Co-creating Fit: How Staff Work Together to Adapt and Implement Clinically Relevant
Measures in Child and Youth Mental Health Agencies

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Abstract

Multi-purpose clinically relevant measures such as the Child and Adolescent Needs and Strengths (CANS; Lyons, 2009) and the Global Appraisal of Individual Needs (GAIN; Dennis et al., 2003) can be useful for improving services at the individual client, program, organization, and system levels. Yet, emerging research suggests that such measures are often not used consistently or effectively (Mellor-Clark, Cross, Macdonald, & Skjulsvik, 2016), and that poor use of these measures can be in part attributed to how they were put into practice (de Jong, 2016). Systematically conducted, empirical research on the effective implementation of such tools is scarce (Boswell, Kraus, Miller, & Lambert, 2015). Thus, the current study examined the factors and processes that contribute to the effective implementation of clinically relevant measures, specifically the CANS and GAIN, in community-based mental health agencies serving children and adolescents. A second objective was to examine the role of staff participation in the implementation process. Three general research questions guided the study, including: (1) How can clinically relevant measures such as the CANS be implemented effectively? (2) What are the perceived consequences of staff participation in adapting and implementing a version of the CANS and how do these consequences come about? and (3) How does the implementation context affect the process and its outcomes?

The study employed qualitative, multiple-case study methods. Four child and youth mental health agencies in Ontario participated, including a total of 44 staff with varying roles (e.g., frontline and management). Several cross-case and within case comparisons were made to examine the contribution of staff participation and tool features, such as tool adaptability, to implementation outcomes. Data was analyzed using

guidelines developed by Yin (2009), Miles and Huberman (1994), and Thomas (2006).

Results suggest that staff participation in the process of putting clinically relevant measures into practice contributes to effective implementation and increased uptake and use of the measures. When staff are engaged in the process, they have reasons and opportunities to interact, talk about the use of the measure, and “co-create fit” between the measure and their work context. This improved fit then facilitates increased staff commitment and ability to use the measure effectively. Agency leaders play a key role in enabling this fit-making process through: encouraging and supporting a participatory approach to implementation, creating implementation structures, following through with planned activities, and being open and responsive to staff feedback. Findings suggest that the implementation context provides incentives or reasons for implementing a measure, affects the initial fit between the measure and staff members’ work, and affects the feasibility of engaging staff in the fit making process.

In conclusion, this study is one of the few empirical studies to examine implementation of clinically relevant measures. The findings have important implications for research and practice, which will be discussed.

Keywords: assessment and outcome measures; implementation; participatory evaluation; child and youth mental health service agencies

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Table of Contents

Abstract	ii
Acknowledgements	iv
List of Tables	xii
List of Figures	xiv
Chapter 1: Introduction	1
Statement of the Problem	3
Research Objectives	5
Research Questions	6
Summary and Overview of Remaining Chapters	6
Chapter 2: Study Context and Literature Review	8
Background Information	9
What are clinically relevant assessment and outcome measures?	9
The Child and Adolescent Needs and Strengths (CANS) measure	12
The Ontario context	14
Review of the Literature	16
What do we know about effective implementation of clinically relevant tools?	17
What do we know about the role of the implementation context?	37
Gaps in the implementation literature	39
Conceptual framework, and literature on participation and organizational change	41
Chapter Summary	51
Chapter 3: Research Design and Methods	54
Epistemological Perspective	55

Case Study Method.....	56
Rationale for using a case study method.....	56
Analytic” versus “statistical” generalizations	57
Literal and theoretical replications.....	58
Study Design	59
Retrospective, cross-sectional and embedded design	59
Multiple-case design	60
Case Recruitment and Selection.....	62
Identifying potential cases.....	62
Case selection criteria	63
Recruitment.....	65
Data Collection.....	69
Phase 1: Understanding the agency’s implementation process.....	69
Phase 2: Validation	75
Data Analysis.....	77
Qualitative analysis of interview data	77
Cross-case analyses.....	79
Strategies Used to Ensure Trustworthiness of Findings.....	81
Construct validity	81
Internal Validity	84
External Validity	85
Reliability	85
Summary.....	86
Chapter 4: Results.....	88
Comparison of Two Participatory CANS Implementations With Positive Outcomes	88

Sketch of “Org. 1 and Org. 2”	91
Implementation Context	91
External influences	92
Organizational factors	98
Staff characteristics	106
Summary of how the implementation context contributed to implementation	107
Implementation Process.....	108
Phases of the implementation process.....	108
Characteristics of implementation.....	116
How staff made the CANS their own through their interactions	128
Implementation Outcomes or Consequences	138
Consequences of staff participation	139
CANS uptake and use	145
Extent of change.....	151
Reciprocal effects of CANS use and other implementation consequences	151
Chapter Summary	153
Chapter 5: Results	155
Less Participatory CANS Implementations With Mixed Outcomes	155
Sketch of Org. 3 and Org. 4.....	157
Negative Implementation Consequences	158
Early implementation consequences	162
Implementation Process.....	169
Implementation characteristics that helped staff stay engaged in creating fit	170
Characteristics of staff interaction	176
Summary of implementation processes	181

Implementation Context	181
Practical implementation barriers	187
Organizational priorities and values, and the organizations' approach to the CANS.....	191
Chapter Summary	193
Chapter 6: Results	195
Implementation of a Less Adaptive Tool – The Global Appraisal of Individual Needs (GAIN).....	195
Background on Org. 4's Implementation of GAIN Tools.....	197
Description of GAIN Tools	198
Differences between GAIN and CANS tools.....	200
How Was GAIN Implementation Different?	204
Characteristics of GAIN implementation.....	205
Characteristics of staff interaction	211
Implementation Consequences	216
Did GAIN's limited adaptability interfere with building "understanding of fit"?	217
Did GAIN's limited adaptability interfere with improving "actual fit"?	223
How did characteristics of the GAIN affect use of the GAIN tools?.....	225
Chapter Summary	229
Chapter 7: General Discussion.....	233
Summary of Findings	236
Question 1: How can clinically relevant measures such as the CANS be implemented effectively?	236
Question 2: What are the perceived consequences of staff participation in adapting and implementing a version of CANS and how do these consequences come about?	237
Question 3: How does the implementation context affect the process and its outcomes?..	238

Thematic Discussion of Findings	238
Co-creating fit	238
Answering “the why” question	241
Co-creating “actual fit”	245
Implementation outcomes	246
Consequences of staff participation	248
Overall Discussion of Findings	249
Value of innovation flexibility and fit making.....	249
What is fitted to what?	250
Conceptual Contributions of the Study	252
Study Limitations and Suggestions for Future Research	255
Implications of Findings.....	259
Implications for research.....	260
Implications for implementation of clinically relevant tools	261
Summary and Conclusions	264
References.....	267
Appendix A: Case Summaries	278
Appendix B: Protocol for Individual Interviews	369
Appendix C: Interview Summary Form	375
Appendix D: General Focus Group Protocol.....	377
Appendix E: Org. 2 Focus Group Protocol.....	379
Appendix F: Study Overview Script and Screening Questions for the Selection of Organizations	382

Appendix G: Recruitment Letter to Organizations	385
Appendix H: Recruitment Letter to Agency Staff	388
Appendix I: Interview Consent Form	391
Appendix J: Focus Group Consent Form.....	395
Appendix K: Template of Data Display Matrix for Org. 3.....	399
Appendix L: Section of Cross-Case Matrix for Org. 1 and Org. 2.....	406

List of Tables

Table 3.1 Characteristics of the Selected Organizations and the Tool Implementation	
Projects Within Each Agency	67
Table 3.2 Characteristics of Staff Participants Interviewed Within Each Case	
Organization.....	70
Table 4.1 Similarities and Differences in External Influences That Affected CANS	
Implementation at Org. 1 and Org. 2	93
Table 4.2 Similarities and Differences in Organizational Factors That Affected CANS	
Implementation at Org. 1 and Org. 2	99
Table 4.3 Comparison of Planned Implementation Activities Completed By Org. 1 and	
Org. 2	110
Table 4.4 Comparison of Characteristics of CANS Implementation at Org. 1 and Org. 2	
.....	118
Table 5.1 Implementation Consequences Across CANS Implementations.....	159
Table 5.2 Characteristics of the Implementation Process Across CANS Implementations	
.....	170
Table 5.3 Contextual Factors That Reportedly Influenced Implementation.....	183
Table 6.1 Differences Between Global Appraisal of Individual Needs (GAIN) and Child	
and Adolescent Needs and Strengths (CANS) Tools	201

Table 6.2 Staff Comments About the "Actual Fit" of GAIN Tools.....	224
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List of Figures

<i>Figure 1.1.</i> Study objectives	6
<i>Figure 2.1.</i> Conceptual framework depicting key factors that are thought to be involved in the CANS tool development and implementation process and expected relationships among them	42
<i>Figure 3.1.</i> Overview of study design	62
<i>Figure 4.1.</i> Proposed model depicting effective implementation of clinically relevant tools	90
<i>Figure 4.2.</i> Activities completed during each phase of the CANS implementation process	109
<i>Figure 5.1.</i> Sequence of implementation consequences related to CANS use	163

Chapter 1: Introduction

Chapter 1: Introduction

Measures of client needs, symptoms, functioning, and other clinically relevant factors are increasingly used in child and youth community-based mental health agencies. This is in part because agencies are being mandated by provincial and national bodies to track client outcomes for accountability and systems planning purposes (Barwick, Urajnik, & Moore, 2014). It is also because several lines of research have shown that using these measures in clinical practice can improve the treatment outcomes of clients seeking mental health services (Bickman, Kelley, Breda, de Andrade, & Riemer, 2011; Shimokawa, Lambert, & Smart, 2010). In fact, Bickman and colleagues (2011) have shown that there is a dose-response relationship between clinicians' use of assessment and outcome measures and children's outcome scores: the more that clinicians view and use feedback from these measures in their clinical work with children and families, the faster that children's mental health outcomes improve. Similarly, the work of Lambert and his colleagues has shown that tracking clients' outcomes and using the information to intervene with clients who are not making expected progress can significantly decrease the odds of treatment failure and increase the odds of clients making improvements in their psychological well-being (Shimokawa et al., 2010). There is enough evidence supporting the beneficial effects of using some of these measures in clinical practice that they are considered "evidence-based practice" for improving client care (Edbrooke-Childs, Wolpert, & Deighton, 2016a).

Additionally, use of these tools in routine practice provides mental health practitioners with information that they seldom have the opportunity to receive: specifically, information about how their professional performance affects clients' mental

health outcomes. It provides mental healthcare providers with feedback about whether their practices were effective, as close to real-time as possible. According to research by Anders Ericsson, author of *Peak: Secrets from the New Science of Expertise*, such immediate feedback is necessary for professionals to learn from their experiences and develop expertise (Ericsson, 2008). Yet, besides from medical domains such as surgery, there are often few opportunities for healthcare professionals to obtain immediate feedback about their performance (Ericsson, 2008). Thus, if used appropriately, feedback from clinically relevant tools can help address this issue and allow clinicians to continuously improve their practice.

Statement of the Problem

Despite mandates in a number of jurisdictions, including the province of Ontario, initiatives to support data collection and use, and the demonstrated benefits of using these measures, staff compliance with completing these measure is low (Hall et al., 2013). For example, a U.K. study using a case-note audit method found that only 60% of clients' files from three child and youth mental health centres contained evidence of repeat use of measures intended to assess treatment outcomes. This was an improvement from a repeat measure completion rate of 30% two years prior to the audit, which was attributed to several government initiatives targeted toward increasing use of outcome measures (Hall et al., 2013). Additionally, there is evidence that even when clinicians comply and administer these measures, many do not use the information they generate to inform their clinical decision making (de Jong, 2016a).

Increasingly, authors have been emphasizing that it is important to attend to how these measures are rolled out in agencies in order to increase effective use of the measures (de Jong, 2016b; Boswell, Kraus, Miller, & Lambert, 2015; Mellor-Clark, Cross, Macdonald, & Skjulsvik, 2016). Several recent studies have investigated the barriers to the incorporation of these measures into routine practice (Hall et al., 2014; Gleacher et al., 2016; Wolpert, Curtis-Tyler, & Edbrooke-Childs, 2016; Unsworth, Cowie, Green, 2012). Authors have also drawn from their own experience and from research on implementation and organizational change to offer suggestions as to how to overcome these barriers and implement measures so that they are most useful (e.g., Boswell et al., 2015; Mellor-Clark et al., 2016). However, systematically conducted, empirical research on how clinically relevant measures can be effectively put into practice is scarce (Boswell et al., 2015). Our limited knowledge about what facilitates effective implementation of these measures is an issue because it leaves us with very few strategies for helping agencies use them consistently and effectively.

From my lens, effective use of data produced by these measures is the final consequence in a chain of processes and consequences involved in the organization's efforts to put these measures into use. The current qualitative inquiry did not begin with a focus on this end point. Rather, it began with curiosity about an earlier part of this sequence leading to use. Specifically, I was curious about the potential benefits of involving staff in adapting the Child and Adolescent Needs and Strengths (CANS) measure (Lyons, 2009), and working out the details to incorporate it within their routine practice. As the inquiry unfolded, it became increasingly clear that one of the main benefits of involving staff in adapting and implementing a measure was that it contributed

to more effective use of the measure and the data it helped produce. Hence, staff participation emerged as a potential solution to the problem of poor uptake and use of assessment and outcome measures. In sum, the current dissertation study began with the primary objective of examining the benefits of staff participation in the development and implementation of the CANS. As the study unfolded, both in response to the data from earlier parts of this study and the emerging literature on implementing outcome measures, a second focus emerged on how effective implementation could be achieved.

Research Objectives

The current study had two objectives. A broad objective was to investigate the factors and processes that facilitate effective implementation of clinically relevant tools. This was accomplished by taking a close look at how four child and youth mental health agencies in Ontario implemented the CANS and other measures. A more specific objective was to examine the benefits of staff participation in adapting and implementing the CANS. Figure 1.1 illustrates the objectives of the current study and how they are related.

Figure 1.1. Study objectives. This figure illustrates how the specific objective of examining the consequences of staff participation (Objective 2) fits within the broader objective of examining factors that influence implementation (Objective 1).

Research Questions

The following questions were the focus of the current study:

1. How can clinically relevant measures such as the CANS be implemented effectively?
2. What are the perceived consequences of staff participation in adapting and implementing a version of CANS and how do these consequences come about?
3. How does the implementation context affect the process and its outcomes?

Summary and Overview of Remaining Chapters

Overall, the current dissertation offers a comprehensive examination of the various factors and processes involved in developing measures and putting them to use

within community-based child and youth mental health agencies. There is a specific focus on the role that staff participation plays in this large implementation picture.

The dissertation consists of seven chapters. Chapter 2 provides a review of the literature and identifies gaps in the research that motivated the current study. Chapter 3 outlines the study design and the methods that were employed. Chapters 4, 5, and 6 outline the study findings or results. The first results chapter compares two organizations that took a participatory approach to CANS implementation and experienced positive implementation outcomes. The second results chapter compares these participatory and successful CANS implementations to less participatory and less successful ones. The third results chapter compares CANS implementation to the implementation of a different tool, namely the Global Appraisal of Individual Needs (GAIN; Dennis et al., 2003). Finally, in Chapter 7 I discuss the findings and how they relate to the existing literature.

Chapter 2: Study Context and Literature Review

Chapter 2: Study Context and Literature Review

The current chapter has three primary objectives. One is to orient the reader to the research topic by providing relevant background information about clinically relevant measures as well as definitions of key terms. Another objective is to review the existing literature on implementation and on stakeholder participation. A third objective is to identify gaps in our knowledge base related to the effective implementation of clinically relevant tools and describe how they motivated the development of the research questions that guided the current study.

Background Information

In this section, I provide an overview of: “clinically relevant tools”, the Child and Adolescent Needs and Strengths (CANS) measure, and the Ontario context in which the current study took place.

What are clinically relevant assessment and outcome measures? “Clinically relevant” is a phrase that I am choosing to use to emphasize a distinction between the types of measures that this study focuses on and other measures that primarily serve a program evaluation or research objective. Unlike other measures that are used for program monitoring and evaluation purposes and do not provide information that can be useful about individual clients, these measures can be useful at the individual client, program, organization, and system levels. They can be used by service providers in their work with *individual* clients or families to help guide and enhance the services they provide. For example, they are used to assess client needs, prioritize which needs must be

attended to, and inform the development of a “treatment plan” (i.e., a set of therapy goals with associated strategies for achieving these goals).

I think this distinction between clinically relevant tools and tools used primarily for program evaluation or research purposes is important because it clarifies why I am discussing “implementation”. Putting in place a tool that is used to inform clinicians’ ongoing practice is a more elaborate process than putting in place a data collection instrument, and thus requires explicit attention to implementation. To my awareness, although the literature on program evaluation addresses different factors that influence effective use of evaluation data, it does not address the “implementation” of measures. Furthermore, although scholars who discuss effective implementation of clinically relevant measures and those who discuss “evaluation use” share a common objective (i.e., identifying ways to improve effective use of data), to my awareness, there are no papers on the implementation of measures that reference research related to evaluation use. Thus, this dissertation study provides a fairly unique integration of these fields.

There is also another distinction that I wish to make within the broad category of “clinically relevant measures”. Specifically, I wish to distinguish between tools primarily intended for assessment purposes and those intended for outcome monitoring purposes. Some clinically relevant tools are primarily intended to serve as assessment tools, although they can also be used to track how clients change by administering them periodically (e.g., every three months). These tools are most useful for planning what services or treatment would be most suitable for a client, and/or for communicating a client’s presenting issues to other professionals involved in his or her care. They are typically comprehensive and cover a range of different domains in which a client may be

experiencing difficulties. Therefore, each administration can be a time consuming endeavor. This makes it unfeasible to administer them from session-to-session, which is why they are not used for monitoring changes within short (i.e., week-to-week) intervals of time. The measure that is the focus of this study (i.e., the CANS) fits within this category of tools.

Another category of clinically relevant tools are most useful for tracking the progress that clients are making toward their treatment goals, typically in psychotherapy, and providing feedback to clinicians so that they can adjust treatment if clients are not making expected progress. This set of tools have been referred to in the literature using terms such as: routine outcome monitoring (ROM) measures, measurement feedback systems (MFS), patient reported outcome measures (PROM), and patient reported experience measures (PREM) (Edbrooke-Childs et al., 2016a). Typically, outcome measures are brief and are completed by the client prior to each session. Often, they are completed and scored using technology, which makes it possible to have the interpreted results of each administration fed back to the clinician immediately after the client has completed the questionnaire. An example of a commonly used outcome measure is the Outcome Questionnaire (OQ; Lambert et al., 2004; Boswell et al., 2015).

The majority of research to date on implementing clinically relevant measures has focused on these types of “outcome measures”. Although assessment and outcome measures are structured differently and are used differently in practice, I believe that the process of implementing both types of measures is largely similar. What matters is that for both of these types of measures to be beneficial in improving client care, they need to be implemented so that clinicians (1) administer them consistently, and (2) take the

results into consideration when making decisions. Therefore, I believe that the emerging literature on implementing outcome measures also applies to implementing assessment measures, and can be used to contextualize the current study.

The Child and Adolescent Needs and Strengths (CANS) measure. The current study focuses on examining the implementation of one particular clinically relevant measure, the Child and Adolescent Needs and Strengths (CANS; Lyons, 2009) assessment tool, in community-based child and youth mental health agencies in Ontario. I first provide some background information related to the CANS tool before describing the Ontario child and youth mental health system context.

The CANS is a multi-purpose assessment tool that can help clinicians identify and prioritize the needs and strengths of children and adolescents. It is intended to support decision-making and communication among different individuals involved in a client's care (Lyons, 2009). It was developed based on a "communimetric" (Lyons, 2009) theory of measurement- a theory that emphasizes the practical utility and communication value of measures above and beyond psychometric properties such as internal consistency.

The CANS is different from psychometric tools because it can be adapted by stakeholders or end-users to meet their specific needs (Lyons, 2009). Several properties of the CANS make it possible for end-users, such as agency staff, to adapt the measure. The CANS and other communimetric tools are designed to be reliable at an item level. This allows staff to pick and choose the items that are most relevant to their needs without concern for the overall reliability of the measure. Routine interpretation of scores does not rely on use of established norms or scale scores. Consequently, individuals can

adapt the measure without concern about how the changes may impact scale scores and the interpretation of the results. In contrast, interpretation of psychometric measures such as the GAIN relies on scale scores and normative data. Any changes to the items of psychometric measures will affect the reliability and validity of the tool. Thus, items cannot be added, deleted or changed by individuals who do not have the ability to test the psychometric properties of the modified tool.

The process of adapting the CANS, as outlined by Lyons (2009), ideally involves significant participation and input from end-users of the tool. Lyons (2009) indicates that end-users should be involved in determining the objectives of the measure (i.e., what information is needed and why), selecting and or developing items that will meet these information needs, and deciding on the actions that should be taken based on assessment results. Thus, if the CANS is adapted using the approach suggested by Lyons (2009), agency staff have the opportunity to participate in what I conceptualize as a program evaluation activity (i.e., developing a measure that will be used, in part, to evaluate services).

What is significant about staff having the opportunity to participate in developing their own version of CANS? Increasing empirical evidence suggests that when staff participate in evaluation activities, such as through developing tools used to evaluate services, they are more willing and able to use evaluation findings (see, Cousins & Chouinard, 2012 for a review). Additionally, separate from enhanced use of evaluation findings, more recent research suggests that there are a range of other benefits that arise from staff being part of the evaluation *process* and learning from it. Examples include: the acquisition of skills, changes in beliefs or attitudes, and changes in program practices

or organizational policies. This phenomenon is referred to as “process use” (Amo & Cousins, 2007). As will be discussed later in this chapter, it was these findings related to the beneficial impact of involving stakeholders in evaluation activities that first motivated the current study.

The Ontario context. Implementation of the CANS within the agencies that participated in this study took place within the broader context of provincially-led efforts to implement a shared assessment and outcome measurement system in child and youth mental health agencies. These initiatives are important context for the current study, as they influenced agencies’ selection of the CANS and its implementation. Thus, the Ontario context is briefly described here.

Ontario initiated a screening and outcome measurement initiative in 1999 in order to improve the mental health system for children and adolescents (Barwick et al., 2004). A challenge that the mental health system was faced with at the time was that there was little systematically collected, uniform data in Ontario about children and adolescents’ mental health difficulties and the outcomes of mental health services. This made it difficult to plan and manage mental health services at the system level. As a result, according to Barwick et al. (2004), the Ontario Ministry of Community and Social Services commissioned a review of standardized assessment and outcome measurement tools (Raphael, Weir, Weston, Lines, & Pettingill, 1999) that could potentially be used in children’s mental health agencies.

Based on recommendations arising from this review, interviews with service providers, and a feasibility study (Boydell, Barwick, Ferguson, & Haines, 2005), two

measures were selected for implementation in child and youth agencies (Barwick et al., 2004). The first was a standardized intake assessment measure called the Brief Child and Family Phone Interview (BCFPI; Cunningham, Pettingill, & Boyle, 2000). The second was a standardized assessment and outcome measure called the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2003). A detailed description of training requirements and processes for these measures, how they are administered and used, and the psychometric properties of the measures can be found in Barwick et al. (2004).

Training and implementation support for these measures was provided through various agencies such as the Community Health Systems Resource Group at The Hospital for Sick Children, and Children's Mental Health Ontario. Implementation support was provided through "consultation, regional community of practice meetings, clinical guidelines and manuals, web site support, and sustainability and capacity building activities" (Barwick et al., 2004; p. 108).

In the year 2000, these measures were mandated for all mental health services in Ontario serving children and adolescents 6-to-17 years of age (Barwick et al., 2014). However, currently, Ontario child and youth mental health agencies are not mandated to use any one specific measure. Rather, they are required to report on "a standardized set of data elements that ... include some outcome measures" (Cairney et al., 2015; p. 4). Interviews conducted as part of the current dissertation study revealed that several child and youth agencies had chosen to administer the Child and Adolescent Needs and Strengths instead of, or in addition to, the CAFAS and BCFPI.

Another relevant initiative is the Drug Treatment Funding Program (DTFP) introduced in 2008. One of the objectives of this national program was to strengthen evaluation and performance measurement practices in addiction treatment agencies. As part of the DTFP, the Ministry of Health and Long-Term Care (MoHLTC) commissioned a project to review potential outcome monitoring (or “recovery monitoring”) models and develop a feasible system for measuring the outcomes of services across all addiction treatment agencies in Ontario, including those serving adolescents (Rush, Rotondi, Furlong, Chau, & Ehtesham, 2013). The Global Appraisal of Individual Needs (GAIN) was one of the main tools that was identified and tested as part of this project.

Thus, over the past two decades, Ontario child and youth mental health agencies have received substantial information and support related to assessment and outcome measures. The implementation of the CANS and GAIN occurred within this context.

Review of the Literature

I now turn my attention to a review of the literature. Inline with the two objectives of my dissertation (i.e., examining effective implementation and the role of staff participation), my review of the literature has two foci. First, I focus on describing what we know from the literature about how to put measures into practice so that they are used consistently and effectively. I review the implementation literature first because it provides a broader context for understanding the role and significance of staff participation and its benefits. Second, I focus on reviewing the program evaluation literature on the benefits of involving stakeholders in evaluation processes. The literature on program evaluation has dealt more extensively with both use of findings from

evaluation, as well as the potential contributions to use that come from stakeholder participation in various aspects of evaluation. Thus, I drew on this literature when I was first starting the current study to develop a conceptual framework outlining propositions regarding how staff participation may contribute to various consequences, including more effective use of the CANS. When reviewing the program evaluation literature, I will use this conceptual framework to structure and focus the review on factors that are relevant to the current study.

What do we know about effective implementation of clinically relevant tools?

Emerging research suggests that how measures are rolled out within settings influences how effectively the feedback they generate are used (de Jong, Van Sluis, Nugter, Heiser, & Spinhoven, 2012; Simon et al., 2012). Increasingly, there is recognition that putting these measures or measurement systems into routine use is not a simple process. Mellor-Clark and colleagues (2016) write that implementing measurement systems intended for routine use “is a more significant and challenging organizational change than has been commonly understood” (p. 279). Leading researchers in the field of routine outcome monitoring have urged researchers to study the factors that facilitate adoption, implementation, and sustained use of these measures (Boswell et al., 2015).

Despite the increasing recognition about the importance of studying effective implementation of measures, research on the topic is scarce and has only begun to emerge recently. Furthermore, many papers on the topic rely on anecdotal evidence as opposed to data from systematically conducted studies. Nonetheless, I will draw on the existing literature, and on the implementation literature more generally, to summarize

what we know about how these measures can be put into practice so that they are used effectively. First, however, I will provide definitions for some key terms.

Definition of key terms related to implementation. In order to be clear about what I intend to communicate when I use certain key terms related to implementation throughout this dissertation, I am providing brief definitions of each term in this section.

Implementation. Implementation refers to *the process* of putting a new practice into routine use or integrating it within a setting (Chambers, Glasgow, & Stange, 2013). It does not refer to *administering* and using measures.

Innovation. Innovation is a term commonly used in the implementation literature to refer to any practice or technology that is being newly implemented in a setting. Innovations do not necessarily have to be innovative or new in general. Rather, they are new to the setting that has adopted them (Klein & Sorra, 1996). Furthermore, when I use the term innovation, I do not intend to imply that the practice being implemented is better than, or an improvement on, existing practices. I am simply using the term because it is commonly referenced in the implementation literature to refer broadly to the ‘object’ that is being implemented.

Effective or successful implementation. Effective or successful implementation of measures refers to implementation that leads to: (1) all relevant staff consistently administering the measure (i.e., administering the measure at all appropriate time points and administering the measure in a way that leads to high inter-rater reliability) and (2) staff using the measure or its resulting data at the level of the client, program, organization, and/or system to enhance client care (Lyons, 2009).

Effective or meaningful use. Effective or meaningful use refers to use of the measures by service providers in a way that helps inform improvements to client care, whether that is at the level of the client, program, organization, or system (Lyons, 2009).

I now return to describing what we know from the existing literature about how clinically relevant measures can be implemented effectively.

Barriers to meaningful use of clinically relevant measures. There are several barriers to the meaningful use of clinically relevant measures that make effective implementation challenging. In a recent special issue on the implementation of outcome measures, developers of various commonly used psychotherapy outcome measures from the U.S. and the U.K. (Boswell et al., 2015; Mellor-Clark et al., 2016) agreed that these barriers can be categorized as either “practical” or “philosophical”.

Practical barriers. Practical barriers identified in the literature typically involve difficulties incorporating the tools within ongoing practice due to issues with resources, time, structures, and other concrete constraints. Several qualitative studies have examined the experiences of staff and/or clients with using outcome measures. These studies have identified practical barriers to effective use of these tools such as: (1) the administrative burden associated with using these measures (Hall et al., 2014; Gleacher et al., 2016); (2) measures being difficult to administer during sessions and/or being disruptive to the therapy process (Hall et al., 2014; Unsworth et al., 2012; Martin, Fishman, Baxter, & Ford, 2010; Gleacher et al., 2016); (3) not receiving timely, usable, clinically relevant information from the measures (Hall et al., 2014; Wolpert et al., 2016; Gleacher et al., 2016); (4) insufficient training to administer and use measures (Hall et al., 2014); (5)

difficulties related to technology when technology is used to administer or interpret the measures (e.g., iPads crashing; Hall et al., 2014; Gleacher et al., 2016); and (6) measures being a poor fit for the service or population being served (Hall et al., 2014).

Philosophical barriers. Philosophical barriers identified in the literature are typically related to staff perceiving the measures as unimportant, unhelpful, or even antithetical to their values. For example, a survey on the research interests of Canadian clinical psychologists suggested that clinicians had little interest in using outcome monitoring tools or related research to enhance their psychotherapy practice (Tasca et al, 2015). The authors suggest that clinicians may perceive outcome monitoring as an “externally imposed agenda” as opposed to a practice that can enhance clients’ treatment outcomes (p. 9; Tasca et al, 2015). Similarly, Boswell and colleagues (2015) argue that many clinicians resist outcome measures because the measures are often imposed on them by systems of care, which contributes to “fear and mistrust” (p. 12) about how the data will be used. Qualitative studies suggest that clinicians sometimes fear that using measures will be harmful rather than helpful. For example, they fear that use of the measures will interfere with the therapeutic alliance, overly influence clinical decisions and lead clinicians away from relying more on their clinical judgment, or that the resulting data will be used to cut funding or judge their performance (Martin et al., 2010; Hall et al., 2014; Unsworth et al., 2012).

I believe the term “philosophical barrier” is a suitable term because the barrier to use is in how staff understand or perceive the measures. Staff perceptions or fears about the impact of using outcome measures are sometimes inconsistent with the reported perceptions of clients, managers/administrators, or with empirical evidence. For example,

in a qualitative study, Unsworth and colleagues (2012) reported that clients generally found discussing the results of outcome measures with their clinicians “therapeutic” and “helpful” (p. 77). This was in contrast to clinician fears that it would interfere with therapeutic alliance. Moreover, Hall and colleagues (2014) found that some clinicians were concerned about favouring outcome measures over clinical judgement, despite their organizations “firmly advocating that quantitative measures are intended to complement rather than replace clinical judgement” (p. 4). Thus, staff come to their own understandings about what it means to use clinically relevant measures, and it is these understandings that appear to be most important in terms of influencing their willingness to incorporate them into their practice.

In general, there are limitations to recent studies that have identified barriers to the use of clinically relevant tools. Several of the key studies (e.g., Boswell et al., 2015; Mellor-Clark et al., 2016) are based on the authors’ experiences with implementing these tools, rather than systematic empirical inquiry. Furthermore, while the qualitative studies that I have cited (Martin et al., 2010; Hall et al., 2014; Unsworth et al., 2012; Wolpert et al., 2016; Gleacher et al., 2016) identify barriers to the use of clinically relevant tools, they do not explore whether and how these factors change over time. In other words, they provide a rather static snapshot of the issues without systematically inquiring into the factors that help or hinder organizations address the issues. They also do not systematically explore whether some barriers are more central than others, nor do they explore the relationship among different factors that influence use.

Factors that facilitate effective implementation. Recent publications that discuss implementation of clinically relevant measures generally draw on anecdotal evidence

and/or the implementation science literature (e.g., Boswell et al., 2015; Mellor-Clark et al., 2016). In general, the strategies that the authors highlight involve addressing the philosophical and practical barriers to use of these measures by fostering buy-in and creating an “implementation climate” that is conducive to uptake and use of measures. Fostering buy-in and creating a strong implementation climate are important factors in most implementation frameworks that describe effective implementation (Meyers, Durlak, and Wandersman, 2012). I will first summarize what the literature indicates about fostering buy-in and subsequently what it indicates about creating a strong implementation climate. Buy-in and implementation climate are mutually reinforcing conditions and achieving both requires the participation of frontline staff and managers. Within both sections, I will highlight what the literature indicates about the role of staff participation in achieving these conditions.

Fostering buy-in. What does “buy-in” involve? Within the context of this dissertation, I am defining buy-in as a commitment to use clinically relevant measures due to beliefs that the measures are valuable or useful. Klein and Sorra (1996) distinguish between “committed” and “compliant” use of innovations and posit that committed use requires that staff perceive the innovation as being congruent with their values. They refer to this congruence as “innovation-values fit”. Similarly, drawing on Conceptualized Feedback Intervention Theory (CFIT; Riemer and Bickman, 2011), de Jong (2016b) argues that in order for staff to be committed to using outcome measures, they need to understand how use of these measures will help them toward their higher level goals, such as being able to best serve their clients. Thus, buy-in involves congruence or

alignment between staff members' understanding of what it means to use measures, and what they value or think is important within their work context.

Why is buy-in important? The extent to which staff are committed to using measures influences how well they use them and how useful they are. Reflecting on their experiences with implementing a measurement system, Douglas, Button, and Casey (2016) wrote that staff who believed that using measures could help them provide better services to their clients were often the individuals who made effective use of them in practice. Similarly, in a quantitative study, de Jong et al. (2012) found that clinicians who were more committed to using an outcome measure at the beginning of the study, based on their responses to a user survey, were more likely to report having used the measure at the termination of the study. Thus, there is some evidence that clinician commitment or buy-in increases use of clinically relevant measures.

Qualitative studies also suggest that staff need to understand why using the measures is important in order to effectively introduce measures to clients and help them understand how and why the measures are used. For example, Unsworth and colleagues (2012) reported that some staff participants in their study thought that their attitudes toward measures could influence the way in which they introduced or conveyed the measures to clients (e.g., by seeming "apologetic"), which could then influence client perceptions of the measures. Wolpert and colleagues (2016) found that some children, adolescents and their mothers who had completed outcome measures in health service organizations were uncertain about how the measures would be used and consequently did not know what information was "safe to reveal to clinicians" (p. 311). For example, clients stated that they did not know whether their ratings on the measures would reflect

negatively on their clinician or be used to cut off a service they were receiving. In both studies, authors highlight the importance of supporting staff so that they can understand and explain the rationale behind the use of these measures.

How can buy-in and committed use be achieved? A number of strategies have been discussed in the literature for increasing buy-in. First, several authors suggest that staff come to value clinically relevant measures, or other innovations, over time as they experience the benefits of them in practice (e.g., Klein & Sorra, 1996; Unsworth et al., 2012). It follows that the more benefits or uses that staff experience from administering measures, the more they will value them. Thus, one approach to fostering committed use of measures is to build value for the resulting data at multiple levels of the organization (Douglas et al., 2016; Fleming, Jones, Bradley, & Wolpert, 2016). One way to accomplish this is by having data available and consolidated in a timely manner so that it can be used to inform decisions at various levels of an organization (Douglas et al., 2016). Another strategy, as described by Fleming and colleagues (2016), is to increase agencies' capacity for effectively using data. Specifically, Fleming and colleagues (2016) described how a learning collaborative in the U.K. works to create more value for outcome measure data by providing support to agencies on how to interpret and use data. When staff have the capacity to make sense of data, learn from it, and use it to inform decisions, they will likely find the data (and the tool that helped produce the data) more useful.

These suggestions are consistent with the literature on evaluation capacity building. For example, one of the themes that Cousins and Bourgeois (2014) found by looking across eight case studies on organizations' capacity to do and use evaluation was that organizational members were more likely to value evaluation if they experienced the

successful use or benefits of evaluation. They hypothesized that “data use leads to data valuing” (p. 113) and observed that this pattern was more likely when staff were involved in the evaluation, for example by conducting evaluation activities or interpreting results. They suggest that this may be due to staff having more opportunities to experience the benefits of evaluation through their involvement in the process. Applied to the topic of implementing clinically relevant measures, which is one of the early steps in some evaluations, these findings might suggest that involving staff in the process of putting these measures to use might provide additional opportunities for staff to learn about or experience the benefits of these measures, which will help increase the measures’ perceived value.

Another frequently discussed strategy for fostering buy-in involves aligning use of innovations with staff members’ and the organization’s values and priorities (Meyers et al., 2012; de Jong, 2016b; Aarons, Hurlburt, & Horwitz, 2011). De Jong (2016b) argues that it is important to connect use of measures with staff members’ higher level goals, such as providing optimal care. Citing the work of Floyd and Wooldridge (1992), Guth and MacMillan (1986), and Klein (1984), Klein and Sorra (1996) suggest that buy-in for innovations can be fostered by teaching staff about how use of the innovation can help organizational performance. Similarly, two reviews of the implementation science literature suggest that buy-in can be enhanced by engaging the organization’s leaders so that they can communicate to staff how use of innovations can support organizational priorities and goals (Aarons et al., 2011; Meyers et al., 2012).

Related to the implementation of measures, Douglas et al. (2016) suggest teaching staff about the clinical benefits of using outcome measures by incorporating role plays

and case examples within training sessions demonstrating how they can be used within the clinical relationship. There is some evidence that such training sessions can help staff develop more positive attitudes about using measures (Willis, Deane, & Coombs, 2009; Edbrooke-Childs, Wolpert, Deighton, 2016b). One downfall of this approach, observed by Hall et al. (2014), is that if staff have little buy-in from the outset, they may be difficult to engage in such training opportunities, particularly if they are voluntary.

In sum, strategies discussed in the literature for fostering buy-in involve helping staff understand the value of these measures, especially with regards to professional and organizational objectives that are important to them. The literature suggests that this can be accomplished by: helping staff get the most use out of the resulting data, creating opportunities for staff to learn about the benefits of data by involving them in evaluation activities or interpreting data, and teaching staff about the clinical benefits of these tools and how their use can help achieve organizational objectives. Other strategies for fostering buy-in that involve staff participation are outlined in a subsequent section.

Implementation climate. What is “implementation climate”? According to Jacobs, Weiner, and Bunger (2014), Klein and Sorra (1996) were the first to introduce the construct of “implementation climate” in their theory about implementation effectiveness. Since then, implementation climate has emerged as an important construct in the implementation science literature (Jacobs et al., 2014). Meyers and colleagues (2012) found that creating a strong implementation climate as a means of achieving effective use of innovations was highlighted in nearly all of the 25 implementation frameworks they reviewed.

Implementation climate is staff members' "shared summary perceptions of the extent to which their use of a specific innovation is rewarded, supported, and expected within their organization" (Klein & Sorra, 1996; p. 1060). Klein and Sorra (1996) argue that implementation climate is a result of staff members' observations of and collective discussions about the organization's policies and practices regarding the implementation of the innovation. The more consistently that staff perceive that the organization's policies and practices encourage, support, and reward the use of the innovation, the stronger the implementation climate for that innovation.

Why is implementation climate important? Klein and Sorra's (1996) theory predicts that implementation climate is one of the two factors that contributes to implementation effectiveness. The other factor is innovation-values fit - the extent to which staff perceive the innovation to fit with their values; as discussed previously. They argue that a strong implementation climate leads to consistent and effective use of an innovation by: ensuring that staff are skilled in the use of the innovation, providing incentives for using the innovation and disincentives for not using it, and removing obstacles that interfere with use of the innovation. Thus, Klein and Sorra's (1996) and others' implementation frameworks or models suggest that the various factors that affect implementation climate (e.g., ensuring skill, removing obstacles), influence how effectively innovations will be used.

How can strong implementation climate be achieved? Klein and Sorra (1996) argue that a strong implementation climate can be achieved in many different ways, and therefore the specific implementation policies and practices that lead to effective implementation can vary from one organization to another. With that idea in mind, the

implementation practices that are generally recommended as ways of improving the climate for the implementation of clinically relevant measures or other innovations are outlined below.

Leadership support and championing. There is general consensus within the implementation literature that leadership and organizational support for use of an innovation positively contribute to implementation effectiveness (Aarons et al., 2011; Meyers et al., 2012). Similarly, there is evidence from evaluation research that leadership support for and championing of evaluation, for example through administrative staff modeling and promoting use of data for decision making, can facilitate organizations' capacity to conduct evaluations and use evaluation findings (Cousins & Bourgeois, 2014). Leaders can support use of clinically relevant measures through advocating for and championing their use, helping create the conditions that would support their use, setting the expectation that they should be used, and monitoring use (Gleacher et al., 2016).

Planned implementation approach. Several implementation researchers state that it is important to take a planned approach to implementation (Meyers et al., 2012; Mellor-Clark et al., 2016). Meyers et al. (2012) and Mellor-Clark et al. (2016) argue that at a minimum, having an implementation plan and a team of qualified individuals who can oversee the implementation and take responsibility for addressing implementation issues is important for successful implementation. These authors also state that it is crucial to first assess whether an organization is ready and has the necessary infrastructure for using an innovation before the innovation is implemented. In fact, 10 of the 14 implementation steps in Meyer et al.'s (2012) Quality Implementation Framework must be completed before implementation begins. This underscores the importance of taking a planned and

proactive approach to create the conditions for implementation to succeed. Mellor-Clark et al. (2016) apply this framework to the implementation of outcome monitoring measures and argue that planned activities such as assessing staff attitudes toward outcome monitoring and using the assessment results to identify champions or create a local implementation team can facilitate implementation.

Removing obstacles. Leaders can support the implementation of clinically relevant measures through working to remove obstacles that would interfere with use and creating the conditions that would promote use (Hall et al., 2013; Hall et al., 2014). This can involve making accommodations for use of clinically relevant measures, for example by assigning administrative staff to help with the administration or completion of measures (Gleacher et al., 2016). In their review of the implementation literature, Aarons et al. (2011) write that given the multitude of system, organization, and individual factors that can interfere with implementation, "ongoing attention to problem solving is a critical driver of the implementation process" (p. 15). While there are likely to be obstacles to the implementation of any innovation within any context, literature suggests that effective implementation rests on efforts to remove these obstacles.

For example, in a qualitative study comparing a clinic that had relatively more success with the implementation of a measurement system to one that had less success implementing the same system, Gleacher and colleagues (2016) surprisingly found that staff from the clinic with more success reported a higher proportion of barriers to facilitators (3:1 vs. 2:1). A critical difference between the two clinics was that the more successful clinic received ongoing training and support with the use of the measurement system from an internal senior clinic administrator and her assistant, whereas the clinic

with less success received support on a scheduled basis from an external researcher. All staff participants from the more successful clinic reported that leadership championing of the measurement system and organizational support for its use facilitated the implementation, whereas at the less successful clinic, less than half the staff participants made similar comments. The authors hypothesized that although staff experienced more barriers at the successful clinic, having internal, onsite clinic leaders who advocated for the use of the measurement system and supported its use allowed staff to resolve and overcome these barriers on a timely basis. In sum, their study highlights the importance of staff, particularly those with more influence within the agency, being engaged in ongoing problem-solving to remove barriers and encourage the use of clinically relevant measures.

Monitoring and ongoing support to sustain use. There is also agreement within implementation frameworks and models about the importance of monitoring implementation and providing ongoing supportive coaching to address issues with adherence and improve staff members' ability to use the innovation (Meyers et al., 2012; Mellor-Clark et al., 2016; Aarons et al., 2011). Douglas et al. (2016) suggest that the implementation of outcome monitoring measures can be monitored by tracking the extent to which the measures are used. For example, this can be accomplished by tracking the percentage of times that the measures are administered and the percentage of times that clinicians view the computer-generated feedback report that displays the results of the assessment. Software programs associated with some measurement systems, such as CFS (Bickman, Kelley, & Athay, 2012) and Outcome Questionnaire (OQ; Lambert et al., 2004), automatically generate reports with these statistics to help with fidelity monitoring

(Bickman et al., 2012). De Jong (2016b) reported that based on personal experience, use of an outcome measure within a team drastically increased when measure completion rates at the team level were reported to the team on a monthly basis. De Jong et al. (2012) and Douglas et al. (2016) emphasize that use of measures can be promoted through leadership support that involves holding staff accountable and setting specific and reasonable behavioural expectations or benchmarks for using measures.

The implementation literature also consistently highlights the importance of ongoing training and coaching (Aarons et al., 2011; Meyers et al., 2012; Unsworth et al., 2012). The need for ongoing training and support was one of the themes that Unsworth et al. (2012) identified in their qualitative study of therapist and client perceptions of outcome monitoring. The authors write that regular training can take the form of regular coaching in supervision sessions or other meetings. They argue that a regular and continuous forum for coaching support is necessary to help staff integrate measures into their practice. Another suggestion discussed in the literature is to target coaching to address specific areas in which staff need additional support by using implementation monitoring data (Mellor-Clark et al., 2016; Douglas et al., 2016). For example, Mellor-Clark et al. (2016) describe holding monthly support calls with local champions in which they inform the champions about which practitioners might need additional coaching support based on the practitioners' data quality.

In sum, the above described strategies are commonly suggested in the implementation literature for increasing the likelihood of effective implementation. According to Klein and Sorra's (1996) model, these strategies all serve to strengthen the implementation climate for the use of clinically relevant measures by ensuring that staff

are skilled, that there are incentives for use and disincentives for non-use, and by removing obstacles that would interfere with use. The implementation strategies that I will describe next are more general and address both the practical and philosophical barriers that can interfere with effective use.

Exercising flexibility to improve fit. Several implementation researchers recommend adapting innovations or exercising flexibility in how they are implemented in order to improve the innovation-organization fit (Meyers et al., 2012; Lee, Altschul, & Mowbray, 2008; Forehand, Dorsey, Jones, Long, & McMahon, 2010). These authors argue that adapting innovations can improve their relevance and/or feasibility to organizations and increase the chances that they will be adopted and used.

In general, the suggested approach to implementing innovations with flexibility involves differentiating between core components of an innovation and parts of the innovation that are less important in achieving the innovation's intended effects (Meyers et al., 2012; Lee et al., 2008). Lee et al. (2008) explain that differentiating between core and non-essential components often requires input or guidance from the innovation developers. However, once these non-essential components are identified, there is room to exercise flexibility because the non-essential components can be adapted without compromising the innovation's effectiveness. Lee et al. (2008) have outlined a series of systematic steps for going about the process of adapting innovations in their "Planned Adaptation" approach.

Several implementation models and frameworks include elements related to adapting innovations. For example, in their Quality Implementation Framework, Meyers

and colleagues (2012) suggest conducting a “fit assessment” to determine whether the innovation fits the organization’s needs, mission, values, priorities, and cultural preferences. A subsequent critical implementation step in their framework involves considering whether the innovation should be adapted so that it is a better fit for the organization. Another example is The Dynamic Sustainability Framework (DSF; Chambers, Glasgow, & Stange, 2013). The DSF rejects the notion that innovations are most effective if they are implemented exactly as designed and treats deviations from protocol as opportunities for innovation. The DSF involves continually adapting innovations to improve fit with multi-level contexts using rapid learning cycles and ongoing assessment and feedback loops. Consistent with these implementation models, in the evaluation field, Patton (2011) argues that in complex contexts the most effective strategy for implementing new practices is to adhere to the guiding principles behind the practice, while making adaptations that are necessary for the practice to be feasible and effective within the local context. These adaptations can be informed by ongoing, real-time evaluation.

Allowing flexibility in the implementation of innovations appears to be gaining popularity in the mental health treatment field as well. Forehand et al. (2010) report that the developers of several evidence-based interventions for children and youth (e.g., Kendall and Chorpita) are allowing for flexibility in how the interventions are delivered by “distilling key intervention components” (p. 258). For example, the Triple P-Positive Parenting Program has a core parenting intervention that can be enhanced by adding other modules depending on the needs of the child and family (Forehand et al., 2010).

The recommendation to increase fit by adapting innovations also applies to implementing clinically relevant measures (Boswell et al., 2015; Douglas, Button, & Casey, 2016). In a qualitative study on the implementation of outcome measures, Unsworth and colleagues (2012) found that clinicians felt the need to exercise flexibility in how these measures were administered; for example by having the client complete the measure at a different point in the session or by completing the measure for someone who was visually impaired as opposed to having the client complete it him or herself. Developers of several outcome measures recommend exercising flexibility in how these measures are implemented. For example, they suggest that paper or electronic methods of administering measures can be used depending on what works best within the particular context (Boswell et al., 2015). Furthermore, recognizing the importance of fit and user-centred design, Bickman and colleagues have developed a measurement feedback system called Contextualized Feedback Systems (CFS) that can be “contextualized” to fit the needs of different organizations with varied populations and treatment models (Bickman, Kelley, & Athay, 2012). The recommended approach for implementing CFS is to exercise flexibility, while maintaining scientific rigor, in order to integrate the measurement system with clinical values and workflow, reduce burden, and maximize usefulness (Douglas et al., 2016).

Stakeholder participation and communication. Implementation literature suggests that stakeholder participation and communication can help address both the practical and philosophical obstacles to implementing clinically relevant measures. Practically, involving staff in the selection, development, and implementation of clinically relevant measures can increase the likelihood that the measure is a good fit with the organizational

context and that it is useful to staff. Bickman et al. (2012) and Lyons (2006) write that involving end-users of measurement systems (e.g., staff practitioners) in the development process and incorporating their feedback in improving the system on an ongoing basis can increase the relevance and usefulness of the measures and the information they produce. Similarly, in their article outlining the “Planned Adaptation” approach, Lee et al. (2008) emphasize that effective adaptation of innovations requires collaboration between end-users and innovation developers or researchers (i.e., those who know what works for the population they serve and those who know how the innovation is supposed to work).

With regards to philosophical barriers, staff involvement and effective communication throughout the implementation process can help build buy-in and increase commitment to use measures (Boswell et al., 2015; Mellor-Clark et al., 2016). Boswell et al. (2015) indicate that in their experience with implementing outcome measures, taking a transparent and non-hierarchical approach to implementation helps address staff members’ concerns about how measures will be used and can increase their trust. Furthermore, several authors suggest that communication or “story sharing” amongst staff can increase their awareness of the benefits of using outcome measures and increase buy-in (Boswell et al., 2015; Mellor-Clark et al., 2016). Boswell et al. (2015) write:

We have also learned that researchers’ attempts to impart the “wisdom of routine outcome monitoring” are far less effective than the wisdom imparted by fellow clinicians who have used the particular outcome monitoring system of interest. It is through direct clinical experience and by sharing these experiences (e.g., through vignettes) that other clinicians begin to seriously entertain the potential benefits. (p. 13)

Mellor-Clark et al. (2016) report that they have developed a web resource to help clinicians efficiently share “success stories” about their use of outcome measures. They write that they have learned that stories can be more effective than quantitative findings at changing staff attitudes and behaviours related to outcome monitoring. They report that using this story sharing resource has helped one U.K. city achieve a 90% session measurement rate for 120 practitioners within three months of implementation.

Several researchers argue that staff participation in the selection and adaptation of innovations can increase the likelihood that the chosen innovation is consistent with staff members’ values, which then contributes to greater commitment to use measures (Klein & Sorra, 1996; Forehand et al., 2010). Forehand et al. (2010) write that it is important for therapists to choose whether they would like to implement an intervention and which variation of it they would like to implement because if the intervention does not fit with their “therapy worldview” it can be challenging to engage them. Furthermore, Klein and Sorra (1996) argue that participation in the implementation process may lead to a change in staff members’ values, making their values more consistent with the innovation that is being implemented.

In sum, the literature suggests that the likelihood of effective implementation can be increased by employing various strategies to foster buy-in and a strong implementation climate for clinically relevant measures. I now turn to describing what the literature indicates about how the context in which implementation occurs can influence implementation outcomes.

What do we know about the role of the implementation context? Context affects the decision to adopt a clinically relevant tool, whether implementing a tool is feasible, how the implementation is carried out, and how effective the implementation will be (Aarons, 2011). In the previous sections, I have already touched on how context can affect the implementation process. For example, context affects the fit between measures and organizations. Furthermore, several contextual factors affect implementation climate, including: the number of obstacles there are to using measures; the extent to which an organization's leadership supports and champions use of measures; availability of incentives for use and disincentives for non-use; and resources and structures dedicated to supporting the implementation. As I have already described these factors and how they contribute to implementation, I will not repeat them here. However, I will highlight some key points about context that have been described in the implementation literature.

Aarons et al. (2011) have developed a conceptual model for evidence-based practice implementation in the public sector. The model outlines the "outer" (i.e., outside the organization) and "inner" (within the organization) contextual factors that affect implementation at each phase. Outer context influences on implementation include factors such as the sociopolitical and funding contexts, and the network of organizations that an agency is involved with. Inner context influences include factors at both the organization and individual staff levels such as: the organization's resources, culture, and climate; and individual staff members' values and goals, social networks, and perceived need for change.

Based on the emerging publications on the implementation of clinically relevant measures, it appears that many of Aarons et al.'s (2011) inner and outer contextual factors are relevant to the implementation of these measures as well. For example, Hall et al. (2013) hypothesized that outer context factors, such as government strategies and initiatives promoting use of outcome measures, may have influenced increased uptake of these measures in two U.K. agencies. These initiatives included providing agencies with additional administrative support to collect data, setting commissioning targets that linked healthcare providers' income to "achievement of local improvement goals", and providing information to agencies about uses and types of measures and about the results of earlier data collection efforts. Boswell et al. (2015) describe outer context factors that serve as barriers to implementation of outcome measures, including: lack of financial support from the U.S. health system or third-party payers to cover expenses related to using outcome measures, and outcome monitoring being imposed on clinicians through systems of care. They also list inner context barriers to implementation of outcome measures such as clinicians' time constraints and staff turnover. Additionally, several authors highlight the negative effect that multiple, simultaneous organizational changes can have on an agency's ability to successfully implement a clinically relevant tool (De Jong, 2016b; Barwick, Boydell, Cunningham, & Ferguson, 2004). Other inner and outer context influences on implementation were described in the previous sections.

In describing the role of context on implementation, the implementation literature also makes reference to "organizational readiness" for change. For example, Scaccia et al. (2015) have introduced a practical implementation heuristic for organizational readiness: $R=MC^2$. They propose that an organization's willingness and ability to implement an

innovation depends on: their *motivation* to implement the innovation, the organization's general *capacities* (e.g., effective organizational leadership), and the innovation-specific *capacities* needed to implement the innovation (e.g., practitioner skills). Mellor-Clark et al. (2016) highlight the importance of organizational readiness for implementing outcome measures. Drawing on Meyer et al.'s (2012) Quality Implementation Framework, they describe the steps they take to ensure that an organization is ready for the implementation of outcome measures before they begin implementation.

Another theme in the implementation literature is the changing nature of context. Dynamic Sustainability Framework (Chambers et al., 2013) emphasizes that context is constantly changing, which means that an innovation that is a good fit for an organization at one point in time may not continue to be a good fit in the future. Thus, according to DSF, sustaining the use of an innovation requires regular assessment of context, problem-solving, and adaptation. Furthermore, some implementation models suggest that the implementation context can be changed as a result of staff members' experiences with using the innovation. For example, effective use of an innovation can change staff values related to the innovation, resulting in improved innovation-values fit.

Gaps in the implementation literature. Research on the effective implementation of clinically relevant measures is scarce. Much of the existing research reviewed here focused on implementation of innovations in general (e.g., Meyers et al., 2012; Aarons et al., 2011), as opposed to specifically focusing on the implementation of clinically relevant tools. The emerging literature that does focus specifically on implementation of clinically relevant measures draws on a combination of anecdotal evidence and the general implementation literature, as opposed to original, empirical

research (e.g., Douglas et al., 2016; Mellor-Clark et al., 2016). The scarcity of research specifically on the implementation of clinically relevant tools is an issue because although the factors that influence implementation of these tools may be similar to those that influence implementation of any practice or technology, we have very little evidence about this. In fact, given that using clinically relevant measures effectively involves routinely using the data, information, or feedback they produce, it is possible that there are factors that uniquely influence the implementation of clinically relevant tools. Thus, research on the factors that specifically influence the implementation of clinically relevant tools is much needed.

The implementation literature in general also has some limitations. Many of the implementation models or frameworks that were cited (e.g., Klein & Sorra, 1996; Meyers et al., 2012; Aarons et al., 2011; Chambers et al., 2013) are either theoretical or based on a review of the literature. In other words, they were not derived through systematic, empirical, originally conducted research. Additionally, with the exception of Klein and Sorra's (1996) and Chambers et al.'s (2013) works, these frameworks generally list factors that affect implementation without explaining or offering propositions regarding the relationships amongst these factors. In particular, while the literature highlights the importance of innovation-values fit, to my knowledge, there have not been any studies on how staff within organizations develop or create fit. Note that Lee et al.'s (2008) Planned Adaptation Approach outlines how staff can or should go about creating better fit, it does not outline how they actually go about doing this. I return to a discussion of these limitations and how they motivated the current research near the end of this chapter.

Conceptual framework, and literature on participation and organizational change. In this section, I present the conceptual framework that I developed at the outset of this study, as well as the literature that was used to develop the framework.

According to Yin (2009), case study research should be guided by theoretical propositions that are identified at the outset of the study. Yin (2009) argues that even if the research is intended to be descriptive, exploratory, or to help develop theory, theoretical propositions are necessary to help a researcher identify what to look for and why. Consistent with these recommendations, I developed the conceptual framework depicted in Figure 2.1 to outline theoretical propositions based on the existing literature that could be used to bound and guide the current study.

The conceptual framework was adapted based on Cousins and Chouinard's (2012) conceptual framework depicting the nature, antecedents, and consequences of participatory evaluation. The framework was developed by drawing on program evaluation, organizational change, and communimetrics literatures, and outlines some of the key factors and processes that I proposed would be relevant to the process of developing and implementing a CANS tool. Note that the framework is based on program evaluation and organizational change literatures for a number of reasons. First, at the outset, my focus was on how staff participation in the process of developing and implementing the CANS may contribute to beneficial changes at the level of individual staff members and the organization. The program evaluation and organizational change literatures were most relevant to this objective. Second, the literature on the implementation of clinically relevant measures has emerged recently and was not available at the time that I was developing the framework.

Figure 2.1. Conceptual framework depicting key factors that are thought to be involved in the CANS tool development and implementation process and expected relationships among them.

The conceptual framework posits that certain contextual factors influence planned and unplanned processes as staff participate in adapting and implementing the CANS. These processes subsequently contribute to consequences at the level of individual staff, the program, and the organization. In the sections that follow, I first describe literature related to the consequences of staff participation, then literature related to the mechanisms or processes that may contribute to these consequences, and lastly, literature related to the role of contextual factors.

Consequences of participation. Amo and Cousins' (2007) reviewed 18 empirical studies that investigated process use. They found that the observed effects of staff participation in evaluation processes can be grouped into three main categories: *learning* (e.g., research skills, ability to implement elements of evaluation inquiry), *changes in actions or behaviours* (e.g., using evaluation data), and *changes in affect or attitudes* (e.g., better understanding, respect of others). Furthermore, they reported that these effects were observed at multiple levels within the organization.

As shown in the “Consequences of Participation in Tool Development and Implementation” panel of the framework (Figure 2.1), consistent with research on process use (Amo & Cousins, 2007), I proposed that staff participation would lead to benefits at the level of the individual staff member, program or team, and organization. Furthermore, I proposed that many of these benefits would involve increased meaningful use of the CANS tool, although I suspected that there would also be other benefits. The framework's focus on increased use of the CANS tool as a consequence or intended outcome of implementation is also consistent with literature on implementing outcome measures (e.g., Bickman et al., 2016) and communimetric theory (Lyons, 2009).

I proposed that these different consequences are interconnected. In particular, based on Senge's (1990) writings on organizational change, I hypothesized that changes in staff members' attitudes or beliefs, their "mental models", are connected to changes in their affect or behaviour. Furthermore, I proposed that changes at the level of the individual staff member can influence changes at the level of the program and organization, and vice versa. This predicted bi-directional relationship is consistent with Stacey's (2010) view of how change happens in organizations. He proposes that individual level changes gradually cumulate to affect change at program or organizational levels, and that change at the organizational level affects change at the individual level.

In addition to investigating the perceived consequences of the tool development and implementation process, the current study sought to examine the extent of change from the perspective of participants. The organizational change literature draws certain distinctions between different degrees or levels of change. For example, according to Sylvestre (2014), Watzlawick, Weakland, and Fish (1974) differentiate between first order and second order change. First order change is often limited in scope and occurs "within a given system which itself remains unchanged" (Watzlawick, et al., 1974, p. 10, as cited in Sylvestre, 2014). However, second order change is transformative and refers to changes in the underlying structures or assumptions of an organization (Watzlawick et al., 1974). Communimetric theory (Lyons, 2009) also distinguishes between using CANS measures as a "form", "tool", and "framework". When CANS is used as a "form" it is treated as a paperwork mandate and when it is used as a "framework", it helps structure and guide work in the organization. Thus, we sought to examine the scope or degree of perceived consequences arising from staff participation.

How these consequences come about. The “Processes and Mechanisms Involved” panel of the framework (Figure 2.1) outlines different aspects of the CANS adaptation and implementation process that I proposed contribute to perceived consequences. Within the organizational change literature, there are two main perspectives on how change occurs in organizations. These have commonly been referred to as the “planned systems change” and “continuous or emergent change” perspectives (Sylvestre, 2014). Drawing on this literature, I proposed that both planned and unplanned processes and mechanisms contribute to any consequences arising from the implementation. Planned processes are those that are systematically designed to achieve certain objectives. Unplanned processes are those that emerge without prior planning, such as informal conversations that staff have after they are introduced to the CANS.

Planned processes. The planned processes that are outlined in the conceptual framework are the steps involved in developing and implementing a communimetric tool, such as the CANS, as specified by Lyons (2009). First, development or adaptation of a communimetric tool requires that stakeholders discuss the objectives that the measure is intended to serve and the information that the measure is intended to help gather and provide (i.e., What are we trying to do and what information do we need to have in order to do this effectively?). Second, stakeholders need to participate in selecting or developing items that will help meet these information needs. Third, stakeholders participate in deciding what they need to do in response to the information that they gather. Research on process use suggests that as staff are going through these types of processes, they may also have broader conversations about program goals and activities. Furthermore, these broader conversations can lead staff to revision and change their

programs (Amo & Cousins, 2007). I sought to investigate whether similar discussions take place during tool development meetings, leading to similar consequences.

Once the measure has been finalized, all potential users of the measure receive training on the philosophy behind the CANS, the principles involved in the proper use of the measure, and how each item should be completed (Lyons, 2009). At the end of the training, all future users are required to participate in a “certification of reliability” process (Lyons, 2009, p. 86). Although the internal-consistency reliability and test-retest reliability of communimetric measures, such as the CANS, are not of central concern, it is essential that communimetric measures have adequate inter-rater reliability (Lyons, 2009). This is because the primary objective of communimetric measures is to help different individuals *communicate* certain information. Thus, it is important that users of the tool are trained on how to use the tool consistently. To become certified, participants in training workshops are required to complete the CANS based on a test case vignette. Certification is contingent on the participant achieving a sufficient level of reliability. Lyons (2009) also recommends that users of CANS tools participate in annual recertification to protect against gradual decline in reliability over time.

Another planned aspect of the tool implementation process is use of champions (Lyons, 2009). Champions are staff who are eager to embrace the communimetric approach. These individuals are identified in each agency or program and trained on the reliable completion of the measure and its multiple applications. The champions can then participate in training and certifying other staff, and in providing ongoing support to staff on the multiple uses of the measure. The rationale behind using local champions is that

staff will be more likely to embrace the measure if individuals who are more similar to them introduce the measure (Lyons, 2009).

As described previously, Lyons (2009) suggests that end-users of communimetric tools should be involved in these planned processes. Cousins and Whitmore (1998) have outlined three dimensions that can be used to characterize stakeholder participation in evaluation processes. These include: (1) control of evaluation processes (ranging from “researcher controlled” to “practitioner controlled”), (2) diversity of stakeholders selected for participation (“primary users only” to “all legitimate groups”), (3) and depth of participation (“consultation” of stakeholders to “deep participation” of stakeholders in all evaluation activities). I sought to describe how staff actually participated in adapting and implementing the CANS using Cousins and Whitmore’s (1998) three process dimensions of participation.

Overall, many of the strategies that Lyons (2009) suggests for putting communimetric measures into use (i.e., involving end-users in adapting communimetric tools; discussing and demonstrating the clinical utility of the tool within training sessions; using local champions to advocate for use of the tool and support other staff in its ongoing use) are consistent with literature on how new practices can be effectively implemented (Mellor-Clark et al., 2016; Meyers et al., 2012; Bickman et al., 2012; Douglas et al., 2016).

Unplanned processes. There has been little attention to the unplanned processes that take place during evaluation and implementation activities. Proponents of the “continuous or emergent” perspective on organizational change argue that change can

occur as a result of everyday unplanned interactions amongst staff. Novel, innovative, or divergent ideas emerging from such interactions or conversations can trigger small changes that gradually culminate over time (Sylvestre, 2014).

For example, Stacey (2010) argues that the introduction of novel ideas or small changes has the potential to set in motion a series of interactions among individuals as they attempt to evaluate or make sense of the idea or change for themselves. He refers to these interactions as “complex responsive processes” and adds that they are the mechanism through which change takes shape in organizations. Furthermore, Stacey (2010) argues that while change can be planned, the form of change that takes place depends on the many interactions that staff have related to the planned change. He argues that through these interactions, staff take general directives for change and “particularize” them within their own contexts. How they particularize these directives depends on pre-existing patterns or “themes” within the organization.

Stacey’s (2010) theory has several implications related to the implementation of the CANS. One is that the development and implementation of CANS introduces some novelty into organizations that undertake this process. This novelty triggers a myriad of formal and informal conversations amongst staff. The second implication is that these interactions will shape how staff come to use the measure or how they will “particularize” the measure within their own context. The third implication is that the way that staff will respond to the measure depends on some of the pre-existing prevalent patterns within the organization. The current study sought to examine these unplanned processes and how they contribute to implementation consequences.

Contextual factors and enabling conditions. Items under the “Antecedents: Contextual Factors and Enabling Conditions” panel of the framework were drawn from literature on process use. Literature on process use suggests that certain contextual factors affect the extent to which staff learn and benefit from participating in evaluation activities.

One of these contextual factors is the facilitation skills of the individual or individuals leading evaluation efforts. In an empirical study of process use, Preskill et al. (2003) found that, according to participants in an evaluation, evaluators’ facilitation of evaluation processes (e.g., amount of evaluator control during meetings, amount and quality of dialogue and reflection) played a key role in enhancing learning from evaluation processes.

Literature on process use also suggests that characteristics of the individuals who participate in evaluation activities contribute to whether the process stimulates learning and positive changes to the program and organization (Preskill et al., 2003; King, 2007). An important participant characteristic that is highlighted in the process use literature is enthusiasm or interest in evaluation activities (King, 2007; Preskill et al., 2003). King (2007) writes that without a group of “evaluation champions”, the evaluation process is unlikely to lead to beneficial effects.

A third contextual factor identified in the literature on process use is the organizational context. In the exploratory study of process use mentioned previously, Preskill et al. (2003) found that participants often referred to organizational characteristics (e.g., degree of organizational stability, degree to which organization supports developing evaluation capacity) as having influenced the evaluation process.

Consistently, King (2007) adds that organizational characteristics like commitment to use information generated through an evaluation, and willingness to question basic organizational assumptions will contribute to the impact of evaluation processes.

Lastly, the fourth contextual factor outlined in the conceptual framework includes external influences. Cousins and Chouinard (2012) write that a range of external influences such as the characteristics of the program community; and social, economic, political, cultural, and environmental contextual factors likely contribute to the feasibility and impact of participatory evaluations.

These contextual factors are almost identical to the contextual factors identified in the implementation literature. These factors likely influence whether taking a participatory approach to implementing the CANS is feasible, as well as how much staff and organizations benefit from engaging in this process.

Summary of the conceptual framework. In summary, the conceptual framework shown in Figure 2.1 delineates key aspects of the communimetric tool development and implementation process, the consequences that are thought to result from this process, and the antecedents or contextual factors that may contribute to the process. This conceptual framework was developed to outline the concepts that are of interest in the proposed study and guide data collection and analysis.

Based on the literature, it is expected that in addition to the planned aspects of the tool development and implementation process, or the steps that have been outlined in Lyons' (2009) writings, unplanned processes will also take place when individuals attempt to carry out this process in their organizations. These unplanned processes may

include individuals' informal conversations in which they share their impressions of the measure, and their direct or indirect attempts to resist against the implementation of the measure.

These planned and unplanned processes likely lead to a number of consequences. At the level of individual staff these consequences may included learning, changes in beliefs, changes in affects and attitudes, and changes in behaviours. At the level of the program and organization these consequences are expected to be related to increased use of the measure to serve different objectives.

Lastly, a number of contextual factors or enabling conditions are thought to influence the process and its consequences. These may include the facilitation skills of the individual(s) leading the process, characteristics of the participants and the organization, as well as external influences.

Chapter Summary

In this chapter, I provided background information on the current study. I also reviewed literature relevant to implementation of clinically relevant tools and the role of staff participation in the implementation process. One of the contributions of the current study is that it integrates research from various fields to help understand how organizations change and incorporate routine use of clinically relevant tools. Taking an integrative approach was necessary because there is a scarcity of research on how clinically relevant tools can be put into practice.

Emerging literature on the topic suggests that the main barriers to the effective implementation of clinically relevant tools are: staff perceptions related to their

usefulness, and practical obstacles that make their use difficult. Implementation literature suggests that successful implementation rests on addressing these barriers by developing innovation-values fit and a strong implementation climate. These conditions can be achieved in a number of ways, including: exercising flexibility and adapting innovations, and involving end-users in the selection, development or implementation of innovations.

Similar to the implementation research, research related to the consequences of participatory approaches to program evaluation also suggests that involving staff in evaluation processes is associated with a range of benefits including increased use of data and evaluation findings. I drew on this literature and literature on organizational change to understand *how* staff participation may lead to increased use of data and other benefits. In particular, the organizational change literature suggests that organizational change can occur through planned and/or unplanned processes, which led me to investigate both the planned and unplanned aspects of implementation and staff participation. Lastly, both the implementation literature and the program evaluation literature outline contextual factors that can influence implementation.

As discussed, several gaps in our knowledge base and limitations in the methods used to study the implementation of clinically relevant measures necessitated the current study. First, literature that specifically focuses on the implementation of clinically relevant tools is scarce. Second, the existing literature relies on anecdotal evidence or on the general literature on implementation. Third, there are few implementation models that explain, or offer propositions regarding, the underlying mechanisms that contribute to effective implementation. The existing literature generally highlights factors that affect implementation without attempting to clarify the relationships among factors.

The current study addresses these gaps and limitations in the following ways. First, the study is one of the few studies that systematically and empirically explores how organizations implement clinically relevant tools. Second, the study offers a proposed model outlining the mechanisms that contribute to effective implementation. This is accomplished first by drawing on research from other fields to develop propositions regarding how intended and unintended changes associated with implementation are made. The study then systematically explores and tests the validity of these propositions using data from four organizations. In doing so, the study increases our knowledge about two important related topics: how clinically relevant tools can be implemented effectively, and how staff participation can help achieve effective implementation and other benefits.

Chapter 3: Research Design and Methods

Chapter 3: Research Design And Methods

In this chapter, I first begin by presenting my epistemological perspective and a rationale for using case study methods. I then provide a description of the methods employed, including case selection, data collection, and data analysis procedures. I end by describing the strategies I used to ensure trustworthiness of the study findings.

Epistemological Perspective

A critical realist perspective informed the design and the analysis of data in the current study. As described by Easton (2010), critical realism assumes that there is a reality, independent of our knowledge of it. However, we can only know this reality imperfectly and make assumptions about how it operates. Given that no causal explanation can reflect the full “truth”, there is a need to continuously collect further data and critically debate alternative explanations in order to distinguish which explanation is most reliable.

Those taking a critical realist position seek to understand the objects or entities that make up reality and the causal relationships among them. An assumption of critical realism is that there are regularities in observable events because there are underlying mechanisms that cause the events. Research conducted within a critical realist paradigm is aimed at understanding what causes events to occur (Easton, 2010).

In the case of this study, I sought to understand the events that underlie effective implementation. I assumed that there are underlying mechanisms related to effective implementation, and that these mechanisms are likely common across different contexts. By studying the implementation of clinically relevant tools in four organizations, I strived

to develop a reliable explanation about the mechanisms and necessary conditions underlying effective implementation. Although the development of this explanation was based on these organizations, I assume that if the explanation is reliable, it would likely apply to other organizations, as similar underlying mechanisms would also be at play in other organization. This assumption underlies the process of using case studies to make “analytic generalizations” (Yin, 2009), as will be discussed in the next section. Lastly, I do not assume that the explanation I have developed through the current study is a proven “fact”. Rather, I see it as the explanation that is most consistent with the data that I gathered. Further testing and critical discussion of the model I have proposed in this study are necessary so that we can gain a closer understanding of the “true” mechanisms at play.

Case Study Method

Qualitative case study methods were employed for the current study. In designing and conducting the study, I primarily relied on Yin’s (2009) guide to case studies and the work of Miles and Huberman (1994). I am aware that others such as Stake (1995) have also published comprehensive guides to conducting case studies or qualitative research. My reason for relying largely on Yin (2009) and Miles and Huberman (1994) was that I found that they offered clear and systematic directions on how to conduct case studies or qualitative research. I will briefly describe the rationale for choosing the case study method and provide some explanations about different aspects of this method that are relevant to the current study.

Rationale for using a case study method. The case study method is best suited for in-depth study of complex, multi-faceted phenomenon in their real-life context (Yin,

2009). The advantage of the case study method for the current study was that it allowed me to gain a rich understanding of all the different factors and processes that were at play when organizations attempted to put the CANS into routine use. Another advantage was that it allowed me to study CANS implementation in the context in which this process often takes place (i.e., community-based child and youth mental health agencies). This provided me with an in-depth understanding of how the context in which CANS was implemented interplayed with the process and its consequences. These advantages made the chosen qualitative multiple-case study methods well suited to studying CANS implementation.

“Analytic” versus “statistical” generalizations. One of the main criticisms of the case study method, and qualitative methods more generally, is that they cannot be used to make generalizations about the population of cases. However, Yin (2009) emphasizes that the purpose of case studies is to make “analytic” as opposed to “statistical” generalizations (p.15). In other words, the intention behind conducting case studies is to determine whether the results obtained are consistent with a set of theoretical propositions. The goal is not to generalize findings to a population (i.e., statistical generalization). However, findings can be used to support or refute a theory, or to expand it (i.e., analytic generalization). By doing so, we increase our understanding of the theory, which allows us to use and apply the theory with more confidence.

In the current study, the objective was to test and further develop theoretical propositions related to the beneficial consequences of staff participation by examining whether the propositions were supported by the experiences of staff who had been involved in adapting and implementing the CANS. Thus, the theoretical propositions that

were confirmed and elaborated through the study can be used to inform efforts to implement the CANS and other clinically relevant measures. However, I do not assume that the experiences of staff from the four case organizations that were studied as part of this dissertation are necessarily representative of the experiences that staff typically have when they engage in adapting and implementing the CANS. However, as will be discussed later, given how consistent the experiences of staff from this study's sample were to experiences reported in other studies, it is likely that the general themes identified in the study also apply to other organizations that implement clinically relevant tools.

Literal and theoretical replications. In case studies, theories are tested by comparing expected themes or patterns with empirical findings. With each additional case study (i.e., replication) that confirms predefined theoretical propositions, or disconfirms rival theories or explanations, confidence in the results increases (Yin, 2009). Yin (2009) differentiates between two types of replications: literal and theoretical. A case study is considered to be a literal replication of another case study when similar results are expected from the study of both cases. Each literal replication increases confidence in the patterns found. In contrast, a theoretical replication is defined as a replication in which opposite or dissimilar results are expected for predictable reasons. This occurs when, based on information available from theory, two cases differ on a theoretically relevant variable. Theoretical replications allow researchers to rule-out rival explanations for the patterns found.

For example, in the present dissertation study, the case study of an organization that implemented a tool that could not be adapted (i.e., the Global Appraisal of Individual Needs; GAIN; Dennis et al., 2003) is a theoretical replication. Another theoretical

replication is the case study of a CANS implementation project that involved minimal staff participation. Given my theoretical proposition that staff participation contributes to positive consequences, I expected a different pattern of results in both these “theoretical replication” case studies because the implementations had involved less staff participation. Furthermore, these theoretical replications allowed me to test the rival possibility that factors other than staff participation were stronger influences on implementation outcomes.

Study Design

The proposed study employed a retrospective, embedded, multiple-case study design.

Retrospective, cross-sectional and embedded design. Each case was an organization in which one or more clinically relevant measure(s) had been implemented one to four years prior to the onset of the study. The study was cross-sectional and retrospective in that staff were interviewed at one point in time and asked to reflect on their experiences with participating in the implementation process.

The organization was the main unit of analysis; however, embedded units of analysis included the program (or the team) and individual staff members. This embedded design allowed me to examine how individual staff member experiences (i.e., the inner most embedded unit) related to broader processes at the level of the organization. Additionally, some organizations had implemented more than one tool or different versions of the CANS. In these cases, each implementation project was also an imbedded unit of analysis.

Multiple-case design. Four case organizations participated in the study (details regarding the cases will follow). The first two cases were agencies that had extensively involved staff in the CANS adaptation and implementation process and had been able to successfully implement the tool. These agencies will be referred to throughout the study as “Org. 1” and “Org. 2”. The third and fourth case studies were comparison cases: one agency (“Org. 3”) had experienced some initial difficulties with implementing the CANS, and one agency (“Org. 4”) had implemented a different measure that was not adaptable (i.e., the GAIN).

Multiple implementation projects were studied within Org. 3 and Org. 4. Org. 3 implemented two versions of the CANS. The agency first *adopted* a version of CANS without making any adaptations and took a less participatory approach. This implementation project will be referred to as the “adopted CANS implementation”. Subsequently, the agency took a participatory approach to *adapt* a version of the CANS (hereon referred to as the “adapted CANS implementation”). There were three implementation projects that were studied in Org. 4: implementation of a brief version of the GAIN (i.e., GAIN-Short Screener; GAIN-SS), pilot of a longer version of the GAIN, and an adapted CANS implementation. See Figure 3.1 for an illustration of how these projects fit within the broader study design.

The second case study (i.e., “Org. 2”) was intended as a “literal replication” of the first case study (i.e., “Org. 1”). I expected similar results from these first two case studies because both had taken a participatory approach to CANS implementation. The theoretical proposition that I was testing in these first two studies was that staff participation contributes to effective implementation and other benefits.

The third and fourth case studies were “theoretical replications”. I expected different patterns of results from each of these case studies. The third case organization (“Org. 3”) was selected because the *adopted* CANS implementation project involved less staff participation and was less successful, compared to other CANS implementation projects. The main theoretical proposition being tested was that implementation was less successful because a less participatory approach was taken. The fourth case organization (“Org. 4”) was selected because it had implemented the GAIN, a tool that could not be adapted. The main theoretical proposition being tested here was that the low adaptability of the GAIN would hinder staff participation and therefore there would be fewer positive implementation consequences.

It is important to note that although I had some theoretical propositions that I was seeking to test, the main objectives of the study were exploratory. Overall, comparisons between the “theoretical replication” cases and the first two cases allowed me to examine: (1) what contributes to effective implementation (comparisons between successful and less successful CANS implementation projects); (2) how staff participation affects implementation (comparisons between more and less participatory implementation projects); and (3) how the features of the tool being implemented, including its adaptability, affect implementation outcomes (comparison between GAIN and CANS implementations). An overview of the study design is shown in Figure 3.1.

Figure 3.1. Overview of study design.

Case Recruitment and Selection

Identifying potential cases. Given that the developer of the CANS was aware of many of the child and youth mental health treatment organizations that had implemented the CANS in Ontario, he was consulted to help identify a list of potential case organizations. Other professional contacts in Ottawa who had been involved with the

implementation of clinically relevant measures were also consulted to identify other organizations that had implemented either the CANS or another clinically relevant measure. The developer of the CANS provided some information about the implementation approach that was taken at each of the organizations he identified (i.e., adapted versus adopted CANS, participatory versus less participatory). Additionally, I conducted a brief screening interview with a contact person from the identified organizations to gain some preliminary information about the implementation (e.g., participatory or not, year of implementation) that I could use to make case selection decisions (see Appendix F for screening interview script).

Case selection criteria. The following selection criteria were used to make overall case selection decisions:

- (1) Organizations and individual staff members had to agree to participate in the study.
- (2) The implementation had to have occurred recently enough for staff to recall their experiences. Preference was given to agencies that had implemented the tool more recently.
- (3) The implementation had to have taken place within the context of a mature and well-established organization. These criteria were set to enable me to examine changes at the organizational level.
- (4) I strived to select cases that were similar in terms of organizational characteristics and to minimize differences that were not related to the constructs being studied. Furthermore, when selecting the agency that had implemented a tool other than the CANS, I strived to select an organization

that had implemented a tool that was similar to the CANS in terms of the function it was intended to serve (i.e., another needs assessment and monitoring tool). These criteria were set to facilitate comparisons across cases and implementation projects.

More specific criteria were used to select specific cases for the literal and theoretical replications. As a reminder, I assessed whether the organizations met these criteria in two ways: (1) by relying on information relayed to me by the CANS developer, and (2) by conducting a screening interview with the implementation lead (see Appendix F). The criterion for selecting “literal replication cases” was that agencies had to have taken a participatory approach to adapting and implementing the CANS. Preference was given to organizations that had involved a greater number and diversity of staff in the implementation process. When selecting the third case, I was looking for an agency that had experienced negative CANS implementation outcomes. I changed this criterion from what I had initially planned. Initially, I was planning to select an organization that had adopted a CANS, as opposed to adapting one, and had taken a less participatory approach. At first, I had difficulty identifying such an organization and consequently I changed the selection criterion out of necessity. However, in the end, the agency that I selected happened to have experienced negative implementation outcomes when they adopted a CANS, as opposed to adapting one, and when there was minimal staff participation in the implementation process. Lastly, when selecting the fourth case, I was looking for an agency that had implemented a clinically relevant psychometric tool that could not be adapted, as opposed to the CANS.

Recruitment. In addition to the four agencies that were selected and agreed to participate in the study, I contacted six other community-based child and youth mental health treatment agencies to see whether they would be appropriate cases for the study. All six did not meet my selection criteria. One agency also could not participate due to other research initiatives that were ongoing within the agency at the time. I had the most difficulty identifying an agency that had experienced negative CANS implementation outcomes. Most contact persons that I spoke with did not believe that their agency's implementation efforts had led to negative outcomes. It is also possible that agencies did not wish to shine the spotlight on a negative implementation experience within their agency.

In the end, I identified four agencies that met my selection criteria. I invited each agency to participate by speaking with the agency's implementation lead (see Appendix G for the recruitment letter to organizations). I explained to the implementation lead how and why I had selected the organization for participation (e.g., how I had found out about the organization; that I was interested in learning about how the implementation of the GAIN compared to CANS implementation; or that I was interested in comparing the successful and less successful implementations at the agency). A letter of agreement was drafted with each agency outlining the study objectives and the staff time or commitment that would be required for data collection activities. Executive Directors of each agency signed this letter to formally communicate the agency's agreement to participate in the study. The University of Ottawa research ethics board approved the protocol for the current study. All participating organizations were informed that their agencies would not be identified in any communication of the study results.

The characteristics of each of the selected organizations, as well as an overview of their implementation process, is outlined in Table 3.1. Further details regarding the case agencies will be described in the Results chapters. Additionally, details about each case study can also be found in the case study summary reports included in Appendix A.

Table 3.1

Characteristics of the Selected Organizations and the Tool Implementation Project(s) Within Each Agency

Organization	Organizational Characteristics	Services Provided	Events Leading to Implementation	Name of Tool Implemented and (Year of Implementation)	Extent of Staff Participation in Implementation Process	Implementation Outcome
Org. 1	<ul style="list-style-type: none"> - Located in a rural setting - Non-profit - Community-based - Small (~30 staff) - Serves children and adolescents 	<ul style="list-style-type: none"> - Mental health services - Family support and early intervention - Supports for youth involved with the criminal justice system 	<ul style="list-style-type: none"> - Participation in a provincial pilot of different assessment and outcome monitoring tools, including the CANS 	<ul style="list-style-type: none"> - Both adapted and adopted versions of CANS (2010) 	<ul style="list-style-type: none"> - High 	<ul style="list-style-type: none"> - Positive
Org. 2	<ul style="list-style-type: none"> - Located in an urban setting - Non-profit - Community-based - Large (~100 staff) - Serves children 	<ul style="list-style-type: none"> - Mental health services - Early childhood development services 	<ul style="list-style-type: none"> - N/A 	<ul style="list-style-type: none"> - Adapted a version of CANS (2011) 	<ul style="list-style-type: none"> - High 	<ul style="list-style-type: none"> - Positive

Organization	Organizational Characteristics	Services Provided	Events Leading to Implementation	Name of Tool Implemented and (Year of Implementation)	Extent of Staff Participation in Implementation Process	Implementation Outcome
Org. 3	<ul style="list-style-type: none"> - Located in an urban setting - Non-profit - Community-based - Serves children and adolescents - Made up of three main staff teams, each providing a different type of service within the same building 	<ul style="list-style-type: none"> - Mental health and addictions counseling - Social services - Child care and education - Secondary education 	<ul style="list-style-type: none"> - Participation in a multi-site evaluation project 	- Adopted CANS version (2011)	- Low	- Negative
				- Adapted CANS version (2013)	- High	- Positive
Org. 4	<ul style="list-style-type: none"> - Located in urban setting - Non-profit - Community-based - Serves adolescents and adults - A large number of staff work offsite out of schools and other settings 	<ul style="list-style-type: none"> - Addictions treatment and support services 	- N/A	- Brief GAIN (2010)	- Low	- Mixed/ Positive
			- Provincial pilot of assessment and outcome monitoring tools	- Longer GAIN (2012)	- Moderate	- Negative
			- Joint evaluation project with partner agency	- Adapted CANS (2013)	- Moderate	- Mixed

Data Collection

Borrowing from methods used by Cousins, Bourgeois, and associates (2014), data collection at each organization was conducted in two phases. During Phase 1, I conducted individual interviews with staff to develop an understanding of the tool adaptation or implementation process at the organization. During Phase 2, I conducted a focus group with staff from the agency to validate and refine my findings from Phase 1. The case studies were conducted sequentially, starting with Org. 1 and ending with Org. 4.

Phase 1: Understanding the agency's implementation process. *Participants.*

At each agency, staff who had been most involved in the implementation process, as well as other staff who had experience using the tool, were identified by the implementation lead(s). Implementation leads were senior or middle managers who had led the implementation effort. They were asked to identify staff with diverse roles within the agency, when possible. At three of the agencies, all staff members who were identified by the implementation lead were invited to participate and nearly all agreed. At one of the agencies, a large number of staff were identified (i.e., 33). Given that I was looking to interview between 5 to 10 staff at each agency, I selected 10 of the staff who were either most involved in the implementation process or who, based on earlier interviews with staff at the agency, I knew had had a different experience with using the CANS.

In total, 33 staff members were interviewed (12 from Org. 1, 10 from Org. 2, 5 from Org. 3, and 6 from Org. 4). The characteristics of these staff participants are outlined in Table 3.2. In general, participants served diverse roles within the agency (e.g., frontline service providers, managers, supervisors). Their roles in the process of

implementing the CANS or GAIN tools also varied from initiating and leading the implementation effort, to serving as a local coach or trainer, to sitting on a “CANS Champions” committee, to not having a role in the implementation but being a user of the tool. Staff participants had been employed at their respective agencies for varying periods, ranging from 10 months to 28 years.

Table 3.2

Characteristics of Staff Participants Interviewed Within Each Case Organization

Organization	N	Roles	Range in Number of Years Employed at the Agency (Mean)*
Org. 1	12	Executive Director; program supervisor; 2 program coordinators; 8 frontline counsellors or workers (e.g., early intervention workers; child and family therapists; intake worker)	1.5 - 20 years (8 years)
Org. 2	10	Executive Director; 4 team supervisors; program manager; 2 specialist frontline staff (i.e., psychologist; speech and language pathologist); 2 frontline workers (e.g., resource consultant; phone intake worker)	1.5 – 12 years (6 years)
Org. 3	5	Executive Director; 2 frontline support workers; team supervisor; assistant program manager	10 months - 7 years (4 years)
Org. 4	6	Executive Director; team manager; 2 program coordinators; 2 frontline addiction counsellors	2 years -28 years (9 years)

*Note. Not all participants were asked about the number of years they were employed at the agency. At Org. 2, most participants were asked about the number of years that they had been employed in their current role at the agency.

Interview protocol. The conceptual framework that was outlined and discussed in the literature review chapter of this dissertation was used to guide the development of the

interview protocol. Interview questions focused on examining: (1) planned and unplanned or formal and informal aspects of the tool development and implementation process, (2) perceived consequences of these processes, and (3) contextual factors that may have influenced the process and its consequences. The “general interview guide approach” (Patton, 1987) was used to create a list of general and more specific follow-up questions to explore each of the above mentioned topics. The interview protocol can be found in Appendix B.

Individual interviews. Interviews were conducted during the following time periods at each organization:

- between June and July, 2013 with Org. 1 staff (i.e., approximately 3 years after start of implementation),
- between July, 2013 and April, 2014 with Org. 2 staff (i.e., approximately 2 to 3 years after start of implementation),
- between September and December, 2014 with Org. 3 staff (i.e., approximately 3 years after start of first implementation),
- and between August, 2014 and January, 2015 with Org. 4 staff (i.e., approximately 4 years after start of first implementation).

I conducted the majority of the interviews in person and onsite at the agencies. There were some exceptions, however. At Org. 1, the majority of the interviews were conducted during two consecutive days by myself and my dissertation supervisor. The first onsite interview at Org. 1 was conducted jointly and the remaining interviews were conducted either by Dr. Syelvestre (N=4) or by myself (N=8). Another exception was that all

interviews with Org. 2 staff, and two interviews with Org. 1 and Org. 3 staff, were conducted over the phone.

All prospective participants were informed about the study and invited to participate by myself (see staff recruitment letter in Appendix H). Prior to all interviews, a consent form outlining the objectives, risks and benefits, and procedures related to protecting participants' confidentiality was shared and reviewed with the staff participants (see Appendix I for a copy of the consent form). Staff were informed that their participation was voluntary, that their decision to participate or not would not affect their employment, and that they could withdraw their consent at any time. They were informed that they would not be personally identified when communicating the results. All participants provided written consent prior to the start of the interview. Interviews were semi-structured, approximately one hour in duration, and followed the protocol described previously. All interviews were audio-recorded with participants' permission and transcribed verbatim for data analysis.

A "depth interviewing" approach (Patton, 1987) was used. Depth interviewing involves posing open-ended questions and following up on responses with extensive probing. This method was appropriate given that stimulating staff members' recall about their experiences related to the implementation process and gaining a deep understanding of their experiences required extensive probing. In a study on the benefits that staff gained from participating in evaluation processes, Preskill and colleagues (2003) found that it was important to have participants reflect deeply about their experiences and involvement in order to trigger their memories of the process and help them "discover their learning" (p. 439). Depth interviewing may have allowed for deeper reflection by

study participants and helped elicit information related to effective implementation and the benefits and process of staff participation in implementation. Moreover, in contrast to structured interviewing, depth interviewing allowed the interview to be flexible and conversational in style, which likely helped facilitate rapport and trust between myself and the participants and may have led to more trustworthy results.

Document review. Staff were asked to share any documents relevant to the implementation during the interviews, or during other communications with agency contacts. Staff provided documents such as: program evaluation reports, information sheets regarding the CANS, and documents outlining the agency's CANS implementation plan, or the intended plan regarding how CANS would be incorporated within staff members' workflow. These documents, along with other publically available sources of information about the agency (e.g., agency website), were reviewed to supplement or corroborate the information collected during the interviews.

Ongoing discussion and reflection. I used several strategies to ensure that I had a good understanding of the emerging data, actively pursued information related to constructs of interest as well as differing perspectives, and continuously improved my interviewing approach. First, following recommendations by Miles and Huberman (1994), I completed an "Interview Summary Form" (see Appendix C) after each interview. I used this form to reflect on and make note of key themes that were salient during the interview, new questions that could be pursued in future interviews, and ways in which the interview protocol or my interviewing approach could be improved.

Second, ongoing discussions with my dissertation supervisor throughout the data collection and analysis period allowed me to: obtain feedback on how I could improve my interviewing approach; reflect on key emerging themes and unanswered questions that needed to be pursued; and to recognize any of my assumptions or biases that were influencing my interpretation of the data.

Draft case summary report. Borrowing from methods used by Cousins, Bourgeois, and associates (2014), and consistent with recommendations by Yin (2009), a case summary report was drafted for each case organization after all interviews were completed with the agency staff. This report was based on qualitative analysis of the interview data, as well as information that was gathered from document review. Details regarding the qualitative data analysis method employed will be discussed in the Data Analysis section.

The case summary reports all shared the same general structure in order to allow for easier comparison across cases. The conceptual framework outlined in Chapter 2 informed the data analysis conducted to write the case summary reports, and the structure of the reports. In general, the reports outlined the background leading to implementation of the CANS or GAIN at each agency, as well as the implementation context, process, and consequences. They varied in length between 10 to 37 double-spaced pages and included relevant, salient quotations from participating staff. After each report was drafted, it was reviewed by my dissertation supervisor and revised based on his feedback. This review and revision process also served the function of making sure that there was agreement between myself and my supervisor on the emerging themes at each organization, thus increasing the trustworthiness of findings.

The revised draft was then shared with the contact person from the case organization and he or she was asked to distribute the report to other staff for review prior to the focus group in Phase 2. In some cases, if a quotation or point in a case summary report was easily attributable to a specific participant (e.g., due to the participant's unique role), that section of the report was first sent to the participant for review. The section was only included in the final draft if the participant consented to having the information included. The final draft of the report was then distributed to all interested staff: both those who participated in the interviews and those who did not but may have had important comments to contribute related to the implementation. If interviewed staff could not participate in the focus group, they were asked to review the report and provide feedback regarding the accuracy and completeness of the summary via email. All case summary reports have been de-identified and are included in Appendix A.

Phase 2: Validation. *Focus groups.* At each agency, after the case summary report had been drafted and distributed to interested agency staff, staff were invited to participate in a focus group to validate and refine the findings from Phase 1. Again, both staff who had participated in interviews and those who had not participated but had comments to share related to the implementation were invited.

The focus group with Org. 1 staff was conducted online using a web-based conferencing technology (Adobe Connect). Four staff participated in the focus group at Org. 1: two had previously participated in interviews and two had not. My supervisor was also present. I conducted the focus groups with Org. 2 and Org. 3 staff in person and onsite at each agency. Twelve staff participated in the focus group at Org. 2: five had

previously participated in interviews and seven had not. Five staff participated in the focus group at Org. 3: all five had previously participated in interviews.

Despite several efforts, I was not able to recruit participants to hold a focus group with Org. 4 staff. By the time I had written the case summary report for Org. 4 and was prepared to hold the focus group, the agency contact person and another implementation lead had left the agency and therefore were not available to comment on the report or help organize a focus group. However, I contacted the staff who had participated in interviews, as well as the staff who had replaced the implementation leads, sent them the draft report, and asked for their comments. I heard back from four staff (three through email and one via telephone) and all indicated that the report was consistent with their experience or knowledge of the implementation projects.

Each focus group was approximately 1.5 hours in duration. Each participant in the focus group received a consent form in advance outlining the objectives, risks, benefits, and confidentiality-related procedures related to the focus group (see Appendix J for a copy of the focus group consent form). Each focus group participant provided written consent to participate. Participants were asked to read the draft case summary report prior to the focus group. However, given that I anticipated that some might not have the opportunity to do so, I started each focus group by providing a brief, approximately 20 minutes, presentation summarizing the findings.

Following this presentation, I facilitated a discussion about the findings focused on two main questions: (1) Was the report's summary description of the context, process, and consequences of the CANS or GAIN implementation at the agency consistent with

staff members' experiences? (i.e., "Did I get it right?"), and (2) Was the report missing any important information related to the implementation? (i.e., "Did I miss anything important?"). The general focus group protocol can be found in Appendix D. A more elaborate focus group protocol was developed to help guide the Org. 2 focus group and to ensure that I followed up on all the points that needed clarification (see Appendix E). The focus groups were audio-recorded but were not transcribed. Instead, I listened to the recordings and took summary notes outlining the staff feedback that was provided.

Following the focus group at each agency, I revised the case summary report based on comments and feedback from participants. At Org. 4, I revised the report based on feedback that I received through individual communication with the four staff who responded to my request for feedback. In all cases, the feedback that was provided was that the reports were an accurate reflection of the CANS and/or GAIN implementation at the agencies. Only minor revisions were made to the draft reports.

Data Analysis

The data was first analyzed case by case and then cross-case analyses were conducted by comparing across different cases (Yin, 2009). I will first describe the qualitative data analysis approach used to analyze the within case interviews, and subsequently describe the methods used to conduct cross-case analyses.

Qualitative analysis of interview data. The analysis of the individual interviews from each organization was informed by the general inductive approach (Thomas, 2006) and the approach described by Miles and Huberman (1994). I completed the coding of the interviews independently, using Nvivo software, a computer software program

designed to facilitate qualitative data analysis. The first step was to condense the information from each agency into a case summary report. The conceptual framework outlined in the Introduction was used to focus the analysis on key concepts of interest and to provide an initial structure, or set of categories, for organizing the data. Note that although the conceptual framework was used to guide the analysis, the analysis was not restricted by it, in that categories were eliminated, combined with other categories, or added depending on what was identified in the data.

Components of the framework were initially used to define upper-level or general categories such as: “Implementation Context”, “Implementation Process”, and “Implementation Consequences”. Transcripts of the interviews were then read closely to identify segments of the interviews that fit within different general categories. Specific or lower-level categories were then derived by searching within each general category for contradictory points of view and sub-topics that fit within the broader category. These codes were subsequently applied to transcripts from interviews conducted at the other case organizations. When analyzing each set of interviews, categories were adjusted, clarified, or added when necessary. I wrote analytic memos throughout the analysis process. These memos were used to describe the meaning of categories and sub-categories, and emerging insights regarding the relationships amongst them.

When analyzing the interviews from Org. 3 and Org. 4, in addition to inductive coding using Nvivo software, I developed data display matrices (Miles & Huberman, 1994) to summarize the information from each participant at each case organization. The rows of the matrices were the different general and specific categories or codes that were developed through inductive coding. Each column of the matrix included the summary

information from each interview organized into the different rows or categories. I have included the template of the data display matrix for Org. 3 in Appendix K as an example to show the layout of these matrices. The example matrix also includes a few summary responses. Note that I am not including the full matrix with the summary of each participant's responses for a number of reasons. First, these matrices include substantial detail and were created using Microsoft Excel. Including the matrix in Microsoft Word would take substantial space. Second, given the level of detail they include at an individual participant level, there is a risk that individual participants will become identifiable, which would be a violation of the study's ethics procedures approved by the University of Ottawa Research Ethics Board.

The advantage of this matrix display approach was that it allowed me to see the data all in one place and in a summary format. In comparison, I found that when coding using Nvivo software, the data became fragmented. It was not possible to see, at one glance, the raw data that was included within multiple categories. This made it more difficult to compare the perspectives of different participants related to one topic or to understand the relationships between different categories by looking across them.

Ultimately, using Nvivo and/or the summary matrices, I summarized the information from all the interviews and any documents reviewed from each case organization into a case summary report. The summary matrices themselves were not included in the case summary reports, for the reasons stated above.

Cross-case analyses. Based on guidelines provided by Yin (2009), the patterns of findings from different cases, or combination of cases, were compared to test the

theoretical propositions outlined in the conceptual framework. For a visual outline of the cases that were compared please see Figure 3.1. First, the two cases that were expected to have similar CANS implementations, the “literal replication” cases (Yin, 2009), were compared to examine how the implementation context, process, and consequences were similar and different at the two organizations. Results of this analysis are outlined in Chapter 4. Second, the CANS implementation projects at Org. 3 and Org. 4 that involved less staff participation and had less successful implementation outcomes were compared with findings from more participatory and successful implementation projects. Results of this analysis are outlined in Chapter 5. Third, the implementation of the GAIN at Org. 4 was compared to findings related to CANS implementation from the other cases. Results of this analysis are outlined in Chapter 6.

Data display matrices (Miles & Huberman, 1994) were used to facilitate these cross-case comparisons. Once gain, matrices were used to summarize the findings from each of the cases being compared. However, in comparison to matrices used during the within case analyses, each column of the matrix contained summary information from a case as opposed to an individual participant. Earlier matrices (e.g., comparison of Org. 1 and Org. 2) were more detailed, given that I had not yet understood the key factors and processes at play. One section of the cross-case matrix comparing Org. 1 and Org. 2 has been included in Appendix L as an example. In comparison, later matrices were less detailed. The matrices from the later stages of the analysis have been included in the relevant results chapters.

Throughout the analysis process, two analytic strategies were used to develop a model describing the role of staff participation in the implementation of the CANS.

Firstly, emergent findings were compared to the original conceptual framework. These iterative comparisons were used to modify the framework so that it best captured the tool implementation process, as described by study participants. Secondly, overlapping coding categories, or categories with similar meanings, were combined under superordinate categories. These superordinate categories were then incorporated into the evolving model.

Strategies Used to Ensure Trustworthiness of Findings

Several strategies were used to ensure the trustworthiness of the current study's findings. According to Yin (2009), the criteria that are commonly used to judge the quality of empirical social research (i.e., construct, internal, and external validity, as well as reliability) also apply to case studies. He suggests several strategies to ensure that these criteria are satisfied. I will now describe the strategies that I employed in the current study to help ensure the validity and reliability, or to use terminology from qualitative research, trustworthiness and consistency, of the study findings.

Construct validity. Construct validity refers to the extent to which the operational measures used, or the way in which constructs have been operationalized, accurately reflect the theoretical concepts being studied (Yin, 2009). Some of the central concepts studied in the current dissertation include implementation effectiveness and staff participation. Construct validity, therefore, refers to the extent to which what I refer to in the dissertation as “effective implementation” or “high levels of staff participation” map onto what these concepts mean in theory.

According to Yin (2009), outlining each of these concepts in specific terms and identifying operational measures that match these concepts increases construct validity. Thus, I made sure to be clear about how I defined these concepts in the literature review chapter of this dissertation. Furthermore, by drawing on the available literature on stakeholder participation and implementation, and developing a conceptual framework, I outlined some of the manifestations or dimensions of the concepts studied. Yet, it is important to note that given the scarcity of research on the implementation of clinically relevant tools, I did not have clear measures, indicators, or operationalizations of these concepts from the outset. In fact, an objective of the study was to gain clarity about how these concepts can be operationalized. For example, I sought to provide a richer description of what effective implementation of clinically relevant tools such as the CANS looks like, and therefore, how effective implementation of these tools can be operationalized.

Yin (2009) recommends three strategies for ensuring construct validity: using multiple sources of evidence, establishing a chain of evidence, and having the study report reviewed by key informants. I will now describe how I employed these strategies throughout the current dissertation study.

First, I made sure to present a complete and nuanced description and analysis of the implementation of clinically relevant tools by triangulating across different sources of evidence, different staff perspectives, and the perspectives of myself and my dissertation supervisor. I triangulated across different sources of evidence by collecting and reviewing relevant documents that could corroborate staff reports, when possible. For example, I reviewed an evaluation report written by an external evaluation firm that had commented

on a case organization's CANS data quality and completeness. However, I was only able to do this on a few occasions and believe that the study could have benefited from additional corroborating evidence (as will be discussed in the General Discussion). Additionally, by triangulating across interviews with staff who held different positions and played different roles within the agency, I made sure that my examination of the implementation process incorporated these different perspectives and was not solely focused on the perspectives of one group of staff. Furthermore, I guarded against biased collection and interpretation of data by reviewing and discussing the data with my dissertation supervisor, and triangulating across our respective interpretations and understandings. Together these strategies allowed me to study CANS or GAIN implementation from different angles or to "provide multiple measures of the same phenomenon", thus strengthening the study's construct validity (Yin, 2009, pp. 116-117). These strategies are also consistent with Lincoln and Guba's (1985) suggestions for increasing the credibility of qualitative data.

Yin (2009) suggests that maintaining a "chain of evidence" (p. 122) so that external observers can follow how evidence was collected and conclusions were made, strengthens both the construct validity and reliability of a study. This involves making very explicit links between the research questions, questions asked during the study, raw data collected, and the conclusions made (Yin, 2009). In this study, by reporting the study methods in detail and including the protocols that I used to collect data, I make it possible for the readers of the study to trace the procedures I followed to arrive at my conclusions. Additionally, I make clear links between the data and my conclusions by referencing specific segments of interviews or other data sources that the conclusions have been

based on. These strategies are also consistent with Lincoln and Guba's (1985) suggestions for addressing the dependability of qualitative data.

Yin (2009) writes that having the draft case study report reviewed by key informants also addresses the construct validity of case studies. This strategy was employed by having staff participants comment on the draft case summary reports either in writing or during the focus groups. This strategy is consistent with Lincoln and Guba's (1985) suggestions for addressing the confirmability of qualitative study findings.

Internal Validity. Internal validity concerns the credibility of the causal explanations that are derived from data (Yin, 2009). Hence, internal validity is less relevant to the descriptive and exploratory aspects of the study. However, given that the study also puts forth some tentative explanatory conclusions about what contributes to effective implementation of clinically relevant tools, I will describe the strategies employed in the current study to address internal validity.

Yin (2009) suggests that internal validity can be strengthened by addressing rival explanations and "vigorously" (p. 134) pursuing evidence that contradict the researcher's expectations. In this study, strategies such as memoing and reviewing and discussing data collection and analysis processes with my dissertation supervisor helped challenge me to pursue and consider rival explanations. Furthermore, the multiple-case study design allowed me to test the rival explanation that factors other than staff participation contributed more to implementation effectiveness. Additionally, the phase 2 validation of the case summaries at each organization was another strategy that helped provide another

check of whether I had accurately captured how the implementation took place and how different factors influenced implementation outcomes.

External Validity. External validity, or whether the studies' findings can be accurately generalized beyond the immediate case study (Yin, 2009), is also less relevant for case studies. As described previously, the purpose of conducting case studies is not to make generalizations to other similar cases. Rather, the purpose is to provide additional support for a theory or theoretical propositions. In this dissertation, conclusions will be made about whether the findings are consistent with what we know to date about stakeholder participation and implementation, but the findings will not be expected to hold true for all organizations adapting or implementing a clinically tool. Nevertheless, Yin (2009) indicates that using theoretical propositions to guide case studies, and conducting theoretical and literal replications, enhances the confidence with which case study evidence can be taken as support for the theoretical propositions tested. This addresses the study's analytic generalizability. As described previously, both these approaches were used in this dissertation.

Reliability. Reliability deals with how consistently different individuals would arrive at the same findings if they repeat the same procedures (Yin, 2009). Yin (2009) suggests that using a case study protocol and developing a case study database increase reliability by making all the steps in the study very clear to other researchers. Creating a case study database involves maintaining and organizing the "raw data" of the study in such a manner that the original data can be reviewed by a different researcher if need be. By allowing for the possibility of checking the researcher's conclusions, this strategy increases the reliability of the findings. In this study, transcripts from interviews,

interview summary forms, and memos were maintained as part of the database.

Additionally, as described when discussing strategies that address construct validity, maintaining a chain of evidence and describing study procedures in detail also help ensure reliability.

Inter-coder reliability was not used because I was less concerned with whether two independent coders would code the same sections of the transcripts as belonging in the same categories, and more concerned with whether the interpretations I was making at a more abstract level about the relationships amongst different codes were reliable. This latter concern was addressed, as discussed previously, using the ongoing discussions with my dissertation advisor.

Summary

In summary, qualitative case study methods were used to study the role of staff participation in the development and implementation of the CANS and the GAIN in four community-based child and youth mental health agencies. The study employed an embedded, multiple-case, retrospective, and cross-sectional design. Comparisons across implementation projects that involved high staff participation and those that involved less staff participation allowed me to explore and understand the role of staff participation. Additionally, comparisons across case organizations that implemented the CANS and an organization that implemented the GAIN allowed me to understand how the features of a tool contribute to the implementation process and outcomes. Overall, the case study method employed allowed me to gain a rich understanding of the multiple factors and

processes at play when clinically relevant tools are implemented within community mental health organizations.

The study results will be presented in the next three chapters. In the first results chapter, Chapter 4, I outline how staff participation contributed to positive implementation outcomes in the first two organizations that were studied. In Chapter 5, I compare CANS implementation projects that were less successful to those that were more successful, and describe the factors that contributed to poor implementation outcomes. In Chapter 6, I compare the process of implementing the GAIN to the process of implementing the CANS, and describe how the adaptability of a tool influences staff participation and implementation outcomes. These chapters will be followed by a General Discussion in which I review and discuss the findings, as well as the study's limitations and avenues for future research.

Chapter 4: Results

Comparison of Two Participatory CANS Implementations With Positive Outcomes

Chapter 4: Comparison of Two Participatory CANS Implementations With Positive Outcomes

This chapter examines the implementation of the Child and Adolescent Needs and Strengths (CANS) measure in two community-based child and youth mental health agencies in Ontario. These agencies implemented the CANS similarly by adapting the measure so that it would meet their particular needs and involving staff in the implementation of the measure. By “adapting” I mean that the agencies selected the items that would appear in the measure and developed some items that were particular to them. The selection and development of items to create specific versions of the CANS is a common and recommended practice as the reliability of the CANS is measured at the item rather than the scale level (Lyons, 2009).

These first two case studies were conducted to test the proposition that staff participation in developing a version of CANS and working out the details to put it into practice would lead to beneficial consequences, including increased uptake and effective use of the CANS tool. As discussed in the introduction, this proposition was based on research in program evaluation suggesting that stakeholder participation in evaluation activities can lead to positive changes such as participants learning research skills and being better able to use evaluation data (Amo & Cousins, 2007). The objective was to examine whether staff perceived that their involvement in the CANS implementation process had led to similar types of changes or consequences to those observed in studies on stakeholder participation in evaluation activities.

I also had descriptive and exploratory objectives in conducting these first two case studies. Little was known about what the implementation of CANS, and staff participation in the process, looked like in practice. I sought to describe this process and explore the factors that facilitated or inhibited effective implementation. As discussed in Chapter 2, the conceptual framework that I developed based on the literature guided these case studies. It helped orient me toward factors that were likely significant to the implementation process.

Figure 4.1 depicts a proposed model that I developed based on findings from all four case studies, outlining factors and processes involved in effective implementation of clinically relevant tools. This model is provided here as a guide to help orient you to the results that I will be presenting in this chapter and the following ones. Note that all arrows between factors in the model are meant to represent hypothesized relationships, as opposed to proven causal explanations.

Figure 4.1. Proposed model depicting effective implementation of clinically relevant tools.

In this chapter, I present findings from the first two case studies in sequential order: starting with a description of the implementation context, followed by the implementation process, and ending with implementation outcomes and consequences. First, however, a brief description or “sketch” of the two organizations is provided in the next section as a reminder of some of the characteristics of these agencies. Further details about the case studies at Org. 1 and Org. 2 are provided in their respective case summary reports in Appendix A.

Sketch of “Org. 1 and Org. 2”

The two first organizations that were studied will be referred to as Org. 1 and Org. 2. Org. 1 was a small (i.e., approximately 30 staff), rural, community-based agency in Ontario that provided mental health, youth justice, and family support services (including early intervention) to children and adolescents. Org. 2 was a larger (i.e., approximately 100 staff), urban agency in Ontario that provided early child development and mental health services to preschool children.

Implementation Context

The implementation context was one of the foci of the current study. The objective was to examine how the implementation context influenced the implementation process and its consequences. Based on a review of the literatures on evaluation use (e.g., Preskill et al., 2003) and communimetrics (e.g., Lyons, 2009), four contextual domains were outlined in the conceptual framework as potentially influencing the implementation process and how much staff benefited from participating in it. These four contextual domains were: *leader(s)’ facilitation skills, external influences, organizational*

characteristics, and *staff characteristics*. I found that factors related to the facilitation of the implementation process fit best with the *organizational characteristics* and *implementation process* categories, and thus I eliminated “*leader(s)’ facilitation skills*” as a separate contextual category.

How factors within these three contextual domains affected the implementation will be described next. External influences refer to “outer context” factors (Aarons et al., 2011), or factors outside the organizations that have an impact on the implementation process. Organizational factors refer to factors such as the organization’s history, structure, activities, values and priorities that were identified as relevant to the implementation process. Staff characteristics refer to the characteristics of individual staff members who take part in the implementation or use of the CANS, such as their previous professional experiences.

External influences. In both organizations, staff appeared to have a shared sense of the different external influences on their agency. These understandings of the external environment of the organization were woven into their thinking about the CANS. They frequently pointed to these external influences as the rationale behind the adoption of the CANS. Thus, these external influences may have provided motivation or incentives to implement the CANS. Furthermore, staff reported that some contextual factors influenced the ease with which the CANS fit within the workflow at the agency. Table 4.1 summarizes similarities and differences in the different external influences that affected CANS implementation at the two organizations.

Table 4.1

*Similarities and Differences in External Influences That Affected CANS Implementation
at Org. 1 and Org. 2*

External Influence	Similarities	Differences
Trend toward outcome monitoring	<ul style="list-style-type: none"> Both agencies were influenced by a trend toward outcome monitoring 	<ul style="list-style-type: none"> None
Maintaining funding during a period of system change	<ul style="list-style-type: none"> Staff at both agencies were aware that the system was changing and believed that implementing outcome monitoring would put them in a better position to ensure that they would maintain their funding and autonomy 	<ul style="list-style-type: none"> At Org. 1, considerations about funding and the changing system were much more central in the decision to implement the CANS
Ministry mandates	<ul style="list-style-type: none"> MCYS mandates to use CAFAS and BCFPI contributed to outcome monitoring becoming common practice in many child and youth mental health agencies. 	<ul style="list-style-type: none"> At Org. 1, staff members were required to complete the CAFAS along with the CANS, even though they did not find the CAFAS user-friendly. This was an added burden to staff members' workloads. Org. 1 staff faced some uncertainty about whether they would be required to use the CANS long-term, which decreased some staff members' investment in the measure MCYS mandates did not directly affect Org. 2, as they were not required to complete the CAFAS because it could not be used with the population that they served
Partnerships and wide-spread use of CANS	<ul style="list-style-type: none"> Both were influenced to use the CANS because of its widespread use in Ontario and the United States Staff at both agencies believed that one of the advantages of the CANS being used by partner agencies was that it would help facilitate communication across agencies 	<ul style="list-style-type: none"> Org. 1 worked in partnership with other agencies around the use of CANS. This was more limited at Org. 2.

Provincial trend toward outcome monitoring. According to staff at both agencies, one external influence was a trend within the child and youth mental health sector toward outcome monitoring and program evaluation. Most staff members reported that many other reputable agencies in the province had become more deeply involved in outcome monitoring and they believed that staying “up to par” with these agencies was important for the success of their own organizations.

Maintaining funding. Staff perceived that the Ministry of Child and Youth Services placed an emphasis on screening and outcome measures. Consequently, they commonly said that reporting on clients’ progress using outcome data was important for maintaining the agencies’ funding and autonomy. The importance of demonstrating the agencies’ effectiveness was also heightened for staff members because the province was in the process of restructuring child and youth mental health services. A theme at both organizations, particularly Org. 1, was that they needed to implement changes within the organization to put themselves in a “much better position” in preparation for potential system changes and funding cuts. In the words of one staff member:

Being able to have a way that we can show that what we do works, that what we do is effective, that what we do is helpful, is also part of making sure that we can show that our agency has value and importance particularly in times like we are right now where we’ve got government cuts and not a lot of funding and potentially a lot of competition for the government dollars there are.

It was clear based on staff reports that the belief that outcome monitoring was necessary for maintaining funding was widely held amongst staff. This was one of the factors that provided a reason or incentive to implement the CANS.

Ministry mandates. Ministry mandates to implement specific measures appeared to influence both staff members’ workloads, and therefore the ease with which they could

use the CANS, and their investment in the tool. The Ministry mandated measures, the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2003) and the Brief Child and Family Phone Interview (BCFPI; Cunningham, Pettingill, & Boyle, 2000), did not work well for the two organizations studied. Org. 2 was not directly affected by the mandate because the CAFAS could not be used with its pre-school population. Staff at Org. 1 found that the CAFAS was not “user-friendly”, but were required to complete it nonetheless while they were also completing the CANS. Staff stated that having to complete these additional measures added administrative burden to their workload. Administering and using the CANS was more difficult for them than it would have been if it were the only measure they were using, and thus fit less smoothly within their workflow. One said:

Not only are we doing CAFAS, which requires a bit of time, but we’re also doing CANS as well, and that was feeling a bit onerous. So it was kind of like can somebody in the Ministry make a decision in terms of which should be the instrument of choice versus making us do 3 or 4 tools.

Additionally, staff members at this organization were uncertain which assessment measures the Ministry would require them to complete in the future, as the system was going through a period of transition. One staff member commented that the possibility of being mandated to use a different measure in a few years discouraged staff from investing in implementing the CANS:

We’re going to get this, we’re going to learn it, we’re going to implement it and then two years from now, something else will change. Government will change, so then [Laughter] the system will change and then this will change. So, ... people are like, “Oh, we don’t want to do this.”

Thus, the uncertainty about whether use of the CANS would be feasible in the future appeared to affect staff motivation and investment in using the tool.

Partnerships and widespread use of the CANS. While staff members' shared perception of a province-wide emphasis on outcome monitoring was a key influence that set the stage for outcome evaluation at both agencies, their perception of the wide-spread use of the CANS in Ontario and the United States influenced the decision to implement the CANS specifically. Staff at both agencies indicated that the use of CANS by other reputable agencies increased their confidence in the measure. One stated that her interest in the CANS was influenced by the fact that it was "being used so extensively in other areas -- in other provinces, and the fact that it was being used cross-sectorally. [...] The fact that so many other agencies were interested in it... and interested in doing something with it." Other agencies that were familiar with the CANS recommended the measure and provided information and resources. This not only increased the perceived value of the CANS but it also practically facilitated its adoption and implementation.

While the wide-spread use of CANS was an incentive for its adoption at both agencies, at Org. 1, it was one of the main reasons that staff gave for why using the tool was important to them and to the agency. Org. 1 had become exposed to the CANS through a provincial initiative that aimed to identify an assessment tool that could be used by child and youth mental health agencies province-wide. Perhaps due to this initiative, the agency had become highly invested in helping to better integrate client care across different agencies by disseminating the CANS and encouraging all agencies to use it. For staff at Org. 1, using the CANS was important because it helped facilitate cross-agency partnerships and the communication of client information from one agency to another.

For example, one staff member noted that completing the CANS collaboratively with the family, and professionals from different agencies and disciplines (e.g., Children's Aid Society (CAS) workers, occupational therapists) helped put the family at ease that they as a team of professionals were working with them to help address their child's needs. This prospect of improving collaboration and partnership in service of the client was an added incentive for CANS adoption at Org. 1 that was less present at Org. 2 because very few agencies that were in partnership with Org. 2 used the CANS.

Summary of external influences. In sum, according to staff reports, external influences affected staff perceptions of the value of outcome monitoring, and of using the CANS specifically, and in doing so, affected their commitment to use the tool. Several external influences provided reasons or incentives for staff to invest in using the tool, including: a provincial trend toward outcome monitoring, the belief that monitoring outcomes would help maintain the agency's funding, and the wide-spread use of the CANS. In contrast, at Org. 1, uncertainty about how Ministry mandates would affect use of the CANS long-term appeared to reduce staff commitment to use the tool.

Furthermore, uniquely for Org. 1, external influences not only affected the perceived value of the CANS but they also affected CANS use in practical ways. Ministry mandates to use tools other than the CANS added an administrative demand to staff members' workloads, thus making it more difficult for them to use the CANS. Additionally, use of the CANS by other partner agencies in the community made it possible for staff to experience the CANS as a useful tool for facilitating inter-agency collaboration in service of the client.

Overall, although there were small differences in these external influences, both agencies implemented the CANS within an environment that provided incentives for CANS implementation and few barriers to CANS use.

Organizational factors. The context within the organization appeared to influence implementation in similar ways as the context outside of it (i.e., the external influences). In a similar manner to how they referred to external influences, staff referred to organizational factors to explain why using the CANS was valuable to them and the agency. Specifically, staff at both agencies reported that the CANS was adopted or valued because its use supported organizational priorities and was inline with clinical values within the agency. The two organizations shared many of the same priorities and values. Therefore, staff at the two agencies pointed to similar organizational factors as having influenced their implementation of the CANS. However, for Org. 2, the context within the organization contributed more to motivating the implementation of the CANS than the outer context. The opposite appeared to be true for Org. 1. Org. 1 staff appeared to derive many of their reasons for CANS implementation from the outer context. In addition to affecting staff members' motivation to implement the CANS, organizational factors affected implementation or CANS use in practical ways. These organizational factors and how they influenced the implementation are summarized in Table 4.2 and will be described next.

Table 4.2

*Similarities and Differences in Organizational Factors That Affected CANS**Implementation at Org. 1 and Org. 2*

Organizational Factors	Similarities	Differences
CANS Use Fit With Organizational Priorities and Values	<ul style="list-style-type: none"> • CANS was perceived as helping staff work more effectively, inline with organizational priorities and values (e.g., strengths-based, family-centred, multi-disciplinary) • CANS use was also inline with prevalent values related to evidence-based practice and data-informed decision making 	<ul style="list-style-type: none"> • Each organization uniquely highlighted aspects of the CANS that were consistent with the particular priorities and values that were prevalent within the organization
Resources for Evaluation Activities	<ul style="list-style-type: none"> • Both organizations were able to obtain the necessary resources to dedicate to evaluation activities • Both relied heavily on external partners for support with evaluation activities 	<ul style="list-style-type: none"> • None
Changing, Dynamic Organizations	<ul style="list-style-type: none"> • Both organizations had undergone numerous changes during the past decade, and had made other changes at the same time as CANS implementation • Other simultaneous organizational change efforts may have interfered with CANS implementation • Unclear whether the changes also facilitated implementation by creating an atmosphere that was receptive to change 	<ul style="list-style-type: none"> • None
Supportive Management	<ul style="list-style-type: none"> • Management staff of both organizations were supportive of CANS implementation and were perceived by staff as being trustworthy • Valued participation and were open and responsive to staff concerns 	<ul style="list-style-type: none"> • Implementation was led by a senior manager at Org. 1 and by middle management at Org. 2
Supportive Collegial Relationships	<ul style="list-style-type: none"> • Although staff at Org. 2 did not commonly refer to having supportive collegial relationships, staff in both organizations felt comfortable raising concerns or questions related to the CANS 	<ul style="list-style-type: none"> • Several staff at Org. 1 indicated that the agency had a supportive collegial atmosphere, whereas staff at Org. 2 did not explicitly refer to the organization having such an atmosphere

Organizational priorities. According to staff at both organizations, the main priority when implementing the CANS was to improve services. However, staff at the two organizations had different understandings about why it was important to improve services and slightly different perspectives on how to achieve this goal. Specifically, at Org. 1 the priority was to adopt the latest evidence-based approaches in order to secure the agency against potential funding cutbacks and to best serve the community. At Org. 2 the priority was to improve staff members' practices by helping staff from different teams and disciplines conduct assessments in a more consistent manner and to the same standard. One staff member stated, "As you would imagine, when you have 50 staff doing initial assessments, they're going to look completely different. And there was no consistency". He explained that one reason behind their adoption of the CANS was that it could be used "across the board" and would add consistency to the assessments conducted within the organization. Staff in both organizations believed that the CANS could help them toward these priority objectives.

Clinical values. Staff at both agencies also saw the CANS as being congruent with their shared clinical values or beliefs about how services should be organized and delivered. As a result, staff at both agencies described the CANS as being a good "fit" and reported that this was another reason that they valued and adopted the CANS. For example, at both agencies, staff valued providing "strengths-focused", "client-centred", and multi-disciplinary care, and believed that the CANS could help them practice more effectively in these ways. This perceived fit is reflected in the following statements by staff at Org. 1 and Org. 2:

We had a natural filiation with the CANS because of the fact that it was fitting more with our philosophy around building on strengths. [Org. 1 staff member]

It fit very well with our philosophy because we really believe strongly in the family centered philosophy. [...] It was something that fit very well with our current model [...]. CANS just added to that [...] and probably strengthened it and helped us get back in line where we've stepped out of line at times with that. [Org. 2 staff member]

It made sense to everybody. It really did. I mean the application of it initially like anything else was challenging and there was a learning curve and so on. But the concept behind it made a lot of sense. For staff they saw it as it is in keeping with our philosophy, so we were not changing the agency philosophy around practicing in a family centered way. [Org. 2 staff member]

Thus, the organizational context affected the fit between the CANS and staff members' work, and the perceived fit provided more reasons to implement and value the CANS.

Values related to program evaluation. In addition to the clinical values that they saw as being congruent with the CANS, staff at both agencies commonly reported that they valued collecting and using data about the services they were offering. Staff said they were committed to providing evidence-based services and valued evidence-informed decision making. For example, staff members from both agencies discussed wanting to use data to inform program development. This was another contextual factor that contributed to the receptivity of staff toward the CANS.

Poor fit. Where there was initial resistance to the CANS, staff members spoke of the lack of fit between the CANS and the specific roles they played in the organizations. For example, staff at Org. 1 who worked with youth who had come into contact with the criminal justice system reported that the population that they worked with did not trust staff as easily as the clients seeking mental health counseling. There was a common perception that clients' limited trust in staff would lead them to underreport what they need to work on in treatment and that, consequently, intake assessments that relied on

clients' self-report were unreliable. Furthermore, staff in this specialized program indicated that they did not always find the CANS useful in their work because they saw clients on a short-term basis and believed that a comprehensive assessment of needs was not necessary for the service they provided. One staff member also added that many professionals in her discipline whom she had to collaborate with did not value conducting needs or mental health assessments for adolescents who had come into contact with the law.

Similarly, some "specialist staff" (e.g., psychologists, speech therapists) at Org. 2 did not find the CANS helpful because they relied on specialized assessments within their own fields to gather information related to the treatment targets that they focused on. One specialist staff member added that the quantitative, check-box format of the CANS prevented staff members from gathering information that she needed within her role.

Differences in the values, activities, and priorities that were part of these staff members' specialized roles led them to perceive the CANS as a poor fit. In these instances, staff referred to this poor fit as the reason that they did not find the CANS helpful and resisted its use.

How organizational factors practically affected implementation. The implementation context also affected CANS implementation in practical ways. First, in both organizations implementation of the CANS was possible because they had the resources to dedicate to selecting an appropriate tool, putting it into practice, and analyzing the resulting data. These resources were not necessarily available internally within the organization. Both agencies drew on sources external to the agency for the

support and resources they needed. For example, Org. 2 relied on the help of a graduate student who was completing a placement at the agency. In addition, the CANS was free to use and the developer was available to consult and offer training.

Second, organizational factors may have also interfered with CANS implementation for practical reasons. Both agencies had undergone several changes in the past decade and were also implementing multiple changes at the time of CANS implementation, such as: changes in Executive Directors and management approaches, staff turnover, organizational restructuring, implementation of new treatment approaches, increases in size and number of referrals, and accreditation. Some of these changes placed additional demands on staff workloads. One staff member described how staff reacted to the different trainings they were required to complete in order to implement different practices:

People would say we're being trained up the yin yang. [...] People would just say, "Whoa! We don't have time for clients. That's how much training we have." That's been the main obstacle in terms of if there's been any hiccups with CANS. That certainly has been it.

Staff at Org. 2 reported that organizational restructuring at the time of CANS implementation made it more difficult to coordinate the implementation. For example, CANS champions or coaches were shifted to different teams, leaving some teams without a champion. However, while these changes interfered with implementation in these ways, it is also possible that the dynamic, changing nature of the agencies facilitated implementation of a new practice such as the CANS by creating an atmosphere that was receptive to change.

Supportive management. Another organizational factor that facilitated implementation at both agencies was that agency managers or leaders whom staff trusted actively supported and promoted CANS implementation. Staff members indicated that they had confidence in the managers who were leading the implementation process. They believed that these individuals were competent and were working to improve the agencies; thus they trusted in these individuals' decision to implement the CANS. This theme of trust in leaders is demonstrated by the following staff members' comment:

So I think that part of [the reason behind the organization embracing the CANS] is knowing that [a senior manager] has that dedication to [...] doing things that are important to our community, important to our agency, important to our profile as well. So that we do have that opportunity to get additional funding to help the families in this community.

A difference between the two agencies was that at Org. 1, the smaller agency, the CANS implementation was led by a senior manager; whereas at Org. 2, which was relatively larger, middle management took the lead to initiate and carry out the implementation process. This difference was likely due to the difference in size between the two agencies. Given that there were more individuals involved in decision-making at Org. 2 and middle managers held relatively less power within the agency than the senior manager at Org. 1, coordinating and following through with implementation activities was a more difficult task for middle managers at Org. 2 than it was for the senior manager at Org. 1. However, this difference did not appear to influence the outcome of CANS implementation at the agencies. At both agencies, staff identified having trusted managers who supported and spearheaded the CANS implementation as a key facilitator.

Staff also commonly perceived these managers as valuing staff participation in organizational decision-making, and believed that management wanted to hear their

feedback and was open and responsive to their concerns. This valuing of staff participation was reflected in managers' own comments:

I'm trying to take a Collaborative Problem Solving approach to the implementation of the CANS now basically. [...] The premise around Collaborative Problem Solving is that you can get what you want and need at the end of the day and I can get what I need at the end of the day and that there's a solution that we could both come up with together. [Senior manager at Org. 1 and implementation lead]

I think the more that people have an opportunity to be involved in decisions the better they like it and the better it is because they're the ones that are using it. Right? So... it increases buy-in obviously. [Middle manager and implementation lead]

Furthermore, staff at Org. 1 emphasized that they had warm and supportive collegial relationships, which facilitated collaboration and allowed staff to openly raise their questions and concerns. Staff at Org. 2 did not explicitly make reference to the agency's collegial atmosphere, however, they also reported that they felt comfortable raising their questions and concerns.

Summary of organizational factors. In summary, organizational factors within the implementation context mainly helped facilitate CANS implementation. First, in general, CANS use was perceived as being consistent with organizational priorities and values. This was an important factor that influenced the decision to adopt the CANS and staff members' receptivity toward the CANS. Second, both organizations were able to obtain the resources and supports that were required for CANS implementation and use. Third, trusted middle or senior managers spearheaded and supported the CANS implementation.

However, some organizational factors also interfered with implementation. CANS implementation faced resistance in programs or disciplines in which staff perceived a

poor fit between the CANS and program or role-specific values and activities.

Furthermore, simultaneous change efforts within the organization may have interfered with CANS implementation by placing too many demands on staff time and making the coordination of CANS implementation activities more difficult.

Staff characteristics. At the individual staff level, many staff members at both organizations described positive reactions toward the CANS when it was first introduced. In these organizations, several staff members reported that their prior professional experiences had contributed to the values and preferences that led them to have favourable attitudes toward the adoption of the CANS and toward program evaluation. For example, one staff member who had completed very time-intensive measures in a previous job found that the CANS was relatively less time consuming and more user-friendly. Those who had previous research training or training in program evaluation often reported valuing evaluation activities. One staff member indicated that because of her social work training, she valued taking a client-centred approach to assessment and she believed that the CANS allowed her to practice in a way that was consistent with this value. Another staff member explained how the contrast between the clinical approaches of her previous and current workplaces motivated her to seek out more strengths-focused practices:

I came from a sector that wasn't the mental health sector, and in the family support field that's certainly a very core value, which is building on strengths. And one of the things that I personally didn't like as I came to the mental health field was that I found it very deficit focused. And so I had at the back of my mind how can we try to flip things organizationally so that we are building on strengths as opposed to just focusing on more traditional medical or more deficit-based model.

Staff members' preferred approach toward conducting assessments and their existing skills also affected their reaction toward the CANS. For example, some were accustomed to only assessing needs within their area of expertise and therefore felt uncomfortable using the CANS because it required them to conduct a comprehensive assessment of different domains. Others reported that staff who had prior training in conducting interviews found it easier to incorporate the CANS into their work, whereas those who did not, struggled to complete it efficiently and flexibly. Thus, as with their values and beliefs, staff members' past professional experiences and training played a key role in shaping the approach to assessment that they felt comfortable with. For most, using the CANS was not very different from the way in which they were accustomed to conducting assessments. Those for whom using the CANS was very different reportedly had more difficulty incorporating it within their practice. These individuals were more likely to be resistant.

In sum, the CANS found a receptive atmosphere in these agencies because in general staff perceived the measure as not just being congruent with organizational values and activities but also with their own professional values, preferences, and practices.

Summary of how the implementation context contributed to implementation.

In sum, results from the first two organizations studied highlight how the implementation context affected the decision to adopt the CANS as well as how effectively it was implemented. The implementation context provided incentives or reasons for CANS implementation, affected the fit between the CANS and staff members' work, and affected the feasibility of implementing and using the CANS. In particular, conceptual and operational fit between the CANS and multiple levels of context (i.e., outer context,

inner context, and individual staff member levels) emerged as a key facilitator of implementation. Staff were more likely to report positive reactions toward the CANS when they perceived fit between the CANS and their professional and organizational values and ways of conducting services.

In the next section, I describe how staff in these two organizations *developed* their views regarding the fit between the CANS and their work, as well as how they concretely built on the existing fit to make the CANS most useful to their work.

Implementation Process

In this section, I describe the steps that staff took in order to put the CANS into routine practice and the unplanned processes that took place as they were engaged in these implementation efforts. First, I provide a brief, descriptive overview of the different planned implementation activities that staff conducted in different phases of the implementation.

Phases of the implementation process. Both organizations went through a series of steps or phases before the CANS became a part of staff members' regular work routines. These phases are outlined in Figure 4.2 and briefly described below. Details of the activities performed at each agency within each of these phases, and how staff responded to these activities, are outlined in Table 4.3.

Figure 4.2. Activities completed during each phase of the CANS implementation process.

Table 4.3

Comparison of Planned Implementation Activities Completed By Org. 1 and Org. 2

Phases of the Implementation Process	Org. 1	Org. 2	Similarities	Differences
Precipitating events	<ul style="list-style-type: none"> Became introduced to the CANS through a provincially-led pilot of four different tools 	<ul style="list-style-type: none"> A graduate student began a placement at the organization and helped search for an appropriate measure 	<ul style="list-style-type: none"> Precipitating events led to the introduction of the CANS 	<ul style="list-style-type: none"> Precipitating event at Org. 1 was taking part in a pilot while at Org. 2 it was the addition of a resource (the graduate student)
Search Phase	<ul style="list-style-type: none"> Search primarily conducted by a senior manager Consultation with external sources 	<ul style="list-style-type: none"> Search conducted by middle management and graduate student Literature search & consultations with external sources 	<ul style="list-style-type: none"> Both organizations went through an initial search phase 	<ul style="list-style-type: none"> Search led by a senior manager at Org. 1 and middle-management at Org. 2 Literature search conducted at Org. 2, none reported at Org. 1
Decision Making Phase	<ul style="list-style-type: none"> Staff from different levels of the organization were involved “Hands on” -Piloted four measures Staff from four different organizations were involved in the pilot 	<ul style="list-style-type: none"> Middle and top management mainly involved Decision making was based on research, consultation, and systematically comparing the CANS to their existing measure 	<ul style="list-style-type: none"> Staff weighed the pros and cons of different measures and considered which measure was the best fit 	<ul style="list-style-type: none"> Frontline staff did not participate in initial decision making at Org. 2 Decision making was more research-based at Org. 2 Pilot involved some interaction with staff across different agencies at Org. 1, whereas decision making was conducted predominantly internally at Org. 2

Phases of the Implementation Process	Org. 1	Org. 2	Similarities	Differences
Active Implementation <i>Implementation Committees and Planning</i>	<ul style="list-style-type: none"> CANS implementation committee was formed (all interested staff were invited to join) 	<ul style="list-style-type: none"> CANS implementation committee initially included middle-management only, but later expanded to include frontline staff Written implementation plan was developed prior to implementation 	<ul style="list-style-type: none"> Committees were formed to involve staff in the implementation process 	<ul style="list-style-type: none"> Org. 2 developed a written implementation plan prior to the implementation
<i>Tool Adaptation</i>	<ul style="list-style-type: none"> A senior manager and the CANS developer developed a version of CANS for one of the agency's programs 	<ul style="list-style-type: none"> CANS Implementation Committee (predominantly middle-management staff) developed a version of CANS for use agency-wide 	<ul style="list-style-type: none"> CANS was adapted at both agencies in consultation with the tool's developer 	<ul style="list-style-type: none"> CANS adaptation process involved a wider range of staff at Org. 2 Adapted version was used by one program at Org. 1 (other programs used pre-existing versions of CANS) and all programs at Org. 2

Phases of the Implementation Process	Org. 1	Org. 2	Similarities	Differences
<i>Training and Certification</i>	<ul style="list-style-type: none"> Staff received some training on the CANS during the pilot and took part in a second in-person training session with the author of the tool at a later date Some staff completed training online 	<ul style="list-style-type: none"> Staff received a mix of in-person and online training 	<ul style="list-style-type: none"> Staff received in- person training on the CANS by the author of the tool. Staff thought that the author's involvement lent credibility to the measure and increased their buy-in. Staff appreciated his confidence and competence in the tool, his engaging presentation style, his flexible and non-dogmatic approach, and his openness to hearing and addressing staff concerns. Online training was available but perceived as less helpful than the in-person training Staff were required to complete a reliability certification test after the training and after each year. Staff found this process challenging. and stressful. 	
<i>Champions and Coaching</i>	<ul style="list-style-type: none"> One staff member who was enthusiastic about the CANS volunteered to become the champion 	<ul style="list-style-type: none"> A CANS champions committee was formed 	<ul style="list-style-type: none"> CANS champions were trained to provide training or coaching to staff Staff found consultation with CANS champions helpful 	<ul style="list-style-type: none"> CANS champion at Org. 1 self-elected to become the champion, whereas some champions at Org. 2 were assigned that role

Phases of the Implementation Process	Org. 1	Org. 2	Similarities	Differences
Implementation Maintenance	<ul style="list-style-type: none"> Hosted a local CANS conference. Staff found that the conference increased their motivation and equipped them with new knowledge and skills to make better use of the CANS. In the process of organizing a CANS learning collaborative Involved in providing training and information about the CANS to other agencies 	<ul style="list-style-type: none"> Staff were asked to present their CANS assessments in team meetings so that they could have a formal venue for discussing challenges with the tool Email groups and a Question and Answer document were created to respond to staff questions as they arose Implementation leaders were part of a U.S. –based CANS collaborative 	<ul style="list-style-type: none"> Ongoing fine-tuning of the CANS and its administration procedures Ongoing support to staff for using the CANS (e.g., internal CANS champions or coaches available to consult) Managers supported CANS implementation, and encouraged and monitored its use In the process of analyzing CANS data and feeding results back to staff Collaborated with external agencies around the use of CANS Implementation leaders attended U.S.-based CANS conference 	<ul style="list-style-type: none"> At Org. 2, there were formal venues to practice the CANS and ask questions (i.e., team meetings, email lists, Q&A documents) Org. 1 collaborated with external agencies around the use of CANS to a greater extent

Precipitating events. The organizations were first introduced to the CANS as a result of a series of precipitating events. For example, staff at Org. 1 first became aware of the CANS after taking part in a provincially-led pilot study of four different assessment measures. Staff at Org. 2 were able to start searching for an appropriate tool when a graduate student began a research placement at the agency. However, these events did were not entirely random. In many ways, they were themselves precipitated by priorities and values within the organization's outer and inner context. For example, if not for the provincial trend toward outcome monitoring, a provincially-led pilot to compare four outcome monitoring measures would likely never have been organized. Similarly, if staff at Org. 2 had not viewed outcome monitoring as important to the success of the organization, the graduate student would likely have not been assigned to research assessment and outcome monitoring measures. In this way, the prevailing priorities or values within the implementation context may have contributed to putting the process of implementing an assessment and outcome monitoring tool into motion.

Search phase. Staff at both organizations went through an initial period during which they were looking for an appropriate measure. At both agencies, this search involved consulting in formal and informal ways with knowledgeable individuals and agencies. Org. 2 also conducted a literature review.

Decision making phase. Staff also went through a period during which they weighed the pros and cons of each identified measure and considered whether the measure would be a good fit for the organization. At Org. 1, staff from different levels of the organization were involved in piloting four measures and discussing the appropriateness of each measure with others involved in the pilot. At Org. 2, the decision-

making was more research-based and involved middle and top management staff, as well as the graduate student. Staff also systematically compared the CANS to their existing assessment form to assess the viability of replacing their existing form with the CANS. At both agencies, staff described that the decision to adopt the CANS was mainly made by middle or senior managers, although frontline staff also provided some input. As discussed during the previous section on the implementation context, the perceived fit between the CANS and the values and activities of the organization influenced decision-making regarding which measure to adopt.

Active implementation. Once the CANS was identified as the measure of choice, both agencies formed committees, comprised of staff with varying roles within the agencies, to manage the details of the implementation process. Staff at both agencies adapted the CANS by selecting items from amongst a pool of CANS items that were most pertinent to their information needs, and making changes to items or adding items as needed. Subsequent to developing an adapted version of CANS, all staff were trained on its use, either through a training workshop delivered by the developer of the CANS, or using an online training website. Following the training, staff members were required to complete a reliability certification test that involved completing the CANS based on case vignettes. Staff members were asked to repeat this reliability certification test each year to ensure that reliability was maintained through time. Furthermore, at both agencies, one or more CANS champions were identified and received training to become CANS trainers or coaches.

Implementation maintenance. Both agencies engaged in ongoing activities to support staff members' use of the CANS and to maintain the implementation. Examples

of these activities included: having internal CANS trainers or coaches available for staff to consult, and asking staff to present their CANS assessments in team meetings to provide staff with a formal venue to discuss challenges with using the measure.

Furthermore, at both agencies, staff held regular meetings and discussed options for fine-tuning the CANS or its administration procedures. For example, they discussed how often the CANS should be completed, and which staff members or groups should complete which versions and sections of the CANS. Managers in both organizations monitored use of the CANS and encouraged its use to fulfill different objectives (e.g., program evaluation and progress monitoring). Both organizations were also in the process of analyzing CANS data and feeding the results back to the staff. Furthermore, they were involved in discussing and learning about the CANS outside of their organizations by attending or organizing conferences or by providing training on the CANS to other agencies.

Characteristics of implementation. In the previous section, I provided an overview of the different planned activities that staff completed in order to incorporate the CANS into their routine practice. I described *what* staff did. Here, I describe *how* staff did it, or the characteristics of the implementation approach at the two agencies. Agency or implementation leaders played a key role in shaping *how* implementation was done. They encouraged and enabled staff participation, were open and responsive to staff feedback, and ensured that there was momentum behind the implementation, follow-through with implementation activities, and that the CANS was kept “alive” or salient.

The way in which implementation was carried out created the conditions necessary for staff to interact, discuss, and reflect on their use of CANS, and to become

engaged in continuously working toward improving its use. In these ways, *how* implementation was carried out may have been as important, if not more important, in influencing implementation outcomes than the specific activities that were carried out. Within this section, I describe characteristics of the approach. The role and significance of these implementation characteristics in terms of implementation outcomes will be described in a subsequent section on how staff made the CANS their own through their interactions.

Table 4.4

Comparison of Characteristics of CANS Implementation at Org. 1 and Org. 2

Implementation Characteristics	Org. 1	Org. 2	Similarities	Differences
Participatory approach	<ul style="list-style-type: none"> Only a senior manager and the CANS developer were involved in developing an adapted version of CANS Staff participated in evaluating the CANS against other options by piloting different measures and providing feedback 	<ul style="list-style-type: none"> Clients were surveyed about their experience with the CANS Frontline staff members were not initially part of CANS Implementation committee 	<ul style="list-style-type: none"> High diversity of stakeholders: Staff with varying roles as well as external consultants participated in the process Level of diversity was lower at the beginning of the process (because frontline staff were not as involved) compared to the latter phases Staff had full control over CANS implementation processes; external researchers and consultants were involved in providing data analysis support or consultation Control over the implementation process rested more with managers than frontline workers; frontline staff had more control over working out implementation details than the initial decision to implement CANS High depth of participation: Staff were involved in most implementation activities 	<ul style="list-style-type: none"> Diversity of stakeholders selected for participation was higher at Org. 2

Implementation Characteristics	Org. 1	Org. 2	Similarities	Differences
Open and responsive to feedback	<ul style="list-style-type: none"> Implementation lead solicited staff feedback in formal and informal meetings 	<ul style="list-style-type: none"> Formal mechanisms were in place to obtain staff and client feedback on the CANS (i.e., “feedback loops”, survey of staff and clients) Some lack of clarity regarding when and how certain staff concerns about the CANS would be addressed 	<ul style="list-style-type: none"> Staff feedback on the CANS was valued and incorporated in making revisions to the measure or its administration procedures 	<ul style="list-style-type: none"> Mechanisms for obtaining feedback on the CANS were less formal at Org. 1 Less clear to staff at Org. 2 how and when management would respond to some concerns about the CANS
Momentum, follow-through, and keeping CANS alive		<ul style="list-style-type: none"> Written implementation plan prepared in advance 	<ul style="list-style-type: none"> Consistent follow-through of individuals leading the implementation was reported as a facilitator 	<ul style="list-style-type: none"> Org. 2 planned the implementation in advance, whereas Org. 1 planned as the process unfolded

Participatory approach. Both agencies took a participatory approach toward the implementation and involved staff in decision-making and in working out implementation details. Participation of staff in the CANS implementation process will be described using three dimensions of participation proposed by Cousins and Whitmore (1998): (1) diversity of stakeholders selected for participation (ranging from "primary users only" to "all legitimate groups"), (2) control of evaluation processes ("researcher controlled" to "practitioner controlled"), and (3) depth of participation ("consultation" of stakeholders to "deep participation" of stakeholders in all evaluation activities).

Diversity of stakeholders selected for participation at both organizations was high, although it was higher at Org. 2. Staff with varying roles from different levels and teams within the organization participated in the implementation process at both agencies. In addition to staff, both organizations consulted with individuals outside the organization (e.g., researchers) and Org. 2 conducted a survey to seek the input of families who had received a CANS assessment.

However, the level of diversity of stakeholders fluctuated at different time points during the process. In general, diversity of participation was lower during initial implementation activities (e.g., decision-making and tool adaptation) but increased during the later phases of the implementation. In particular, diversity of staff participation was lower during the process of adapting CANS than the process of working out implementation details once the CANS version had been developed. At Org. 1, a CANS version was created by a senior manager in consultation with the CANS developer. At Org. 2, middle managers led the process with some input from frontline staff. Notably, although Lyons (2009) advocates for involving all end-user groups, including clients, in

the development/adaptation process, neither agency directly involved clients in the development of their CANS version. However, Org. 2 did conduct a survey of client experiences with using their adapted CANS version, with the intention of using feedback from the survey to make adjustments to the tool. This was in contrast to what I expected based on reading about the intended CANS adaptation approach (Lyons, 2009). I expected that the process of adapting CANS would present most of the opportunities for staff participation. This was not the case at these agencies. The implication of this is that the adaptability of the CANS form itself is not central to creating opportunities for staff participation, and therefore, implementing measures that cannot be adapted in this way can also offer opportunities for engaging and involving staff.

Some staff at both organizations commented that the increased diversity of stakeholder staff during the latter phases of the implementation was helpful because it led to decisions that were more inline with the needs of staff who were using the tool on a day-to-day basis. Furthermore, the diversity of participation likely allowed ideas or perceptions about the CANS to spread to a range of staff, while also allowing emerging ideas to be influenced by a diverse set of perspectives. In a later section, I will further describe how through diverse staff participation and interaction, staff generated shared understandings about what the CANS meant to them and their organization, and shaped how the CANS could best be used.

The second dimension of participation is control over evaluation processes or, within the context of this study, control over implementation processes. On a continuum from “researcher controlled” to “practitioner controlled”, the implementation of the CANS at both agencies was highly practitioner controlled. Staff decided on whether the

CANS was the right choice for them, on what specific form the CANS should take and how it should be administered, and on how the data from the CANS should be used. Participation by individuals outside the agencies was limited to consultation and data analysis support.

However, senior and middle managers sometimes had more control over some processes than frontline staff. For example, at Org. 1, a senior manager indicated that the decision to implement the CANS was a “top down thing as opposed to a bottom up thing”. She explained:

Change management in organizations is a hard thing. There’s some decisions that you know that you need to go for to keep up with the direction that ... you know where the organization needs to go I guess. How you bring people there is another question.

Although a senior manager made the ultimate decision to implement the CANS, frontline staff were involved in evaluating different potential measures through the pilot study. One staff member explained that staff feedback on the measures was sought and that the general consensus was that the CANS was a good choice: “We were asked how we felt about it, was it useful, all of those things. Why do you find it useful? And I would say the majority of people feel or felt the CANS was a good [...] one.” Furthermore, frontline staff had control and could contribute to decisions and activities during latter phases of the implementation (e.g., adapting the measure and deciding on administration procedures).

The third dimension of participation is “depth” or the extent of participation in implementation processes. Staff members at both agencies were highly involved in implementation processes, although managers were more involved in some processes

compared to frontline staff. At both organizations, implementation committees were formed so that staff could participate in planning and executing the implementation. Staff members were involved in selecting items to include on their agency's adapted version of CANS, changing the wording of items, piloting the measure and providing feedback, developing and fine-tuning procedures for administering the CANS, and deciding on how the CANS data should be used. Even the manner in which staff spoke about the implementation process was reflective of the depth of their participation. For example, one staff member stated, "We're still in the transition period and trying to brainstorm different ideas. How can we develop it better so that it can be better used?" The staff member used the pronoun "we" to describe how staff members as a group were involved in developing procedures for the administration and use of CANS.

In summary, staff participation in the implementation of the CANS can be characterized as high on diversity, high on control, and high on depth at both organizations, overall. The diversity of staff participants likely allowed ideas or perceptions about the CANS to spread to a larger number of staff, while staff members' control over implementation processes and depth of participation allowed them to engage in making the CANS work for them within their particular context.

Open and responsive to feedback. Implementation leaders at both agencies solicited feedback from staff about the CANS and were responsive to the feedback. In this way, they provided staff with a reason to participate and provide input. Furthermore, by using the feedback to make concrete changes to the CANS or how it was used, implementation leaders helped improve the fit between the tool and staff members' work.

Openness and responsiveness to staff feedback took different forms at Org. 1 and Org. 2. The approach to obtaining feedback was less formal at Org. 1 compared to Org. 2. At Org. 1, staff input was solicited during formal and informal meetings. A senior manager provided the following example:

When the developer [of the iPad software for CANS data entry] was partway through and wanted to do a demonstration and feedback, I brought everyone that was available and interested in the room so that they could give their input.

At Org. 2, the larger of the two organizations, deliberate “feedback loops” were built into the implementation process. Staff members who implemented the CANS early on were asked to provide feedback about the use of the measure to the CANS Champions and CANS Implementation committees. One staff member described the types of feedback they received:

[The feedback ranged from] “We don’t agree with this question [on the CANS], we don’t like the wording of it”, to “How can we not let [the administration of the CANS] take so long?” Or “On my team there’s these issues or that issue [with using the CANS]”.

Org. 2 also conducted a formal survey to obtain feedback from staff and clients who had used the CANS.

This feedback was used to make revisions to the measure and the policies and procedures related to its use. A middle manager and implementation lead spoke about the importance of “keeping feedback loops alive” and acting on the feedback “so staff [...] feel heard but also [to help] around a good implementation and a tool”. She described how they worked to remain open and responsive to staff feedback throughout the process:

The way [the feedback loop] was kept alive would be scheduling the meeting for the CANS Champs [CANS Champions committee meeting] once a month and somebody being there to facilitate those meetings, hear what was being shared,

and then act on it the best we could. And just one of the main ways that we would be acting on it would be either setting new direction for staff -- you know, whether it's an email [with directions for staff] or within the team process that the supervisors would take back [directions to their teams]. Maybe there's some training practice issues [that we needed to address]. Or in terms of the revision of the tool itself.

Frontline staff confirmed that their input was taken into consideration to make changes to the CANS form and how it was used.

Despite these efforts to solicit and respond to staff feedback at Org. 2, a minority of staff members reported that at times there was some “mystery” around when and how some concerns and questions about the CANS would get addressed. One frontline staff member explained, “I think sometimes these things get held up at the management level and we don't always know what the outcome is. But it has been discussed, and as far as I know it is being looked at, but when that will get resolved, I don't know.” She later added that she sometimes felt “frustrated” or “dismissed” when a concern she had identified related to the CANS was not addressed. The lack of clarity around how and when management would respond to concerns may have been due to the relatively larger size of the organization and the greater number of individuals involved in making decisions. Nonetheless, what this example suggests is that openness to feedback without responsiveness can sometimes lead to frustration rather than increased staff motivation to engage further in shaping the CANS to the agency's needs.

Momentum, follow-through, and keeping CANS alive. Yet another characteristic of the implementation that helped set the stage for staff working together to improve the use of CANS was that the process was sustained and seen to conclusion. This helped ensure that staff remained engaged until concrete implementation outcomes were realized.

Implementation leaders at both agencies built momentum behind CANS implementation but this was done differently at each agency. A strategy that was employed at Org. 2 was to have a written implementation plan prepared in advance. The plan was informed by adult learning principles and consisted of four phases: “Pre-Implementation” (e.g., decision making regarding CANS, training, informal practice), “Early Implementation” (e.g., identifying champions, soliciting staff feedback, making modifications to CANS), “Full Implementation”, and “Evaluation” (e.g., aggregating CANS data). Implementation was completed in a stepwise fashion, with some teams being designated as early implementers. Several staff members commented that having this plan and taking a systematic approach to implementing the CANS facilitated the process. In contrast, the implementation lead at Org. 1 indicated that she did not have a formal plan for the implementation of CANS in advance. This might suggest that a pre-planned approach is necessary for larger organizations but not essential to implementation success in smaller organizations or teams.

The factor that may be more central to implementation success is follow-through of implementation leaders. Staff members at both agencies reported that the consistent follow-through of the individuals leading the implementation was an important facilitator of the process. Multiple staff members at Org. 2 indicated that the implementation lead kept the “momentum going” by regularly scheduling meetings to work on the implementation. One staff member stated, "She kept this going. I really think that if it wasn't for [her], this would have just died in the water."

Implementation leaders also kept the CANS “alive” or salient within the organization by continuously introducing it into conversations and advocating for its use.

One supervisor indicated that he would actively put the CANS on the agenda during team meetings because he feared that if CANS was not discussed, “The danger then becomes for people to say, ‘Hmm.. if the supervisor doesn’t care if I’m doing it or not, why should I bother?’”. A senior manager noted that they were able to create opportunities to use the CANS for multiple purposes by regularly discussing the various possible applications of CANS in different contexts. For example, when staff members were planning an outcome evaluation of one of their programs, the senior manager encouraged the team to use the CANS as the outcome measure. She stated, “So I think part of the success with the CANS is being able to integrate it into all the conversations you’re having about whatever it is that you’re doing.” Additionally, several staff members indicated that their regular meetings and discussions about the CANS helped keep it salient in their minds so that it did not “just fall to the wayside”. These quotes from staff demonstrate that purposeful and intentional effort was put into making the CANS a salient and widespread topic of conversation.

Summary of implementation characteristics. In sum, in this section I described how implementation leaders helped create the conditions necessary for staff to become engaged in the implementation process. They accomplished this by giving staff a role to play in the implementation process and allowing them to take part in decision-making about implementation details. They not only asked for staff feedback about the CANS but they also actively used it to make concrete changes to the tool or how it was used in order to improve its fit with staff members’ work. Furthermore, leaders helped ensure that there was momentum behind the implementation through planning and following-through with implementation activities. They kept the CANS alive and salient for staff by continuously

advocating for its use and introducing it into different conversations. As will be discussed in the next section, these conditions together made it possible for staff to work together toward making CANS their own.

How staff made the CANS their own through their interactions. Now that I have described the conditions that allowed staff to work together, I will describe how they made the CANS most useful to them through their interactions. One of the objectives of the present study was to look at unplanned aspects of the implementation process, in particular, conversations that staff had amongst themselves about the CANS. Based on organizational change literature (Stacey, 2010), I had proposed that unplanned processes would also contribute to implementation outcomes. By asking staff about how they initially reacted to the CANS, what types of conversations they had with their colleagues, and whether the conversations shifted or changed over time, the intention was to explore whether these unplanned aspects of the implementation process played any role in how the process unfolded and its consequences. Results of these inquiries, as will be discussed below, suggest that staff interactions were the mechanisms through which they built shared understandings about why the CANS was important to use and how it should be used. These interactions were also the mechanisms through which they identified the changes that needed to be made to the CANS in order to improve its fit with their work. First, I will describe the types of CANS-related conversations that staff were having and how the conditions I described in the previous section enabled these types of interactions.

Characteristics of CANS-related conversations. There was evidence that the CANS was a very salient topic for staff within both agencies. The aliveness of the CANS

within the agencies was reflected in staff descriptions of how persistently and pervasively they talked about the CANS and the types of conversations they had. The majority of staff at both agencies reported that the CANS was “consistently a topic of conversation”.

Staff made comments such as:

It was just part of our discussions, it was part of emails that were happening. The philosophy was continuously repeated. [...]The executive director would be able to speak the language of CANS, supervisors would, the trainers were able to, the CANS implementation team... [...] It was constantly, not indoctrinated, but encouraged and it was like our baby really. [Org. 2 frontline staff member]

Furthermore, CANS conversations were pervasive. Staff with varying roles within the agencies were engaged in talking about the CANS. Individuals leading implementation efforts felt they were “talking CANS all the time” because of their involvement in planning out and executing the implementation. Staff who were less involved indicated that they were “kept in the loop” and received updates and information on the use and implementation of the CANS during meetings.

Conversations were generally about two topics: the implementation of the CANS and the clinical use of CANS assessments. Importantly, implementation-related conversations were often action-oriented and focused on improving the use of the CANS in the organization. For example, staff discussed questions such as: how often the CANS should be administered, how staff should be trained, and how the efficiency and reliability of CANS administration can be improved.

However, less frequently, staff spoke about problems that they were encountering with the CANS and vented frustration, particularly when they were first learning how to use it. Staff mentioned that some of the initial conversations after the CANS was introduced were focused on CANS being more paperwork and an extra burden on staff

time. Staff also shared that they spoke about the difficulties they experienced with the reliability certification process. However, they added that these initial reactions gradually shifted to a focus on problem-solving and improving the use of CANS within the agency. As will be discussed further in the next section, this focus of the conversations on problem-solving, as opposed to venting, was significant because it propelled staff forward toward identifying actions that could make the CANS a better fit for the agency.

How implementation conditions helped shape these conversations. As I alluded to earlier, there was some evidence that the persistent, pervasive, and problem-solving oriented qualities of these conversations were shaped by the implementation conditions or characteristics that implementation leaders helped create. By encouraging and enabling a participatory approach and creating opportunities and reasons for staff to discuss the CANS, implementation leaders helped engage staff in the implementation process and in talking about how they could make the CANS as useful as possible for themselves.

Staff at both agencies commented that through their participation in the implementation process, they had become more invested in the process of incorporating the CANS into their practice. One staff member felt that staff participation was essential for obtaining the staff investment necessary to make the implementation a success: "I don't think it would have worked without it. There wouldn't have been the investment." Similarly, another staff member stated, "People feel part of it and I think they need to feel part of it to be on board." The increased investment that came with taking a participatory approach may have contributed to the persistent, pervasive, and problem-solving oriented qualities of the conversations about the CANS.

Additionally, by giving staff some control over decision-making, being responsive to their feedback, and making it evident that staff input and participation could help make the CANS a better fit, implementation leaders likely provided staff with a reason to have constructive, problem-solving oriented conversations. One staff member said, “It just felt more open so people were willing and able to bring that feedback forward, so it made them feel included in the process.”

“Co-creating fit”. Based on staff comments, these persistent, pervasive, and problem-solving oriented conversations about the CANS served important functions. Through these conversations, staff connected professional and organizational values with use of the CANS, thus developing a shared “understanding of fit”. They also identified concrete changes that needed to be made to the CANS and how it could be better incorporated within their workflow, thus creating “actual fit”. “Understanding of fit” and “actual fit” can be conceived as early consequences of staff participation. However, I am describing these early consequences in the current section on the implementation process because it is difficult to describe how staff co-created fit without also describing what they created.

“Understanding of fit”. In the section on the implementation context I described that staff within both agencies were more likely to be receptive toward the CANS because it was congruent with their professional and organizational values and priorities. I now would like to emphasize that “congruence” or “fit” is a perception and it cannot exist without a perceiver, or a group of perceivers, actively making the perception. At these two agencies, the implementation context provided opportunities for perceiving fit because there were priorities and values within the context that staff could see as being

consistent with features of the CANS. However, perceiving or understanding fit was an active process that required making interpretations about the CANS and deciding how its use supported or hindered perceived professional and organizational objectives. This process was not always planned and often these shared understandings about fit emerged through staff discussions about the CANS.

There were two main ways in which staff formed these perceptions about whether and how the CANS could help them toward their priorities and values. First, by participating in the implementation process and being involved in the decision-making about whether to adopt the CANS, staff gained early opportunities to become exposed to information about the tool, evaluate it for themselves, and discuss their perceptions with others. This process of evaluating the possible uses of the CANS against priorities and values was reflected in staff comments at both agencies. For example, a supervisor and implementation lead reported that as staff searched for and obtained more information on the CANS when they were deciding on whether to adopt it, and thought about its potential uses in the agency, they began to value the measure more: “The more we were learning about the CANS, the more intrigued we were with it.” This suggests that before even using the tool, staff involvement in selecting the CANS offered opportunities to engage in connecting its potential uses to what was important to staff within the agency, leading to the CANS being more valued.

During later phases of the implementation, staff evaluated and formed perceptions about whether the CANS was a good fit through using it and discussing their experiences. There was evidence that engaging staff in piloting and providing feedback on the CANS facilitated staff reflection on whether and how it could be useful to them. A supervisor

and implementation lead indicated that through participation and “healthy questioning” staff got to make up their own minds on whether they “believe” in the CANS, “endorse it”, and whether it is “meaningful for them”. Another staff member described how being asked for feedback on the CANS led to increased reflection among staff:

Being part of the implementation process really made us reflect on how we were using it, why we were using it, and how people were responding to it. By the time it rolled out to all the staff, they were just doing it and I don’t think they were doing as much reflecting as to how it was being used.

Thus, by learning about the CANS through information gathering or through practical experience with using it, staff formed perceptions of whether it fit with what they were trying to achieve. Being involved in decision-making and being asked for feedback appeared to facilitate this process of assessing fit.

When staff at both agencies were asked about whether they found the CANS useful, they identified several ways in which use of the CANS fit with their priorities and values. They indicated that some of these ways that the CANS fit were identified early on and motivated them to select and adopt the measure. Other ways were identified after staff had had opportunities to use the measure. This suggests that the perception of fit is not something that is always apparent from the outset, but can evolve during the implementation process. These different uses will be outlined in detail in the consequences section.

Interestingly, staff at each organization focused on aspects or uses of the CANS that were most inline with values and priorities that were emphasized within the agency. At Org. 1 they emphasized that use of the CANS was consistent with their strengths-focused philosophy or that it could help maintain funding and facilitate inter-agency

collaborations. At Org. 2 they emphasized that it was consistent with their family-centred philosophy and that it could help facilitate multi-disciplinary care provision.

Furthermore, there appeared to be a relationship between the aspects or uses of CANS that staff emphasized as being a good fit and how the tool was most utilized in each agency. For example, at Org. 1, given their priority of protecting themselves against funding cutbacks, staff emphasized how the CANS could help them accomplish that. At Org. 2, given their value of providing multi-disciplinary care, several staff described how using “CANS language” to communicate with other colleagues involved in the clients’ care was one of the key uses of the CANS for them. For example, staff referred to CANS phrases such as “actionable need” when sharing information about clients and their treatment plans. Staff often commented that having this shared language and framework for discussing cases helped facilitate inter-disciplinary collaboration. I believe that these subtle differences in shared perceptions about how the CANS fit or was most useful across the agencies reflect the active meaning making that staff engaged in. Within each agency, shared perceptions about fit were slightly different because there were slightly different values and priorities within each implementation context. Staff had different “building blocks” to work with, leading to different constructions.

Although staff could assess and form perceptions about fit individually, there was evidence that the conversations and interactions they had as they engaged in the implementation process helped create *shared* perceptions about fit. Thus, one function of conversations about CANS amongst staff with diverse roles was that these perceptions or understandings spread to different staff. For example at Org. 1, a senior manager indicated that she had been communicating to staff the role that implementing an

outcome monitoring measure would play in preparing the agency for upcoming system changes. Interviews with staff members at the agency suggested that the senior manager's communication of this potential systems change as a rationale for adopting the CANS was very salient in staff members' minds. For example, they made the following remarks:

I think that [the senior manager is] very savvy and she can see where things are going, and she's doing whatever she feels is necessary to try and safeguard the agency's position.

I just know from following the news that there's going to be changes in the government. I think our agency's trying to be prepared for that.

[Implementing the CANS] is important because this is how we get funding.

The system transformation is perhaps coming down the pipelines. So, I think [the senior manager] values, having as many tools and information as we can to be moving forward in the influx of mental health system transformation.

Thus, when there is good communication, staff members are on the same page about why implementing the CANS is necessary.

In sum, staff co-create a shared “understanding of fit” through discussing how what they have learned or experienced about the uses of the tool connects with what they feel are the priorities and values of the organization. Conversation enables a collaborative meaning making process and allows for the spread of these understandings to others within the agency.

“Actual fit”. Conversations also facilitated the identification of changes that needed to be made to the CANS to improve its fit, as well as how it could best be incorporated in staff members' workflow. Specifically, conversations brought concerns and questions to the surface and helped staff realize whether the issues they had identified were also experienced by other staff. For example, one staff member reported that she

was concerned that staff members who were completing the intake CANS assessments were over-rating strengths and under-rating needs. She explained that she shared this concern with other staff in order to determine if others shared the same perception:

I sort of informally was asking a couple of people who are on my team what their experiences were. Like, "Am I just crazy? Does it seem like intake's kind of being a little optimistic with these families?" And then they said, "Yeah. I know. That's my experience as well."

Once an issue was identified as a common concern, staff explored potential causes of the problem and suggested relevant solutions. Feedback arising from these formal and informal conversations was used to make concrete changes to the CANS or the instructions about how it was intended to be administered. One staff member described this process:

As you're using it you go, "Oh, well, this doesn't seem to make sense. Or why can't we put this here or put this there?" And I believe a lot of the changes to the score form were based on staff feedback.

It is worth noting that staff input was not always used to adapt the CANS, and there was some evidence that this interfered with effective use of the tool in those instances. For example, the senior manager at Org. 1 described that she developed a version of the CANS for use in a specialized program without the input of the program staff: "When I [developed the adapted version of] CANS I think I made the mistake of working on it with [the developer] in isolation and then kind of bring it forward." The staff who were involved with this program were the minority who did not always find the CANS useful because it did not fit with their role. This suggests that not engaging staff in a process of creating actual fit may interfere with their ability and willingness to make effective use of the tool.

Furthermore, the process of making actual fit was ongoing at both agencies. Staff reported several issues that they had with using the CANS that they were continuing to work toward addressing, including: administering the CANS in a flexible and time efficient manner, difficulties obtaining trustworthy information from clients at intake, concerns about inter-rater reliability, and concerns about not collecting and documenting qualitative details (e.g., birth history). Thus, the process of making actual fit was not complete but there appeared to be a willingness to work toward that end.

Even when staff did not make actual changes to the CANS, conversations allowed staff to come to shared understandings about how they were supposed to apply and use it within the context of their work. Specifically, conversations created opportunities for staff members to ask questions about the administration of the CANS and seek input from their colleagues, thus resulting in better incorporating the CANS within their work. For example, one staff member expanded on how CANS “coaches” and other colleagues would help resolve challenges with CANS administration by re-orienting staff to the tool’s basic administration principles:

We had mentors that you could go to and say, “I can’t figure this out.” So you knew who to go to and say, “Everybody is stuck on this two, three thing,” and then people could talk to each other and say, “Don’t get too stuck on the numbers, remember these basic tenants, right? There’s basic tenants of CANS that are simple and you have to always keep them in your head about what not to report and what to report and why we’re doing this.”

These group discussions also helped staff voice concerns that would have affected their administration of the CANS. For example, at Org. 2, several staff members were uncomfortable asking for some of the more sensitive information that the CANS touched on. When this concern was discussed within the agency, other staff members had the

opportunity to explain to these staff members why gathering this information was necessary.

Identifying concerns and questions and discussing them collectively allowed staff to apply the CANS in similar ways. In other words, it allowed them to come to shared understandings about how to address these concerns or how to administer the CANS, as opposed to each staff member deciding on how to resolve the concern or question individually. This process of aligning staff understandings and practices was likely critical for maintaining the tool's inter-rater reliability.

In sum, in these organizations, staff were engaged in an ongoing, interactive process of creating fit between the CANS and their work. Staff participation in the implementation process allowed them to join others in co-creating a shared understanding of how use of the CANS could support their organizations' priorities and values. It also allowed them to make concrete changes to the tool or how it was used in order to better incorporate it within their work. In the next section, I describe the consequences or outcomes of this fit making process.

Implementation Outcomes or Consequences

In this section, I describe consequences of staff participation in implementation activities and the outcomes of the implementations at the two agencies. In the previous section I described some of the early consequences that staff identified as arising from their participation in the implementation process. These included opportunities to: learn about the CANS before it was put to practice, reflect on how use of the CANS fit with their professional and the organization's objectives, and identify shared ways of

addressing commonly experienced difficulties or issues related to CANS use. In short, participation appeared to enable staff to co-create “understanding of fit” and “actual fit” between the CANS and the organization. The data suggest that these early consequences are linked with later consequences related to CANS uptake and use (i.e., implementation outcomes). I will first describe other perceived consequences of staff participation, and subsequently describe implementation outcomes related to CANS uptake and use.

Consequences of staff participation. Staff across both agencies reported that being active participants in the implementation process led to a number of generally positive consequences. Some of these benefits were related to CANS uptake and use. However, some appeared to be less related or unrelated to their use of the CANS. Before describing these, I will note that some of these perceived consequences can be attributed to more than *just* participation. I believe that these consequences were a result of a combination of factors that can be difficult to tease apart, including: staff being active participants in the process, demands associated with the tasks and activities of the implementation, staff using the CANS and learning about its benefits, and staff engaging in this process together as a group.

Consequences that contributed to CANS use. Staff reported that their participation led to a number of benefits that contributed to their increased willingness and ability to effectively use the CANS, including: buy-in and ownership of the CANS, learning about the CANS, reduced stress and anxiety related to change, and more positive attitudes toward outcome monitoring and program evaluation.

Learning about the CANS. As described previously, by being part of activities such as deciding whether to adopt the CANS, staff gained early opportunities to gather information and learn about the tool. Staff also described that being part of the process facilitated their learning about the application and use of the CANS in other ways. Some said that they learned better when they were informed about changes as they arose, that being involved helped keep the CANS salient and relevant to their work so that they were engaged in learning about it on an ongoing basis, that it increased motivation to learn and attention to training, and that it made it easier to ask questions about CANS use.

One Org. 4 staff member who was involved in both implementing the CANS and the GAIN (i.e., a tool that could not be adapted) described how being involved in adapting the CANS led to a more in-depth understanding of the CANS, whereas the same did not occur for the GAIN:

The whole process of developing a specific [CANS] really gave you a really good understanding of the tool itself, because you were involved in every aspect of the wording, and the meaning of the questions, and what each one fit in to, and why they were doing each one. So, I think it just gave you a really good background and a really good knowledge base and foundation into it. So I think that's what was most helpful, because you kind of knew it inside and out by the time you finished developing it. [...] Whereas the GAIN-SS, it was implemented as is, so it was like, okay, they chose these questions, [...], they had reasons, but I don't know, really, what they are. They gave you some background on it, but you don't have that total knowledge.

Adapting the CANS provided early opportunities to learn not just about why the tool was being implemented but about why each item on the tool was included and what it was included to achieve.

Reduced stress and anxiety related to change. Several staff members indicated that being part of the implementation process along with their colleagues helped reduce

some of the stress and anxiety related to the process. One staff member reported that frontline staff members who sat on the CANS implementation committee helped alert the implementation team to issues that would cause difficulties for staff, thus resulting in a smoother implementation and less staff frustration. For example, the staff member explained that prior to frontline staff members joining the implementation committee, changes to the CANS form would be introduced without an awareness of how the changes would disrupt the work of staff. The staff member's impression was that feedback provided by frontline staff members on the implementation committee resulted in an approach that was more attuned to staff members' experiences:

[Frontline staff members' participation resulted in] a little bit more lead time around changes. Just acknowledging that sometimes things are in process and we might need a little bit of time to finish what we've already started before we start making more changes.

In some ways, participation of frontline staff made the implementation process itself fit more smoothly with the needs of staff.

Staff also expressed that being part of the process with their colleagues resulted in a sense of camaraderie, which took away some of the stress associated with learning and implementing a new practice. Staff on the implementation committee said that they supported each other when they faced challenges with the implementation process. Other staff commented that they were less anxious about learning how to use a new tool like the CANS because they knew others were "on the same boat" and that staff were "growing together". One staff member commented, "It felt like, 'Okay. I'm not the only one here trying to figure this out.' There was lots of us trying to figure it out."

A supervisor speculated that the core group of staff who were involved in piloting the CANS helped dissipate some of the anxiety of the staff members who were less involved by sharing their experiences with the measure:

I would like to think that because people were experimenting with it and trying it out and there was an opportunity for hopefully a positive feedback to filter on down to other staff, that it made it less scary and less intimidating for [other staff] to pick up and use on their own.

However, as described previously, the implementation process and staff participation in it also led to staff frustration at times. A minority of staff reported experiencing frustration when they felt that their concerns about the CANS were not being addressed or when they were overburdened by the demands that different organizational change efforts placed on them.

Attitudes toward outcome monitoring and program evaluation. Some staff members mentioned that through participation and use of the CANS tool there was a shift in their attitudes toward data collection and evaluation. Several staff members noted that they had become more aware of the benefits of measuring outcomes both at the level of the program and at the level of service delivery to individual clients. One said:

When I came to this agency back in 2007, it was almost something we weren't really doing per se. It was the last thing on our agenda, if you will. And I think [we learned that] wait a minute, not only collecting data is important, but that whole research/ evaluation piece is critical.

He added that after "blending in" the CANS and other measures into the organization, there had been a shift in the agency toward a culture of "checking things out". One described what she had learned about the value of outcome monitoring at the individual level: "When I saw how parents responded to seeing that concrete identification for them

of the change, it really brought home to me how important it is to celebrate the small successes.”

Another staff member reported that her participation on the implementation committee had heightened the importance of measuring outcomes for her and made her curious about what the aggregate CANS data would show:

Because we’ve been doing the CANS for so long and talking at the Implementation Committee about what is it showing? Like is it showing that our work is effective? Is it showing that there’s change over time, from the time the family’s referred to the time they’re discharged? [...] I mean it’s nice to know that families like us and like us coming to their home or happen to like us as a person but it’s also good to know that the service that we’re providing is making a difference in either from the parents’ perspective or the child’s perspective or both.

In contrast, the staff member added that although there is “more recognition that we have to use evidence-based outcome measures” within the agency, she believes that many of the staff members who have been less involved in the discussions around implementing the CANS likely do not share the same understandings about program evaluation:

I’m not sure how many staff [...] maybe don’t realize how important that is. That we can’t just say, “Oh, our families like us. So therefore, we’re going to keep providing the service.” It doesn’t work that way. That we do have to provide proof and evidence that our services are working. [...] They may just see it as one more piece of paper they have to do. As opposed to that it’s an important piece of paper, that we have to do.

What this suggests is that by being part of those ongoing discussions about use of the CANS, staff connect its use to a valued objective (e.g., staying accountable), and consequently, learn to value the CANS and evaluation as a whole more. Those who are less involved in these discussions, have fewer opportunities to make the same connections.

Consequences unrelated to CANS use. While the implementation consequences I just described likely contributed to increasing staff members' effective use of the CANS, staff also described consequences that appeared to be less directly related or unrelated to their use of the CANS. The following perceived consequences appeared to be indirect benefits that staff derived from CANS implementation: improved staff morale, learning skills, learning about the organization, and networking.

Improved staff morale. Staff also reported that being included in making major agency decisions, such as the implementation of the CANS, led them to feel valued as employees and improved their morale. One staff member said:

It made [staff] feel included in the process. And I mean that always makes people feel better about themselves, the job, and the organization.

Some staff members also reported feeling proud of their agencies for taking a lead in implementing the CANS and striving to improve the provision of mental health care.

Learning skills. Depending on the role staff members played in the implementation, they also reported gaining a range of skills such as: adult teaching and presentation skills, and how to communicate with professionals from different professions. At times, during CANS training sessions or as a result of coming into contact with other professionals and colleagues, staff discussed and learned skills that were not directly related to the CANS, such as different intervention techniques. For example, one staff member shared that while providing training on the CANS and demonstrating how to complete a CANS assessment using an existing client's information, a staff member asked questions about the appropriate intervention that would target the child's problem

behavior. This provided an opportunity for an exchange around appropriate intervention techniques.

Learning about the organization. Some staff members commented that they learned more about their organizations. One staff member who had networked with other organizations through her role in the implementation noted that she had learned how practices at her agency compared with practices in other agencies. A staff member at Org. 2 indicated that through her involvement on the implementation committee she had learned more about how decisions and changes were made at her agency.

Networking. For Org. 1, implementing the CANS was a joint venture that the agency undertook with several other agencies across the province. Through conferences, learning collaboratives, and meetings, staff gained opportunities to network with others and build professional relationships.

In sum, it appeared that staff participation in the implementation process, together with other factors including staff trying out the CANS and seeing its benefits, had some beneficial effects. Staff described the main “fruit” or product of their work together as the incorporation of the CANS in staff members’ work routines. In the next section, I provide a description of this outcome, or how staff used the CANS at multiple levels.

CANS uptake and use. Staff reports suggest that the majority felt committed toward effectively using the CANS. As described previously, they believed that their participation in the implementation process contributed to their investment in and ownership of the tool. At both agencies, staff noted that the CANS had become an integral part of their service delivery. One said, “I think it’s just interwoven into all

aspects of the service that we do now. Like from front door to back door. Yeah, it's part of who we've become. It's part of our practice." Another staff member commented, "[The CANS] is a part of the core approach that we're using with families now as opposed to 'well if you feel like it, you can do this'".

At both agencies, staff reported that the CANS was used for multiple purposes and a majority of staff who were interviewed described finding it useful. It was used at intake to assess clients' needs, to determine the urgency of the case, and to determine which clinician or services would best meet the clients' needs. As described previously, although the uptake of the CANS was widespread, it was not embraced uniformly by all staff. One staff member said, "There's a number of staff on my team who use it and love it and they talk the language. And then there's others who are still using old language and still struggling."

Staff identified several different ways that using the CANS helped them with what they were trying to accomplish in their organizations. At the level of individual staff members, these valued uses included: conducting comprehensive assessments that were focused on available evidence, facilitating a conversation with clients about their needs and goals, developing treatment plans, monitoring and communicating client progress, and communicating client information. At the organization level, staff reported using the CANS for program evaluation and informing program development decisions. Furthermore, at the system level, Org. 1 staff found that use of the CANS helped improve inter-agency partnerships and the quality and continuity of client care.

Individual-level uses. Perhaps not surprisingly, one of the main reasons that staff reported for finding the CANS useful was that it helped them conduct more effective assessments. Specifically, they reported that it helped them conduct comprehensive assessments and to assess for clients' strengths. Staff at Org. 2 found the comprehensiveness of the CANS particularly helpful because it prompted staff to assess areas outside of their immediate expertise as opposed to focusing on a limited aspect of the clients' presenting problems. They also indicated that it helped them stay focused on identifying client needs based on the available evidence. This use of the CANS was valued at both organizations. A staff member at Org. 2 explained why she found this aspect of the CANS beneficial:

[Previously,] hypotheses were not based on information that was gleamed sometimes and that made me a little bit uncomfortable. Not just me, a lot of us. We would challenge each other on those kinds of things, we didn't just sit back. This tool helped in that because if you didn't see it, if you didn't hear it, if it wasn't talked about, it didn't exist. So we can't report on it.

Staff at Org. 1, the rural agency, found this aspect of the CANS helpful for a reason that was specific to their setting. Several explained that being trained to complete CANS assessments based on the available evidence helped them with setting aside the information they may have previously known about clients through encountering them in their small rural community.

Staff reported that they also found the CANS useful for generating a conversation with clients about their needs, collaboratively identify treatment goals and priorities, and resolving any discrepancies between the perspectives of the clinician and clients regarding the treatment plan. One said, "I like it. I find that it helps me in my work. It helps in my conversations with parents. I find it a very nice model to work within." One

staff member indicated that administering the CANS was especially helpful when there were disagreements about clients' needs:

It was a great way to have conversations with families and a great way to kind of have some further discussions about some of those items that you may have felt differently than the family, where you might have felt that there was a need but the family didn't. It facilitated that.

For staff at Org. 2, completing the CANS collaboratively with clients was particularly important. Providing family-centred care was a core value at the organization and the CANS helped staff stay true to this value. One staff member said, "I think maybe the skill that I have learned is to ...ensure that I'm staying true to what the family's needs are and not kind of putting my own little spin on it." Staff also added that the CANS was helpful for prompting families to discuss sensitive concerns that they would otherwise have difficulty bringing up spontaneously. For example, one staff member said, "It's very, very helpful in particular [when screening for Autism] because sometimes parents can't say that nasty A word. It's really something that bothers them."

Staff reported that they found the CANS helped them with developing treatment plans. One staff member indicated that some staff previously had trouble setting specific treatment goals and added that the CANS provided staff with a helpful structure for treatment planning: it gave staff "something very concrete to build goals around". Some staff also indicated that the CANS provided a "common framework" for all staff to use when developing treatment plans and that this helped ensure that treatment goals were focused on the clients' priorities as opposed to the comfort areas of the clinician. Several staff members speculated that setting clear goals in this manner may have helped staff provide more focused or "more organized" and time-limited services.

Staff indicated that the CANS provided a clear, visual display of clients' information that was used to help summarize information in clinical reports and to review clients' progress at follow-up assessments. One staff member reported that this helped to better articulate assessment results for clients, and another commented that it helped clearly demonstrate the change that clients had made.

Staff reported that the CANS was used to communicate client information, both internally with colleagues and externally with other professionals involved in the client's care. Internally, the CANS facilitated inter-disciplinary collaboration by providing all staff with one framework or "language" to work with. The CANS was also used when reviewing cases in supervision. One supervisor stated that the CANS helped her ensure that treatment plans were in line with clients' needs. She added that prior to the CANS, the process of reviewing the treatment plan in supervision was less systematic because they did not have a clear and comprehensive overview of clients' needs:

It makes me really kind of have conversations with [staff] about help me understand the items that were identified and how you came up with your goals, why you decided to focus on these as opposed to those. There's more dialogue about that whereas before when we developed goals it was just kind of a narrative, like, "Here's the family needs assessment. Here's the narrative that we had. The family wants to work on bedtime. There might have been other issues but it's just bedtime that we're going to work on". Whereas now, because it's identified more clearly, it allows you to have those conversations back and forth.

Organization-level uses. Staff also reported that the CANS served multiple functions at the level of the organization. It helped increase accountability. Furthermore, aggregate CANS data was used to provide staff with information on program outcomes, the profile of their clients, and any gaps in services. This information was used to make program-level decisions and inform program development. For example, one staff

member at Org. 1 indicated that their preliminary data suggested that staff needed further training in helping children with impulsive behaviour. This prompted them to begin training staff on the Collaborative Problem Solving approach.

System-level uses. As explained previously, Org. 1 staff found use of the CANS beneficial at a system-level, whereas Org. 2 staff did not have many opportunities to use the CANS in that way. Specifically, some Org. 1 staff explained that completing CANS assessments with staff from different agencies and sectors allowed them to build a culture of partnership and to improve the continuity and quality of services for clients. For example, one staff member described how the Children's Aid Society (CAS) workers had started using the CANS as well, in part because of Org. 1's promotion of the measure. She added that using the CANS during joint meetings between the CAS worker, the clients, and Org. 1 staff helped the clients feel that all individuals involved in their care were on the same page and working as a team to help them. Another reported benefit of the CANS being used across different agencies was that clients did not have to complete different assessments when they transferred from one agency to the next.

Overall, these descriptions of how staff used the CANS to support their service delivery at multiple levels suggest that the implementation was effective at both agencies. The descriptions also suggest that staff had a very well-developed "understanding of fit". It appeared to be very clear to them why using the CANS was important within the context of their work. This well-developed understanding was likely central fuelling their continued commitment toward the tool.

Extent of change. One of the objectives of the current study was to examine whether the implementation of the CANS and staff participation in the process would lead to perceived organizational change, and if so, to what degree. While staff members at Org. 1 indicated that the implementation of CANS had resulted in significant changes to the organization and their practice, some staff members at Org. 2 reported that the process had not led to changes “in any profound way”. They found that completing the CANS did not result in a major divergence from the way they completed their work in the past. One stated, “I found that the CANS fell in somewhat nicely with what we were already doing. It just made it more... evident what we were doing.” Another reported:

I mean when I think about CANS, I used it to augment the skills that I already had, that I already used for families, and incorporated it into the work that I did. Other than having to complete the paperwork part of it and maybe write up reports a little differently, I continued to do practice, for the most part, the same that I have always done.

I do not believe that I have sufficient evidence to make firm conclusions about the degree of perceived organizational change and whether there were differences in the degree of change across the two agencies. However, reports that CANS implementation did not lead to significant perceived changes in the organization or staff members’ practice are consistent with the model that I have proposed in this chapter. Specifically, if the implementation process involved *making the CANS fit* staff members’ practice, it would be reasonable to expect that staff members’ practice would remain relatively unchanged.

Reciprocal effects of CANS use and other implementation consequences. The outcomes or consequences of implementation appeared to have a reciprocal effect back onto staff members’ understanding of fit, the tool’s actual fit, and the organizational context in general. As discussed previously, creating fit was an ongoing process that was

reinforced by CANS use. Several staff members reported that they continued learning about the CANS and became increasingly comfortable with the tool through their use of the measure. For example, they learned that they did not need to go through each item in sequential order and that administering the CANS did not need to be a “a rote, robotic process”. Many staff members indicated that learning to administer the CANS in a flexible and time-efficient manner took time. One staff member said, "It's only after doing it several 1000 times that you understand the flow to it." Similarly, another indicated:

People are feeling more comfortable with it the more they use it. The more they get comfortable with asking the questions or inquiring and knowing how to score it without having to really think about it. I think we're evolving and getting it to be more of a casual [...] conversation with the family.

Through this practice-based learning, staff became better able to fit the CANS smoothly within their practice. In turn, this smoother integration likely affected their perception or attitudes about the tool's fit. Furthermore, the shared perceptions that staff developed about the different ways that use of the CANS can support their values and priorities likely changed the implementation context for other implementation or program evaluation efforts.

There was also some evidence that what staff indirectly gained from going through the implementation process had a reciprocal effect back onto the organizational context. As an example, a senior manager spoke about how seeing the benefits of staff participation in the implementation process led to an affirmation that taking a participatory approach was a good choice:

The approach we took to implementation was we probably had six or eight teams and everybody here at the agency sat on a committee that was driving something

and that was a very successful outcome. And people like the ownership and so I think that its become to permeate part of the agency culture, not as much as people would like yet, but I think we're moving in that direction.

Thus, as proposed in the conceptual framework that I set out at the outset of this study, while the implementation context affects implementation outcomes, the outcomes themselves also likely influence the context.

Chapter Summary

In this chapter, I examined how two agencies successfully implemented the CANS and derived other indirect benefits from engaging staff in the process. I first outlined how the implementation context influenced the process and its outcomes. The implementation context affected the fit between use of the CANS and staff members' work, and consequently, their initial receptivity toward the measure. It also affected the feasibility and ease with which staff could participate in the implementation process and use the tool.

Results suggest that a key facilitator of the implementation process was the social, interactive process of creating fit between the CANS and staff members' work.

Participation in the implementation process gave staff opportunities to learn about the CANS, reflect on its use within the agency, have conversations with their colleagues, and weave together their perceptions of what the CANS could help them accomplish and their priorities and values. In doing so, they developed a shared "understanding of fit" that was likely central to fueling their commitment to use the tool. Staff at these agencies were also engaged in a collaborative, ongoing process of fine-tuning the CANS or its use (i.e., creating "actual fit") in order to smoothly incorporate the tool within their practice.

Agency or implementation leaders played an important role in facilitating this fit making

process by encouraging and supporting a participatory approach, being open and responsive to staff feedback, and keeping the CANS “alive” and salient within the agency.

Results suggested that the main consequence of this collaborative fit making process was that the CANS was integrated in staff members’ service delivery and effectively used for multiple purposes. Staff reported that by being involved in the process of incorporating the CANS into their practice, they gained several benefits that contributed to them being better able and more willing to effectively use the CANS. Additionally, staff reported deriving indirect benefits from being part of the implementation process, such as improved morale.

In the next chapter, I will describe CANS implementation efforts that employed a less participatory approach and led to mixed outcomes.

Chapter 5: Results

Less Participatory CANS Implementations With Mixed Outcomes

Chapter 5: Less Participatory CANS Implementations With Mixed Outcomes

The previous chapter described the successful implementation of the CANS at two organizations that had taken a participatory approach. Following recommendations from Yin (2009), I then sought to compare the experiences of these two organizations to organizations that had experienced less positive implementation outcomes and had taken a less participatory approach. These latter organizations will be referred to as Org. 3 and Org. 4. The case study at Org. 3 was particularly illuminating because it offered an opportunity to compare two CANS implementations with different outcomes within the same agency. Thus, successful and less successful CANS implementations were compared across organizations, as well as within the same agency at Org. 3. The purpose of these comparisons was to examine which factors contributed to less positive implementation outcomes, and how the limited participatory approaches that the agencies took during the less successful implementations played a role in the outcomes they experienced.

The chapter will first describe the negative implementation consequences that staff reported in less successful CANS implementations and outline how these were different from the positive consequences reported for successful implementations, particularly the successful CANS implementation at Org. 3. Working backwards from the implementation consequences, the implementation processes and, subsequently, contextual factors that contributed to these poor implementation outcomes will be outlined. Note that this chapter is “backwards” because I felt that it was important to first convey how the implementation outcomes were different before describing the factors that contributed to these different outcomes.

Sketch of Org. 3 and Org. 4¹

Org. 3 was an urban, non-profit agency that served adolescent mothers and their children. It offered a broad range of services, including: (1) mental health and addictions counseling, as well as social supports, (2) childcare and education, and (3) secondary education for pregnant or parenting adolescent mothers. This organization had two implementations of the CANS. Implementation one involved adopting an existing version of the CANS (henceforth referred to as the “adopted CANS implementation”). When this proved to be unsuccessful, they then adapted a version of the CANS to meet the needs of their organization and implemented it successfully. Implementation two, henceforth referred to as the “adapted CANS implementation”, also involved more staff participation than the adopted CANS implementation.

Org. 4 was a large, urban, community-based, non-profit agency that provided addiction counselling to adolescents and adults. Org. 4 provided a wide range of services to varied groups of individuals and worked in partnership with several community agencies. An example of Org. 4’s services included an extensive school-based program in which counsellors worked out of high schools to support adolescents experiencing difficulties related to their own or a family member’s addiction. A few Org. 4 counsellors also provide addiction treatment services out of a different, offsite community-based agency.

¹ Further details regarding the organizations, as well as the specific names of the CANS versions used are not disclosed in order to maintain the anonymity of the participating case organizations.

A version of the CANS was developed based in part on the input of one staff member in this offsite Org. 4 program. This adapted CANS version was implemented and used to evaluate its addiction counselling services. This CANS implementation had mixed outcomes and is described in the current chapter. Note that implementation of the CANS within this offsite Org. 4 program was not the focus of the Org. 4 case study. Rather, the focus of the case study, which will be described in Chapter 6, was on GAIN implementation. Consequently, only one Org. 4 staff member was interviewed who could speak to the CANS implementation within the Org. 4 program.

Negative Implementation Consequences

In Chapter 4, a range of predominantly positive consequences related to the implementation of the CANS were described. Table 5.1 summarizes these consequences and outlines how the reported consequences from less successful CANS implementations at Org. 3 and 4 were different. These differences are described in this section.

Table 5.1

Implementation Consequences Across CANS Implementations

Implementation Consequences	Implementations With Primarily Negative Consequences		Implementations with Primarily Positive Consequences		
	Org. 3 Adopted CANS (N=3)	Org. 4 (N=1)	Org. 3 Adapted CANS (N=5)	Org. 1 (N=12)	Org. 2 (N=10)
Consequences Related to CANS Uptake and Use					
CANS completion and staff perceptions of data trustworthiness	-	-	+	+	+
CANS use to inform clinical decision making	-	-	+	+	+
Fit between CANS and program	-	?+	+	+	+
Understanding of how cans fits with organizational objectives and clinical values	-	-	+	+	+
Increased buy-in for the CANS	-	+	+	+	+
Consistent understanding of how to administer and use CANS	-	+	+	+	+
General Consequences					
More favorable attitudes toward program evaluation	?	-	+	+	+
Enhanced evaluation capacity	?-	+	?	+	+
Learning about the organization	?-	?-	+	+	+
Improved staff morale	?	?-	+	+	+
Improved collegial relationships	?-	?	+	?	+
Skills related to implementation leadership	?	?	+	?	?
Strengthened partnerships	?-	+	?+	+	?

Note. For each CANS implementation a “+” sign is used when staff generally reported positive consequences; a “-” sign is used when staff generally reported negative consequences or when they reported that they had not perceived positive consequences; “?-” signs are used when positive consequences were not reported by staff and this was likely because staff did not experience these consequences, “?+” signs are used when staff did not report a positive consequence but it is likely that they did experience it based

on other comments, and “?” is used when there is insufficient data to determine whether the consequences were experienced.

The implementation of the adopted CANS at Org. 3 led to a number of negative consequences. Staff at Org. 3 described the adopted CANS implementation as a “disaster”. The main reason they concluded that the implementation was a disaster was that results from analyzing the pre-post CANS aggregate data had suggested that clients had not made progress toward their treatment goals throughout the course of the program. Staff reported that this finding was inconsistent with their perception of clients’ treatment outcomes.

After taking a closer look at the data and discussing possible explanations, staff concluded that they had completed the adopted CANS inconsistently (i.e., that inter-rater reliability was low). This was reportedly because staff had difficulty interpreting the items of the adopted CANS within the context of their particular work. For example, staff inconsistently rated an item assessing needs related to sleep because it was normative for the population they worked with to be sleep deprived. One senior managers explained how the limited relevance of some CANS items to the population they worked with led to difficulties consistently interpreting and rating the items:

One of our raters was saying, “Well she’s getting as much sleep as she can, so it’s not that she’s not getting rested. So I wouldn’t say that was three, I would say maybe it was two or a one because she can’t help it.” [...] And then the other rater was saying, “But she’s sleep deprived so that has an impact on her emotions and her self-regulation and all of those things because despite the reason for it happening, she still is sleep deprived.” So there I had two raters, because it didn’t really fit our girls, interpreting that test item differently, which had an impact.

Similarly negative consequences were reported at Org. 4. The Org. 4 staff member who implemented the CANS suspected issues related to staff members not completing the measure. Specifically, she noted, “To be honest, I don’t think we got as many [completed CANS forms] in as they had expected.” Furthermore, both at Org. 4 and during the adopted CANS implantation at Org. 3, the CANS was not used to inform clinical decision-making. The Org. 4 staff member stated, “I’ve been told to continually do CANS on my clients. However, it’s not going anywhere, it’s just sitting in the files at this point, so it can be accessed whenever they need to access it.” An Org. 3 staff member stated that because the adopted CANS was not used to support their service delivery, it “didn’t feel valuable”.

The implementation consequences from less successful CANS implementations at Org. 3 and Org. 4 were very different from consequences in more successful projects (as shown in Table 5.1). For example, Org. 3 staff reported that, unlike the adopted CANS, staff used the adapted CANS in their day-to-day clinical work. They saw the adapted CANS as being useful for multiple objectives (e.g., treatment planning, enhancing communication between staff from different programs) and had a sense of buy-in and ownership of the tool. They also had more confidence in their ability to complete the adapted CANS reliably.

Furthermore, similar to Org. 1 and Org. 2, following successful CANS implementations staff also reported other, general, positive consequences that were not directly related to CANS uptake and use. For example, Org. 3 staff reported that the process of developing the adapted CANS led them to learn more about the organization. One said:

Developing the [adapted CANS] was professional education in itself. Right? Because we were discussing our girls at length. What were the kinds of things that we needed to know about them? What were the profiles of our girls? So what needed to be included [in the adapted CANS], what needed to be abandoned? We needed for instance some self-regulation items but did we care as much about classroom behavior as we did mental health items?

The comparison between these CANS implementations highlights that some of the main consequences that characterize successful implementation are staff buy-in, reliable and meaningful use of the CANS, and production of useful or trustworthy data.

Early implementation consequences. The implementation consequences that staff reported can be placed in sequence. While limited buy-in, non-optimal use of the CANS, and untrustworthy data can be seen as relatively longer term consequences of the implementation, staff also described earlier consequences of the implementation that they believed contributed to these longer term consequences (See Figure 5.1). These early consequences can be conceptualized as belonging to two categories: the “actual fit” between the CANS and the organization, and staff members’ “understanding of fit” between the CANS and the organization. These early consequences will be described here.

Figure 5.1. Sequence of implementation consequences related to CANS use

“Actual fit”. “Actual fit” refers to the extent to which the measure or the procedures for administering it fit with the demands of staff members’ day-to-day work. “Fit” refers to the relevance and appropriateness of the measure for the target population, consistency of the measure’s characteristics with organizational approaches to practice, and smooth integration of the measure with staff members’ workflow. The “actual fit” of the measure is conceptualized as an implementation consequence because it is something that staff develop by adapting the CANS and shaping the procedures related to how the measures should be used within the agency.

Org. 3 staff saw the “actual fit” of the CANS version that they were using as a key factor that contributed to implementation outcomes. They attributed their difficulties with implementing the adopted CANS, and the resulting untrustworthy data, to the poor fit between the measure and the population that they worked with. One staff member noted:

We found halfway into this process that we were outliers in the study because although CANS was easy to use and appropriate for our population, it wasn't tailor-made for our population and we were trying to fit our girls into the assessment rather than the assessment fitting our girls.

Because the adopted CANS was a poor fit for their population, Org. 3 staff decided to develop a version of the CANS that better reflected the population with whom they worked. They reported that the adapted CANS was a much better "actual fit" because its items were relevant to the needs of the population they served. They added that due to the better fit of the adapted CANS, completing CANS assessments reliably became easier and they were more motivated to use the tool.

In addition to poor fit with the population, both Org. 3 and Org. 4 staff reported that poor incorporation of the CANS within their workflow was another factor that contributed to implementation challenges. One problem was that the demands of completing CANS assessments did not fit well with other work-related demands that staff were managing. An Org. 3 staff member reported that they were expected to pilot multiple assessments in addition to the adopted CANS at a time when they were understaffed:

[Our manager would say] "try this one and try this one and we're part of this pilot project and this study and we're part of this grant." And it just went on and on. It felt like every month we were getting a new tool that we had to use and we were already pulling our hair out.

Another problem noted at Org. 4 was that details regarding how the tool should be used in practice had not been worked out, and thus, staff did not have many directions regarding how to incorporate and use the CANS as part of their practice. An Org. 4 staff member commented that many procedures related to the administration and use of the

CANS needed to be developed before CANS assessments could be used in a clinically meaningful way within the agency:

I think they're going to have to really sit down, as a staff, and really decide how we're going to use [the CANS] that way [to inform clinical decision making]. What are we going to do with it? Who gets to see it? How do we implement it? How do we actually use it? Do we bring it into meetings and actually use that as our working document? [...] Who would do them? Would it just be a simple one person, or would it be a team that would do it together? There's a lot of questions around how you would do that.

These unanswered questions suggest that during the CANS implementation at Org. 4 details that needed to be attended to in order to create “actual fit” between the CANS and staff members’ workflow had not been attended to. This reportedly interfered with staff members’ ability to effectively use the CANS.

In summary, staff at both agencies saw difficulties with “actual fit” as one of the main factors that interfered with effective use of the CANS. These difficulties were related to both the limited relevance and appropriateness of the CANS items for the population that staff served and/or the poor incorporation of the CANS in staff members’ workflow. In contrast, issues with “actual fit” were reportedly less common during CANS implementations with more positive outcomes.

“Understanding of fit”. Another early implementation consequence that appeared to contribute to longer term consequences was staff members’ “understanding of fit”. This refers to staff members’ perception or understanding of the fit between use of the CANS and their professional and organizational priorities and values.

During the less successful CANS implementations, both Org. 3 and Org. 4 staff reported that they did not understand how the CANS could be useful in ways that

mattered to them and their organization. An Org. 3 senior manager reported that she believed she received “pushback” from staff when the adopted CANS was first introduced because they saw the measure as “just another test” and did not understand “the why” behind the assessment. She explained that they did not initially find the CANS “meaningful” to their work. Initially, there was no narrative about how the CANS connected with organizational priorities and values, even though staff indicated that the same priorities and values were present at that time (This will be discussed further in the Implementation Context section). In short, not understanding “the why” was perceived as contributing to poor uptake of the adopted CANS.

In comparison, Org. 3 staff developed shared understandings about why the CANS was meaningful during the more successful adapted CANS implementation. The senior manager noted that when a frontline staff member began participating in implementation activities,

[...] she began to understand what the CANS was, why it was important to use an assessment like that and why it was important to use the CANS in developing the individual treatment plan. So as it were, she became my champion. And as soon as I had her on board, then her enthusiasm started to go... bleed its way through the Centre.

Thus, the adapted CANS implementation afforded opportunities for staff to develop an “understanding of fit”. This was a key difference between the successful and less successful CANS implementations at Org. 3.

Evidence that staff had developed an “understanding of fit” during the adapted CANS implementation at Org. 3 was reflected in staff members’ comments about why they used the tool. Similar to Org. 1 and Org. 2 staff, Org. 3 staff were able to articulate why completing CANS assessments was important in terms of priorities or values that

mattered to them professionally and organizationally. Furthermore, this understanding was shared amongst most staff involved in the implementation, not just a few champions. For example, one staff member who was hired to cover a maternity leave after the adapted CANS had been implemented explained that having treatment plans be informed by rigorous assessments was a priority for the organization because having strong treatment plans differentiated the organization as a mental health treatment centre rather than a non-treatment oriented service agency. She stated:

I know the treatment plans are something that we're still developing, and trying different ways of working towards, and the CANS is really instrumental to that process. So, I mean, how I interpret it I guess is that the CANS is really, really significant for these treatment plans and for us identifying the need areas of our girls. Because a lot of them have very complicated needs and a lot of them have multiple, multiple need areas. It really helps to identify that and also to prioritize.

Another staff member connected the CANS to the values of providing preventative care and helping clients “grow”:

We want to see them grow and meet success and not meet failure, and so I think, like having the CANS is the way to do that; where not having it, once again, you're just spinning your wheels and you're dealing with the crises, and you're not doing any preventative work, it's just your ongoing crisis management.

Staff indicated that when they understood how the CANS “fit”, or how it could help them achieve organizational objectives and work toward clinical values, they were more motivated to complete CANS assessments, despite all the work demands that they were under. One said:

Even though I might feel overwhelmed by the work load sometimes and think “Oh no I need to get all these CANS [assessments] done” you know I'm like okay [laughs] it's a lot of work, but I understand why it's so important.

Furthermore, the senior manager stated that the development of an understanding of “the why” behind the use of the tool was essential for gaining staff buy-in and achieving a

“smooth implementation”. She said, “I think if an assessment doesn’t bring meaning, if they don’t understand *‘the why’*, you’re not going to have a smooth implementation.”

Of note, one staff suggested that just knowing how use of the CANS was important for the success of the agency was not sufficient to maintain her investment in the tool. She also needed to know how using the CANS would help her clients.

Sometimes it feels like the only reason we’re doing certain things is strictly for funding. And when that comes into play it’s a little bit tougher to feel invested in it. I want the Centre to do well, don’t get me wrong. But everything that I do I want to feel motivated that it’s for the client.

This statement suggests that for staff to be committed to effectively using the CANS, they need to understand how its use helps them be effective both organizationally and professionally. Finding answers to the “the why” question gave purpose and direction to staff members’ action. It provided the motivation necessary to work through challenges and overcome obstacles in order to increase fit and use the tool effectively.

The comparison between these two phases of CANS implementation at Org. 3 suggests that in successful implementations, staff gradually co-create a shared understanding of how CANS fits with what they are trying to achieve through their work. This “understanding of fit” can build on the “actual fit” between the measure and the agency, and can become more elaborate as a consequence of implementation processes. This early consequence contributes to subsequent consequences such as buy-in, meaningful use of the CANS, and useful data.

Implementation Process

The previous section outlined the many decisions that needed to be made and the actions that needed to be taken before staff could make effective use of the CANS. Staff indicated that they needed to adapt the CANS so that it was relevant to their population. They needed to decide together how they were going to interpret items within the context of the population they worked with. They needed to decide who would complete the CANS assessments, at what time, and in what way. In order for staff to make these decisions and take these actions to make the CANS fit their work, they need to be engaged together in an ongoing process of making fit.

This section examines how staff approached this fit making process during less successful implementations compared to the more successful ones. My hypothesis, based on the previous case studies, is that how staff carried out the implementation and how they interacted during the process were important factors that affected their ability to successfully “co-create fit” between the CANS and their work, which then led to effective implementation. In Table 5.2 and in the paragraphs that follow, I examine the degree to which less successful CANS implementations incorporated the implementation characteristics that reportedly characterized successful implementations. The objective behind this comparison is to gain further clarity about how (if at all) these characteristics contribute to implementation outcomes.

Table 5.2

Characteristics of the Implementation Process Across CANS Implementations

Implementation Characteristics	Implementations with Primarily Negative Consequences		Implementations with Primarily Positive Consequences		
	Org. 3 Adopted CANS (N=3)	Org. 4 (N=1)	Org. 3 Adapted CANS (N=5)	Org. 1 (N=12)	Org. 2 (N=10)
Characteristics That Promoted Engaged Staff Interaction					
Participatory approach	-+	+	+	+	+
Openness and responsiveness to staff feedback	?-	-	+	+	+
Momentum and follow-through	?	-	+	+	+
Characteristics of Staff Interaction					
Persistent and pervasive talk about the potential benefits or uses of the CANS	-	-	+	+	+
Problem-solving oriented conversations	-	-	+	+	+

Note. For each CANS implementation a “+” sign is used when staff generally reported that the implementation had the characteristic listed in the left most column; a “-” sign is used when the characteristic was not reported; “+” is used when there were mixed reports; “?” indicates that the implementation likely did not have the characteristic, although staff did not definitively indicate that this was the case; and “?” is used when there was insufficient data.

Implementation characteristics that helped staff stay engaged in creating fit.

Based on the previous case studies, three implementation characteristics appeared to promote staff engagement in the process of creating better fit between the CANS and their work: taking a participatory approach, showing openness and responsive to staff feedback, and building momentum and following through with implementation activities.

I will first provide a description of how less successful implementations compared with

the more successful ones in terms of these characteristics. I then discuss how these characteristics together affected staff members' ability to engage in the process of co-creating fit.

Participatory approach. In more successful implementations of the CANS, participation of staff in planning and carrying out the implementation allowed them to become part of the conversation about the CANS, and to contribute to shaping it and its administration or use procedures. It also allowed them to contribute to the development of shared understandings about how the measure could be useful.

In comparison to successful implementations, there was less staff participation during the less successful CANS implementations at Org. 3 and Org. 4. First, very few staff members were involved in implementing the CANS. During the adopted CANS implementation at Org. 3, only a senior manager and a frontline staff member participated in implementation planning activities. Furthermore, these two staff members had less control over implementation decisions, including the decision to implement the adopted CANS. This was because a prior senior manager had committed to participating in a pilot study and other agencies participating in the pilot had already decided on using the adopted CANS.

Similarly, at Org. 4, only one frontline staff member was involved in the development of the adapted CANS and in planning out the evaluation in which it was used. Furthermore, she implemented the adapted CANS in a separate offsite agency and stated that she felt isolated during the process. She described how implementing the CANS in isolation affected her motivation and her ability to problem-solve:

If you feel like you're off track, if you're falling behind, or you're not really understanding, or maybe you're just losing motivation in it because you're not really seeing the purpose anymore, or nothing seems to be happening. When you're part of a team you can talk about it, you can discuss it, you can trade off ideas, you can do lots of things. But when you're a lone person doing it, it can be isolating.

She also did not see herself as being involved in making the larger decisions about how the adapted CANS would be used.

Although there was some staff participation during the less successful implementation projects, staff participation was limited in terms of diversity of stakeholders selected (i.e., one frontline staff member was involved in each project), control of evaluation/implementation processes, and depth of participation (i.e., not involved in deciding next steps in terms of the use of the tool). In comparison, more successful CANS implementations took place within larger teams and a number of staff with a wide range of roles were involved in the process (i.e., high diversity of participation). Staff also had more control over implementation processes and were involved to a greater extent in implementation and evaluation activities.

Similarly, during the more successful adapted CANS implementation at Org. 3, a greater number of staff with varying roles participated in implementing the CANS; staff had much greater control of implementation processes (e.g., they could select which items to include and exclude from the adapted CANS); and they were involved to a greater extent in implementation activities (e.g., developing the adapted CANS, participating in “assessor moderation meetings” to ensure reliability).

In summary, both the within organization comparison and the comparison between organizations show that less staff participation was associated with less positive implementation outcomes.

Openness and responsiveness to staff feedback. The previous case studies suggested that openness and responsiveness of implementation leaders provided reasons and encouragement for staff to engage in the implementation process. Furthermore, implementation leaders' openness and responsiveness to staff input allowed a greater number of staff to have control of the implementation process and to be involved at a deep level. Thus, as with taking a participatory approach, the "openness and responsiveness" of managers allowed staff to have a role in shaping the CANS and how it was used within the agencies.

In comparison to successful implementations, during the less successful CANS implementations at Org. 3 and Org. 4, staff reported that there was either less responsiveness to their feedback about the CANS or the responses were delayed. One staff member who was involved in the adopted CANS implementation at Org. 3 noted that she raised the difficulties that they were experiencing with the tool with a senior manager and with the committee organizing the pilot. The senior manager was reportedly receptive to the feedback. However, given the shortage of staff at the time and not having a team supervisor, it took some time before they could address the problems.

In comparison, the Org. 3 senior manager reported that one of the factors that helped facilitate the adapted CANS implementation was that she began addressing staff concerns related to the burden of having to complete multiple assessments. She stated,

“Taking away those two assessments that were not informing the practice hugely helped in implementation.” Thus, although the senior manager at Org. 3 was described as being generally open and responsive to staff input, being understaffed at the time of the less successful adopted CANS implementation may have led to a delay in resolving issues that staff presented.

There were also issues related to management responsiveness to staff feedback at Org. 4. The staff member who implemented the CANS in an offsite agency recalled conversations she had with managers in which she felt there was limited responsiveness to her concerns and questions about the implementation:

When you're not giving me more time in my day, where am I supposed to do 23 CANS if you're expecting me to take 45 minutes per CANS? Have you thought about that? I think they just kind of said, “Just do it.” [...] It was like, yeah, but you don't understand, I'm the only one doing them, and there's a big backlog of them now because now you want me to do them back on every client. And then you're just saying, well, find the time. Well, I'm sorry, that's a lot of freaking time.

The Org. 4 staff member explained that although these concerns were not addressed quickly, ultimately, she was given “permission to do what I had to do to get it done”.

In summary, there were some noteworthy differences in openness and responsiveness to staff feedback across successful and less successful implementations. In the less successful implementations, in general, feedback was not solicited from staff as systematically or consistently as the successful implementations. Additionally, responses to staff concerns were often delayed and took the form of cursory, short-term solutions. These issues related to openness and responsiveness interfered with staff members' ability to be part of the process of shaping CANS and how it was used. In short, these issues resulted in missed opportunities to “co-create fit”.

Momentum and follow-through (or “keeping it alive”). Yet another factor that was important for keeping staff engaged and focusing their attention on co-creating fit in Org. 1 and Org. 2 was that the implementation was sustained and the CANS was kept alive or salient. Implementation leaders kept the “momentum going” by consistently setting planning meetings and ensuring that there was follow-through with planned activities. They also advocated for the use of CANS and kept it salient by actively introducing it into the conversations that they were having. These actions created opportunities for staff participation and ensured that staff remained engaged until concrete implementation outcomes were realized.

Similar to beliefs stated by Org. 1 and Org. 2 implementation leaders, an implementation leader at Org. 3 underscored the importance of keeping “the assessment alive in the organization” by continuously creating occasions and opportunities for staff to have discussions about how and why the assessment was being completed. She noted that during the successful adapted CANS implementation, she was engaged in planning activities such as an in-person CANS training and “assessor moderation” meetings. She noted that these planned activities provided opportunities for staff to discuss how they were each interpreting the items, which was critical to improving the reliability of their data. In comparison, during the less successful adopted CANS implementation, implementation leaders were less involved in planning such activities. Thus, there were fewer occasions for staff to talk about how they were completing CANS assessments and to ensure that they were all taking a consistent approach.

Similarly at Org. 4, given that the staff member implemented the CANS by herself and other managers were offsite, there was no one but herself to create

momentum or to make the CANS a salient priority. In this case, geographic separation from managers with decision-making power at the main agency and from other staff, made it difficult for this staff member to continuously engage with other staff in creating better fit.

Summary of implementation characteristics. Overall, during less successful implementations the conditions were not right for staff to engage, and stay engaged, in making fit between the CANS and their work. Successful implementation requires leaders that consistently create opportunities and reasons for staff participation and make CANS implementation an important priority. During less successful implementations, contextual factors (i.e., being understaffed, geographic separation) interfered with leaders' ability to create the conditions that would promote staff members' ability to work together and make decisions or take actions necessary to make the CANS work for them.

In the next section, I describe how the absence of these conditions affected the ways in which staff talked about the CANS. As described in the previous chapter, the ways in which staff talked about the CANS had important implications in terms of their ability to identify shared solutions to problems that they encountered with CANS use, and their ability to develop shared understandings about why use of the CANS was important to them. Thus, as will be described, the absence of the right implementation conditions in less successful CANS implementations importantly contributed to implementation outcomes through its affect on staff interactions.

Characteristics of staff interaction. The Org. 1 and Org. 2 case studies showed that during successful CANS implementations, the CANS was consistently a topic of conversation amongst staff with varying roles and that the conversations centred on how

the CANS could best be used within the agency. This section describes how staff interactions during the less successful implementations compared to staff interactions during the more successful implementations, and how this affected staff members' ability to create "actual fit" and "understanding of fit".

Limited interaction about the CANS. The Org. 4 staff member who was involved in implementing the CANS explained that implementing the tool by herself in an offsite agency limited her ability to interact with other staff about the tool. She reported that she did have occasional opportunities during formal meetings to discuss the CANS with staff from a partner agency who were also engaged in CANS implementation. However, she reported that during these meetings, she often felt that she needed to "catch up" on important parts of the conversation that she had missed. She stated:

If I had anything to say that was a barrier, would be, I think, because [the partner agency] lived and breathed CANS, and because that wasn't the same here, because no one else was doing it, that, I think, sometimes, they were ahead of me, and I was always feeling like, okay, sorry, slow down and explain this. Because they would have information, they would do things ahead of me, and then I would be like, I don't know what you're talking about because I don't know about this, or, I don't understand why you made that decision yet, or whatever. So, I think that was the only thing, because in between meetings they were still discussing, and I wasn't part of those discussions, because there was a whole bunch of them that worked on it over there, so I'd have to catch up a little bit.

What this quote highlights is the difference across agencies in terms of the extent to which CANS was a salient topic of conversation. The staff member pointed out that the partner agency "lived and breathed CANS"; it was something that staff continuously worked on and refined in their day-to-day work outside of formal meetings. This level of continuous and widespread engagement by staff, which was absent at Org. 4, is likely an important contributing factor that allows for staff developing "fit" between the tool and

the work that they do in their agency. There was evidence that staff at Org. 3 were engaged in these types of conversations during the adapted CANS implementation, but had different types of conversations, as will be described next, during the less successful adopted CANS implementation.

Focus of conversations on “venting” and “sharing tricks”. In addition to the CANS not being a persistent topic of conversation in less successful implementations, the conversations that did take place were not described as being action-oriented or aimed at identifying ways that the tool could best be used. One staff member at Org. 3 reported that the conversations during the less successful adopted CANS implementation often involved venting frustration about problems that they were experiencing with the CANS (i.e., how long the CANS assessments were taking, how the adopted CANS items were not relevant to their clients) and “sharing tricks” amongst each other to help with completing the assessments more quickly:

We had sort of little venting sessions [about CANS] and trying to share tricks with each other about how we can make it faster and what we liked, what we didn't like. That kind of thing.

The tips and tricks that they shared were about how to complete the CANS quickly as opposed to how to use it meaningfully. The conversations were not action-oriented in that they were not focused on resolving some of the confusion that they were experiencing about the items that were not relevant to their clients.

The focus of conversations during this “disaster phase” (i.e., the adopted CANS implementation) was very different from the focus of conversations during the more successful adapted CANS implementation. Consistent with Org. 1 and Org. 2, Org. 3 staff reported that during the adapted CANS implementation, conversations were focused

on how the tool could best be used to inform and enhance the services they offered. One staff member indicated, “[We’re] constantly dialoguing about how [we] can make it...not just easier but more meaningful.” Another staff member described how their conversations focused on their priority of “best meeting clients’ needs” and how the CANS or other assessment tools could be used to achieve this priority:

A lot of our conversation revolves around meeting our clients’ needs and best meeting our clients’ needs. And managing our time in the best way so that we’re meeting our clients’ needs. [...] So a lot of the conversation is how can we find a tool that can maybe help us narrow down the clients’ needs and prioritize them. So that’s what we use our assessment tools and CANS for.

This quote highlights that the focus of conversations during the adapted CANS implementation was different from the focus on expediency that staff described during the earlier adopted CANS implementation.

Implications of these conversations for creating fit. Compared to successful implementations, staff interactions during these less successful implementations led staff to come to different understandings about the CANS and how it applied to their work. First, in both these less successful implementations, limited staff interaction about the CANS interfered with staff making sense of the tool together. Instead, they were each individually making decisions about how the tool could be applied. Org. 3 staff reported that divergent understandings about how CANS assessments should be completed, or how to rate CANS items, led to low inter-rater reliability during the adopted CANS implementation. In comparison, during the more successful adapted CANS implementation at Org. 3, staff had conversations, both during planned implementation activities such as “assessor moderation” meetings and in their day-to-day work, to ensure

that their understandings of how to complete CANS assessments were consistent. One staff member recalled:

Our whole staff went together to the in-person training and again the discussion during that training about how to rate items was a very rich discussion and improved our inter-rater reliability. So now I feel that we're getting the results we want because we continue to have those discussions.

Thus, this process of staff aligning their understandings, deciding on how to use and apply the CANS in consistent as opposed to divergent ways, helped improve staff members' ability to complete the CANS reliably.

Second, in less successful projects, conversations were not oriented toward developing shared understandings about how the CANS could be used to inform staff members' clinical work in different ways. Rather, the focus of staff members' discussions and shared perception of the CANS, was on the time it took to complete a CANS assessment. In other words, the implication of staff "venting" and "sharing tricks" rather than problem-solving was that they did not come to see how the CANS could be useful and share these perceptions with their colleagues. An Org. 3 staff member described the shared opinion that arose during their discussions during the adopted CANS implementation:

The thing about CANS is that it wasn't always the favourite tool. [...] There was a lot of discussion about which is the right tool. Sometimes you're wanting to choose the quickest tool, so CANS necessarily wasn't the quickest tool at the time. So initially, it wasn't that we were all pro CANS. We were even a little bit like some of these questions don't apply to our girls. What are we doing? We're spending so much time.

Hence, CANS was perceived as a tool that was time consuming and not the best fit for the population they worked with as opposed to being perceived as a tool that could help improve services.

Summary of implementation processes. In summary, the implementation process in less successful CANS implementations differed in several ways from the implementation process in more successful implementations. Firstly, staff participation was limited in terms of the diversity of staff who participated, the extent of control they had over implementation decisions, and the extent to which they were involved in different implementation activities. Secondly, implementation leaders' responses to staff concerns were often delayed and involved cursory solutions. Related to this, due to several constraints related to the implementation context, implementation leaders were less involved in organizing regular meetings about the implementation project and keeping the CANS a salient priority within the organizations. Given the limitations in staff participation and responsiveness to staff feedback, staff were less engaged in conversations focused on how they could adapt the CANS or its administration procedures to make the best use of the tool. Instead, conversations were focused on the various problems they were experiencing with the tool and there was little attention paid to how these problems could be resolved. These factors appeared to interfere with staff members' uptake and effective use of the tool.

Implementation Context

As discussed in the previous section, several contextual factors appeared to influence staff member's ability to engage in ongoing fit making, and consequently, their ability to get the most use out of the CANS. In this section, I provide further details about how the implementation context appeared to contribute to less successful CANS implementations. Similar to the more successful implementations, the context of CANS implementation at Org. 3 and Org. 4 influenced implementation in practical ways, and it

also influenced the way that staff came to perceive the role and use of the CANS. As shown in Table 5.3, the contextual factors across different agencies were more similar than different. The main difference that appeared to have an effect on implementation outcomes at Org. 3 and Org. 4 was that there were some practical barriers to taking a participatory implementation approach as well as to CANS use.

I will first describe how the implementation context affected staff members' perceptions or understandings of how well use of the CANS fit with what they were trying to achieve and with how they strived to provide services. I then describe the practical constraints that interfered with the "actual fit" of the CANS within staff members' work routines, and that also made it difficult for them to engage in trying to improve fit. Lastly, I describe how the values and priorities that were uniquely emphasized within Org. 3 and Org. 4 were associated with different ways of approaching CANS assessments.

Table 5.3

Contextual Factors That Reportedly Influenced Implementation

Implementation Context Factors	Implementations With Primarily Negative Consequences		Implementations with Primarily Positive Consequences		
	Org. 3 Adopted CANS (N=3)	Org. 4 (N=1)	Org. 3 Adapted CANS (N=5)	Org. 1 (N=12)	Org. 2 (N=10)
External Influences					
Provincial trend toward outcome monitoring	+	+	+	+	+
Incentive to use program evaluation to maintain funding	+	+	+	+	+
Ministry mandates to implement CAFAS and BCFPI	+	-	-	+	-
Partnerships and widespread use of CANS	+	+	+	+	+
Organizational Factors					
Priority: Providing high quality care	+	+	+	+	+
Values: strengths focused and client-centred care	+	+	+	+	+
Values: multidisciplinary care	+	?	+	+	+
Value: Evidence-informed decision making	+	+	+	+	+
Value: Trauma-informed care	+	+	+	-	-
Changing, dynamic organization	+	+	+	+	+
Resources for CANS implementation	-+	-+	+	+	+
Perception that management values staff participation	+	+	+	+	+
Trust and confidence in management	+	?+	+	+	+
Staff Characteristics					
Favourable attitudes toward program evaluation and the CANS	+	+	+	+	+

Note. For each CANS implementation a “+” sign is used when staff generally reported that the contextual factor listed in the left most column was relevant to the implementation; a “-” sign is used when staff did not describe the factor as relevant; “-+”

is used when there were mixed reports; “?+” indicates that the factor was likely relevant, although staff did not definitively indicate that this was the case; and “?” is used when there was insufficient data.

“Building blocks” for developing an “understanding of fit”. In the previous chapter, I indicated that the implementation context provides “building blocks” that staff can use to develop a shared perception of why using the CANS is important to them professionally and organizationally. These building blocks are priorities or valued ways of providing services that staff can potentially see as being supported by CANS use. In the previous organizations, it appeared that once staff formed the perception that use of the CANS could help them toward these objectives, they became more motivated and committed to use the tool effectively. During the less successful CANS implementations, many of the same objectives, priorities, and values that could be perceived as being congruent with CANS use were present. I will now describe these “building blocks” in the outer and inner organizational context.

External influences or outer context. In less successful CANS implementations, external influences or the “outer context” of the organization provided many of the same reasons or incentives for adopting and using the CANS as in the more successful CANS implementations. Org. 3 and Org. 4 staff made similar comments about: a provincial trend toward outcome monitoring, and the value of collecting data both for data-informed decision-making and for obtaining funding. Staff in these agencies also similarly commented on the widespread use of the CANS by partner agencies and indicated that this: increased the perceived credibility of the tool for them, made it easier to obtain information and support related to its use, and facilitated inter-agency partnerships.

Inner organizational context and staff characteristics. As in the agencies that successfully implemented the CANS, there was a similar push in Org. 3 for developing the organization and the services they offered. Staff reported that they were striving toward adopting the latest practices, staying accountable to their clients and their funders, data-informed decision-making, strengthening their treatment planning process, becoming more preventative in their approach, and becoming an accredited treatment centre. The values that staff reported were also similar to other agencies. One of the main values at Org. 3 was providing multi-disciplinary, “wraparound” care and “working with the whole girl”, as opposed to focusing solely on her education, parenting, or mental health. Providing client-centred and strengths focused care was also important to staff.

As mentioned in the previous chapter, organizations that successfully implemented the CANS believed that using the CANS would help them toward priorities and values that were very similar to those that were present at Org. 3. This shared perception provided a strong motivation for incorporating the CANS in their practice. Furthermore, Org. 3 staff did not report any shifts or changes in their professional or organizational priorities and values between the adopted and the adapted CANS implementations. Yet, despite priorities and values that could be perceived as congruent with CANS use, staff reported that they were not committed to effectively using the CANS at the time.

Staff members’ own professional priorities and values at the time of the less successful implementation could also be perceived as being congruent with CANS use. Staff at Org. 3 reported having a “helping perspective”, as well as a strong commitment to their agencies and dedication to their work. One staff member said, “At a non-for-

profit organization, people are here because they want to -- they believe in the organization and what the organization is doing.” Staff suggested that given that they have these values, they are driven to use tools and strategies that help them better serve their clients. Additionally, similar to staff in the previous two agencies, they reported that their prior professional experiences had led them to see program evaluation and use of data in decision-making as valuable activities. One said, “If you're going to be doing all that work with somebody, it’s always nice to know that there is outcomes. [...] to look at, over time, that, yeah, you were having an effect, and you were helping that person make change for the better”. Thus, at the time of the less successful implementation at Org. 3, there appeared to be a lot of potential to see use of the CANS as useful, both because of what staff themselves believed, valued, and wanted to achieve, and because of what the organization as a whole wanted to achieve.

Why then were these incentives or reasons not sufficient to make staff embrace the CANS and motivate them to overcome challenges and obstacles with its use? As suggested by Org. 3 staff, what may have contributed to poor implementation outcomes during the adopted CANS implementation may not have been the absence of reasons or incentives for implementation, but that these reasons were not discussed and incorporated in staff members’ shared understanding of why using the CANS was important (i.e., their “understanding of fit”). While senior managers may have had a vision of how CANS use would contribute to the success of the agency and to improved client care, this vision did not appear to be understood or shared by the majority of staff during less successful implementations. This may have contributed to frontline staff being less motivated or invested in working out the details to effectively incorporate the CANS within their

practice. However, as I will discuss next, based on the data I believe that these motivational factors were less of an influence on implementation outcomes than some of the practical issues that arose out of the inner organization context.

Practical implementation barriers. In less successful implementations, there were practical constraints within the inner organizational context that appeared to make it difficult for staff to effectively use the CANS. These same constraints also interfered with staff members' ability to collaboratively engage in addressing barriers to using the CANS and create better "actual fit".

Staff workloads. In comparison to more successful implementations, one of the main ways that the organizational context during less successful implementations was different was that staff felt overburdened by simultaneous demands. Given the multiple demands on staff, they could not prioritize the effective implementation and use of the CANS. Several organizational factors reportedly contributed to these issues. One was that similar to Org. 1 and Org. 2, both Org. 3 and Org. 4 were dynamic agencies in which multiple changes were occurring simultaneously. Org. 3 staff reported that the demands associated with leading these changes or initiatives (e.g., applying for accreditation) contributed to their "fatigue" at the time of the adopted CANS implementation.

Furthermore, another type of change (i.e., staff turnover) led to periods of time during which both Org. 3 and Org. 4 were understaffed, which meant that existing staff had greater workloads. An Org. 3 staff member stated that there were only two staff members at the time of the adopted CANS implementation who each managed a caseload

of 24 clients. These two staff members were required to complete various assessments on each client, including the CANS, which led to a sense of “burnout”. She stated:

There was a lot of complaining about doing the CANS in general. People were like “It takes me 45 minutes to complete one CANS assessment. I have to do it three times a year. You know we have 48 clients.” That’s a lot of time invested in one tool plus having to do the other five at the time.

As alluded to in the above quote, the requirement to complete measures other than the CANS was another contributor to the excessive burden Org. 3 staff experienced at the time of the adopted CANS implementation. Two of these tools, the CAFAS and BCFPI, were Ministry mandated tools. Thus, similar to Org. 1, Ministry mandates to implement the CAFAS and BCFPI added to staff members’ workloads at the time of the adopted CANS implementation and made it more challenging for them to find time to complete the CANS effectively. In comparison, during the more successful adapted CANS implementation, there were five staff members working with the same number of total clients. Furthermore, some of the Ministry mandated assessment measures that were not useful to staff members’ work had been eliminated. Consequently, staff were less overwhelmed by the demands of completing the adapted CANS.

Staffing issues also contributed to difficulties finding time to complete CANS assessments at Org. 4. At the offsite Org. 4 program, a staff member was hired partway through the implementation and was not trained on how to use the CANS. Consequently, the demands of completing CANS assessments fell fully on the existing staff member until the new staff member was hired and trained.

As an aside, there was some evidence from these organizations that supported the hypothesis I stated in the previous chapter, namely that the dynamic, changing

characteristic of organizations may also facilitate further change. According to staff at both Org. 3 and Org. 4, the staff who were hired or who remained with the agencies following organizational changes were more open to the changes. Hence, change created an organizational atmosphere that was receptive to more change.

Similarities to other agencies. Aside from this important difference in staff workloads across the agencies, other organizational factors relevant to the implementation were similar. Similar to organizations that successfully implemented the CANS, less successful agencies were able to obtain the resources and support they needed for CANS implementation and data analysis through partnerships with external agencies or individuals. These resources made it possible for the agencies to start on the journey of implementing the CANS, however, the limited time that staff had available for completing the CANS well was a roadblock on their path.

Furthermore, as in agencies that successfully implemented the CANS, agency or implementation leaders at Org. 3 and Org. 4 described themselves, and were described, as valuing staff participation:

I'm a very big, big believer that if you're going to get people on board with a project, they have to see their role during the implementation process. If you're going to get buy-in, they have to be involved. [Org. 3 senior manager]

[The senior manager is] really good at delegating and giving people responsibility and letting them sort of spearhead things. [...] and giving people a sense of ownership over things. Which really helps spill over onto the rest of the staff. Then it's not her telling everybody, then it's the frontline staff talking about it. It's not directive, it's more an inclusive process. [Org. 3 frontline staff member]

Thus, the limited participatory approaches that these agencies took toward implementation were not a result of managers not valuing participation or participation not being the norm within the organizations. Rather, as previously described, practical

organizational factors such as staff members' excessive workloads and geographic distance interfered with leaders' ability to engage staff in decision-making and in implementation activities. This explanation was also supported by the finding that once these constraints were eliminated at Org. 3, staff were able to participate more fully in the implementation process.

At Org. 3, another organizational factor that facilitated staff uptake of the CANS, as in Org. 1 and Org. 2, was that staff had trust and confidence in the individuals leading the implementation effort and who advocated and championed its use:

We have trust in our leaders and in our admin. team and obviously they've done the background work and the leg work and said this works for us. [Org. 3 manager]

If someone is so passionate about something, clearly, it's doing good. [Org. 3 frontline staff member]

However, the frontline staff member who was the CANS champion during the successful implementation was less involved in implementation efforts during the less successful adopted CANS implementation. This suggests that her increased involvement importantly contributed to CANS uptake and use. Furthermore, the Org. 4 staff member at the offsite agency did not have a CANS champion onsite who showed enthusiasm for the CANS on a day-to-day basis. Thus, having trusted and respected managers and implementation leaders advocate for the CANS may be an important element in implementation success, particularly if those leaders are frontline staff members who are onsite and interact daily with other staff.

In sum, the demands that were on staff due to simultaneous organizational undertakings as well as staffing issues made it difficult for them to focus on using the

CANS effectively. As discussed in the section on the implementation process, these same demands also made it difficult for staff to try and address issues they were experiencing with the CANS as a staff team. These practical issues appeared to be the main difference in implementation context between less successful and more successful CANS implementations. Furthermore, once workload related issues were resolved at Org. 3, CANS implementation was more successful. These findings suggest that practical barriers to CANS use and to taking a participatory approach contribute importantly to implementation outcomes.

Organizational priorities and values, and the organizations' approach to the CANS. Organizational priorities and values did not appear to interfere with effective use of the CANS. However, as with other organizations, priorities and values that were emphasized within the organization appeared to lead to different ways of approaching CANS assessments. In the previous chapter, I discussed how Org. 1 and Org. 2 each appeared to emphasize different uses of the CANS and use the CANS in slightly different ways based on the priorities or values that were prominent within the agency. Staff reports suggested that the same phenomenon occurred at Org. 3 and Org. 4.

Many of the stated values and priorities at Org. 3 and Org. 4 were similar to those in other agencies (e.g., client-centred, strengths-focused, “wraparound” care). There were some differences, however. Org. 3 staff placed a unique emphasis on ensuring that the way they were working with their clients was “trauma-informed”. Due to this emphasis, staff indicated that they were not completing CANS assessments in collaboration with clients, as CANS measures are intended to be administered (Lyons, 2009), or sharing the full CANS assessment with them. One staff member explained, “Being trauma-informed,

we're not sure if in the initial stages, if that's something that our girls could handle because of the level of depression they often come to the Centre with".

At Org. 4, as in many agencies, staff prioritized building and maintaining a strong therapeutic relationship with their adolescent clients. Though this priority was not unique to the agency, staff members' beliefs about how conducting assessments would impact this priority was associated with different perceptions and applications of the CANS than those observed at Org. 1 and Org. 2. Similar to Org. 3, Org. 4 staff also did not complete the CANS with clients, reportedly due to beliefs that youth who seek services in the community would be put off by a lengthy assessment. One staff member stated that this made the CANS "super client-friendly" because "it's not taking time away from that clinical hour that you have only once or twice a week" and because youth "don't want to sit through a long series of assessments that in particular ask them questions that have nothing to do with what they're asking for help with".

These interpretations of and ways of using the CANS were in stark contrast to how staff at Org. 1 and Org. 2 saw and used the CANS. In those organizations, staff saw completing the CANS with clients as one of its strengths. One staff member at Org. 2 said that this helped strengthen their family-centred model by "ensuring that we're seeking the input of the family and checking in with them and creating the plans with the family as opposed to, yes, I'm seeing this need, this need, and this need so I'm just going to write the goal and see if they're okay with it." These differences in how the CANS was adapted across agencies appeared to be associated with differences in organizational context. At Org. 2, providing family-centred care was a prominent value, as opposed to trauma-informed care. Additionally, the organization worked with pre-school children

and their families as opposed to youth. Given these differences, staff may have developed different understandings about how the CANS could be most useful within the organization. Thus, similar to the previous case studies, the current case studies suggest that staff adapt not just the CANS form itself, but the way that the CANS is used in order to make it fit within their organizations' contexts. These types of adjustments and adaptations may also be important for facilitating uptake.

Chapter Summary

The case studies of less successful implementation projects at Org. 3 and Org. 4 help provide a clearer outline of what factors are important for implementation success. The studies suggested that less successful implementations took place within a context in which there were several constraints and practical barriers such as staff shortages and staff isolation due to the physical location of programs. These constraints and barriers limited staff members' ability to fully participate in implementation activities, and to effectively use the CANS. They also interfered with implementation leaders' ability to be responsive to staff feedback about the CANS and continuously create opportunities for staff to discuss and refine the CANS.

As a result, in general, staff did not manage to make the CANS their own during the less successful implementations. While staff were aware of problems with fit between the CANS items and the population they served or between the demands of completing CANS assessments and their existing workloads, they did not resolve these difficulties to improve fit. Furthermore, given that staff had few opportunities to discuss the CANS together, they each formed divergent understandings of how to complete CANS

assessments. This, combined with difficulties with “fit”, interfered with staff members’ ability to complete CANS assessments reliably and led to problems with data trustworthiness and completeness.

Additionally, staff did not develop shared understandings of how the CANS could help them achieve objectives that they valued or that were priorities for the organization. The shared understandings that they did develop together about the CANS centred on the theme that the CANS was lengthy and time consuming. Not being able to connect the CANS with higher goals and values as a staff team interfered with buy-in and using the CANS to inform clinical decision-making.

In conclusion, the “co-creation of fit”, the emergent adaptations to the CANS and its administration procedures as well as the shared understandings of how it can be useful, appears to be of central importance to successful implementation.

Chapter 6: Results

Implementation of a Less Adaptive Tool – The Global Appraisal of Individual Needs (GAIN)

Chapter 6: Implementation of a Less Adaptive Tool – The Global Appraisal of Individual Needs (GAIN)

Chapters 4 and 5 described CANS implementation in four different agencies from the perspective of staff who were involved in the process. These chapters examined how the context and process of implementing the CANS may have contributed to the reported consequences. Other factors that may influence the success of the implementation of a clinically relevant tool may lie in the features of the measures themselves. In this chapter, I review evidence of how the characteristics of the CANS and the GAIN may have influenced staff perceptions and use of these measures, including their fit with clinical practice and their everyday workflow. Among these measure characteristics I include: (1) the features of the measure (e.g., length, item content, structure, clinical relevance), (2) recommended procedures on how to put the measure to use within a setting (e.g., procedures for training and certification of staff, adaptability), and (3) procedures regarding how to use the tool (e.g., administration procedures).

Following recommendations from Yin (2009), the case study presented here, Org. 4's implementation of the GAIN, was conducted as a "theoretical replication". The purpose of a theoretical replication is to explore whether a different pattern of results emerges when a factor that is thought to be a key contributor to the phenomenon is different. Within the theoretical framework of the current study, staff participation in the processes of adapting and implementing a tool was seen as a critical contributor to positive implementation outcomes. Given that the GAIN is a less flexible tool compared to the CANS, I expected that there would be fewer opportunities for staff participation in the implementation process which would negatively contribute to implementation

outcomes. Hence, the purpose of this theoretical replication was to examine how a measure's limited adaptability would affect the implementation process and outcomes.

Background on Org. 4's Implementation of GAIN Tools

Org. 4, described in Chapter 4, is a community-based, non-profit, addiction treatment agency that works with both adolescents and adults. Org. 4 first implemented the GAIN-Short Screener (GAIN-SS; also referred to in this chapter as the "brief GAIN") in 2010 to evaluate its school-based program. In 2012, Org. 4 piloted a longer, more comprehensive version of the GAIN tool. The pilot was organized by an external agency and was part of a provincial initiative. Its objective was to obtain feedback on a package of screening and assessment tools that could be used by addiction treatment agencies across Ontario. The assessment package consisted mainly of the GAIN family of tools (e.g., GAIN-Q3 Motivational Interviewing, and GAIN-I). Org. 4 agreed to pilot the measures and provide feedback to the external agency organizing the pilot.

Before describing the results, I need to bring your attention to a limitation of the current case study. A small number of staff were interviewed at this agency (N=6), and not all participating staff had been involved with all implementations (i.e., CANS, brief GAIN, and longer GAIN). Thus, descriptions of some aspects of each implementation are sometimes based on reports by as few as two staff members. My concern is that the experiences of these few staff members may not have been representative of the experiences of the majority of the staff. This issue made it especially difficult for me to make comparisons across different implementations with confidence. Thus, when

describing the results, I will flag findings that are based on only a few staff members' experiences, and exercise caution in interpreting them.

Description of GAIN Tools

The Org. 4 case study examined both the agency-wide implementation of the GAIN-SS and their pilot of the GAIN family of tools. A description of these tools is provided here for context.

GAIN-Short Screener. The GAIN-SS is a brief, 20 item, screening and assessment tool that can be used to identify clients who need more thorough assessment (Dennis, Feeney, Stevens, & Bedoya, 2008). It can also be used for systems planning, quality assurance, and as an outcome monitoring tool. The tool includes four subscales assessing internalizing and externalizing disorders, substance use problems, and problems related to crime or violence. It can be completed by clients themselves or be administered by staff, and takes approximately five minutes to complete. All items are scored on an ordinal scale based on the last time the client experienced each problem. Response options range from 0, indicating that the client has “never” experienced the problem, to 3, indicating that the client has experienced the problem “in the past month” (Dennis et al., 2008).

The GAIN-SS was developed and is copyrighted by Chestnut Health Systems (Rush, Rotondi, Furlong, Chau, & Ehtesham, 2013), a private, not-for-profit organization that offers behavioural health and human services in Illinois, U.S. (Chestnut Health Systems Inc., 2016). The Centre for Addiction and Mental Health (CAMH) has modified the GAIN-SS with permission from Chestnut Health Systems and added seven supplementary items (Rush et al., 2013). These items cover eating disorders, traumatic

experiences, psychotic experiences, and problem gambling. The modified version, called the GAIN-SS CAMH-modified, was implemented by Org. 4.

GAIN-Quick 3 Motivational Interviewing (GAIN-Q3 MI). GAIN-Q3 MI was the main measure that was included in the package of tools that Org. 4 agreed to pilot in 2012. The core of the GAIN-Q3 MI is the GAIN-Q3 Standard. The GAIN-Q3 Standard is a multi-purpose, interviewer-administered, semi-structured assessment tool (Titus et al., 2013). Its aim is to identify individuals' difficulties and the level of intervention (i.e., brief or specialized) required to address them. It can be used with both adolescents and adults (ages 12 and up). It assesses difficulties related to school, work, physical health, mental health, substance use, crime and violence, as well as sources of stress, risk behaviours for infectious diseases, and life satisfaction. According to the manual, the average time required for administering the GAIN-Q3 Standard is 35 minutes (Titus et al., 2013). The GAIN-Q3 can be used for outcome monitoring purposes by administering the GAIN-Q3 Follow-Up quarterly after the initial assessment (Titus et al, 2013).

The GAIN-Q3 Motivational Interviewing (GAIN-Q3 MI) is composed of the GAIN-Q3 Standard plus additional questions that can be used to ask about an individual's reasons and readiness for change in each area of difficulty. The manual suggests that the GAIN-Q3 MI can be conducted in one session, which would take approximately 60 to 75 minutes (Titus et al., 2013). An alternative is that the GAIN-Q3 Standard can be administered in one session and the MI questions asking about reasons and readiness for change can be administered in a separate session.

The manual includes specific instructions on how to administer the GAIN-Q3 MI to ensure reliable and valid results (Titus et al., 2013). For example, the authors write that while administering the GAIN-Q3 MI over two sessions results in shorter sessions, it may lead to reduced reliability for the MI items because the client's situation may change between sessions (Titus et al., 2013). Furthermore, given that it is a semi-structured assessment, administrators of the tool are instructed to read items verbatim and to conduct the assessment interview according to very specific guidelines. An example of these guidelines is to read the assessment questions "at an appropriate tempo" (Titus et al., 2013; p.10). However, interviewers have the flexibility to also ask clarifying follow-up questions to increase the validity of the results (Titus et al., 2013).

CAMH developed an Ontario version of the GAIN-Q3 MI with the support of Chestnut Health Systems (Rush et al., 2013). This CAMH modified version was piloted at Org. 4. According to Rush and colleagues, revisions were necessary to "Canadianize" (p. 46) the language of the questions, particularly terms related to demographics and government and community services, and to ensure consistency with mandatory reporting requirements in the Ontario addiction sector. Questions related to trauma were added and the language of the tool was adjusted to reflect a harm reduction philosophy and approach. Some questions from the broader GAIN- Initial (GAIN-I) assessment were also added to the GAIN-Q3 MI (e.g., housing status, living environment, barriers to treatment and physical health).

Differences between GAIN and CANS tools. There are a number of differences between the GAIN and CANS tools, which are outlined in Table 6.1. The list of

differences outlined in this table is not exhaustive and only highlights those most pertinent to the current study.

Table 6.1

Differences Between Global Appraisal of Individual Needs (GAIN) and Child and Adolescent Needs and Strengths (CANS) Tools

	GAIN	CANS
Intended Population	<ul style="list-style-type: none"> Designed for use with adults and adolescents 	<ul style="list-style-type: none"> Designed for use with children, adolescents, and families
Use within Ontario Context	<ul style="list-style-type: none"> Widely used within Ontario by addiction treatment agencies 	<ul style="list-style-type: none"> Widely used within Ontario by child and youth mental health agencies
Capacity for Adaptation	<ul style="list-style-type: none"> Can only be adapted by individuals with specialized test development knowledge or resources 	<ul style="list-style-type: none"> Reliable at an item level and thus can be adapted by agency staff without specialized test development knowledge or resources
Administration Procedures	<ul style="list-style-type: none"> Specific procedures must be followed, without modifications, to maintain the tool's reliability and validity GAIN-SS can be completed by clients independently or staff-administered GAIN-SS can be completed within 5 minutes; GAIN-Q3 MI can take over an hour to administer 	<ul style="list-style-type: none"> Administration procedures are flexible (e.g., no specific script to read, do not have to ask about items in any particular order) Can only be staff-administered Administration time can vary but it is not generally described by staff as a brief tool
Training and Certification	<ul style="list-style-type: none"> GAIN-SS training was half a day and was offered by an external consultant Training and certification process for the GAIN-Q3 MI was more extensive than for the GAIN-SS or for the CANS. It involved intensive five day GAIN training in Illinois, U.S. at a GAIN Coordination Center To become certified to administer the GAIN-Q3 MI, participating staff were required to audio-record themselves administering the tool to a client and send in the recording as well as the score form to the trainers in the U.S.. The trainers provided them with feedback on their administration and assessed whether they met the reliability standard required to be certified. To become certified as Local Trainers, staff had to train one or two other staff 	<ul style="list-style-type: none"> For the cases studied, training was offered locally by the CANS author and/or online Duration of the training was typically one day Certification involved completing a CANS assessment based on a case vignette and achieving a level of reliability

	GAIN	CANS
Ongoing Support and Follow-up	<ul style="list-style-type: none"> Following GAIN-Q3 MI training, staff had access to GAIN trainers in the U.S. via email and phone for ongoing support during the certification processes Some Org. 4 staff were trained as GAIN trainers and staff did provide training on tools to their colleagues. Unlike CANS “champions”, GAIN local trainers were not involved in planning and fine-tuning the implementation or administration of the tool 	<ul style="list-style-type: none"> CANS “champions” were formally identified within the agency and these champions provided ongoing support to other staff while also participating in planning and fine-tuning the implementation and administration of the CANS

The main difference between the GAIN and CANS tools is that while the CANS is reliable at an item level (Lyons, 2009), the GAIN is not. The item level reliability of the CANS makes it possible to add or remove items and adapt the measure to meet the specific needs of a particular setting. The recommended procedures for adapting the CANS indicate that representatives from all groups of individuals who will be using the tool, including staff, should participate in the adaptation process. In comparison, the GAIN cannot be modified by staff within community-based agencies whom do not possess specialized knowledge and resources related to test development. Although CAMH modified the GAIN tools, the process required the involvement of several researchers and teams, an extensive consultation process, and permission from the GAIN test developers. Thus, implementation of the CANS offers more opportunities for staff participation than the GAIN. Details regarding how this difference impacted the implementation process will be discussed in a subsequent section.

There was also a difference between the two tools in terms of how they were viewed and used within Ontario. Whereas the GAIN was widely used by addiction treatment agencies in Ontario, the CANS was widely used by child and youth mental

health agencies. The uptake and use of the tool within the provincial context played a role in agencies' decision regarding which tool to implement. Given that Org. 4 was an addiction treatment agency, they were exposed to more opportunities and information regarding the GAIN. Furthermore, staff at Org. 4 suspected that the GAIN would become a mandated measure for addiction treatment agencies. These factors motivated the agency to choose the GAIN tools for implementation.

Furthermore, there were differences in terms of the recommended procedures for the implementation of the tools. The train-the-trainer training for the GAIN-Q3 MI was offered in the U.S. to three staff members by GAIN Coordination Center-approved trainers. In comparison, in Org. 1, 2, and 3 CANS training was offered locally by the CANS developer to all staff who would be using the tool. Staff across Org. 1, 2 and 3 commented that the CANS training was one venue for conversations about the CANS; both conversations amongst themselves and conversations with the tool developer about the local application of the tool and possible changes to the tool. Having fewer Org. 4 staff attend the GAIN-Q3 MI training and not having the developers of the GAIN involved in the training and implementation processes may have limited the possibilities for collaborative interactions about how the GAIN-Q3 MI tool could most effectively be put to use within Org. 4. However, in some ways these differences in the way staff were trained were situational as opposed to due to formal recommendations or structures put in place by the tool developers.

Another difference was that staff were not formally selected to become GAIN “champions”, as they were in agencies that successfully implemented the CANS. Although some staff were involved in providing GAIN training to their colleagues, their

role was different than CANS champions. They were less involved in providing ongoing coaching, planning or fine-tuning the implementation of GAIN tools, or discussing the benefits of using the tools with other staff. In agencies that implemented the CANS successfully, champions played an important role in bringing the topic of the CANS to staff conversations and helping build common understandings about how and why to use the tool. Not having formally identified GAIN “champions” who were involved in ongoing planning and support activities may have contributed to the GAIN tools being less salient in staff conversations.

In summary, differences between the tools may have influenced both the decision about which tool to implement and the implementation process. The more widespread use of the GAIN in Ontario addiction treatment agencies may have influenced decisions to implement or pilot GAIN tools at Org. 4. The limited adaptability of the GAIN tools and some of the differences in the formal activities that were carried out to put the GAIN to use within the agency (e.g., not having formally identified GAIN “champions” involved in planning and executing the implementation), may have contributed to reduced staff participation and interaction. Details regarding how differences in the tools played out in the implementation process in terms of staff participation and interaction will be described next.

How Was GAIN Implementation Different?

The implementation of GAIN tools, particularly the pilot of the longer GAIN, was different from CANS implementation for a number of reasons; not just because the tool itself was different. When staff were asked about the implementation and their reactions

to the tools, they described their experiences as a whole. In their experience, factors that influenced the implementation of the GAIN were complexly intertwined. Thus, teasing apart the effects of the tools' features from other factors that impacted implementation was not possible within the context of the current study. As a result, while I focus on describing how measure-specific features impacted implementation, I believe that in order to stay true to the data, I need to also describe other factors that staff identified as influencing their experience of the implementation and its outcomes.

Characteristics of GAIN implementation. In this section, I describe how the limited adaptability of the GAIN tools, and the external initiation and management of the longer GAIN pilot, contributed to a less participatory implementation approach and reduced responsiveness to staff concerns and feedback. The previous case studies suggested that participation and responsiveness importantly contributed to promoting staff engagement in the process. When agency leaders supported staff participation and used their feedback to improve the use of the tool in the agency, staff were encouraged to remain engaged in the process and to work toward making the best use of the tool. Thus, I expected that limited participation and responsiveness would have implications in terms of how engaged staff would be in the implementation process and how “alive” the tool would be in the organization. Before proceeding to discuss how these differences in implementation characteristics influenced staff engagement and their interactions about the GAIN tools, I first provide evidence that GAIN implementation was less participatory and there was less responsiveness to staff feedback.

Limited control and depth of participation. One of the main ways in which implementation of the GAIN tools was different from CANS implementation was that

staff had less control over the GAIN measures or how they were implemented and used. Unlike with the CANS, staff could not remove or add items to the GAIN to adapt it specifically for their agency. Additionally, staff reported that they had limited control over how it could be administered. For example, one staff member explained that although completing the longer GAIN assessment tools over multiple sessions at a stage in therapy when clients were engaged may have been feasible, “They were big on that it should have been done at least in one or two sessions”. Staff believed that if the tools were used at all, they had to be used the way they were intended by the tool developers.

The lack of flexibility in the GAIN tools reduced the “depth of staff participation” (Cousins & Whitmore, 1998) in their implementation. Compared to the adaptation and implementation of the CANS, GAIN implementation had fewer ways for staff to be directly involved. For example, Org. 4 staff did not describe forming GAIN implementation committees, or conducting a survey to gather staff and client feedback so that they could make adjustments to the tools based on the results. The lack of flexibility also meant that there were fewer decisions that staff could participate in making. Two staff members reported that they felt they lacked “agency” or “say” when they could not influence the few decisions that they were involved in. Similar to what occurred in other agencies when staff felt that their feedback was not taken into account, this led to feelings of “frustration” and “disgruntlement”:

There were times, because we were having so much discussion, it felt we had some say in the decision [of whether to implement the brief GAIN]. But then to ultimately not really have any say in the decision may have worked well for some people, but I think for others it really was frustrating. [...] When the final word came down and it was the same as the first word, it was more of a disgruntlement because they felt “Well, what was the point of all of that discussion if there wasn’t really any agency?”

As I will later explain in further detail, limited control and participation likely had implications in terms of how staff engaged in the process. Due to these factors, there were fewer opportunities for staff to talk about the GAIN tools, to take ownership of them, and to have an active role in helping work out how the tools could be most useful within the context of their work. Without having responsibility for such tasks, and without having an understanding of how their participation would help accomplish an objective that mattered, staff likely had less motivation to engage in a constructive manner.

Differences in participation across GAIN implementations. However, staff comments suggested that this limited flexibility and control was not always a hindrance to staff participation or to perceptions that their participation mattered. Specifically, the pilot of the longer GAIN may have involved more staff participation than the implementation of the brief GAIN. The five staff members who participated in this pilot were involved in a number of activities, including: a five day training in the U.S., an elaborate certification process, training other staff, completing weekly log entries to provide feedback on the longer GAIN, and a focus group facilitated by the external agency to seek their input. In comparison, the brief GAIN implementation involved: a half day, onsite training, discussing experiences with the tool during weekly meetings, and informal peer training of new staff on an ongoing basis. One staff member who participated more extensively in the implementation of the pilot stated, “I enjoyed the fact that they actually invited us in to have that much of a part of it.”

Furthermore, staff had a reason or motivation for participating in this pilot, which was to have “a voice” in informing recommendations to the Ministry regarding which

measures should be used by all addiction agencies. This reason was reiterated and reinforced by the agency's leadership, which may have strengthened staff members' beliefs about the value of their participation. A senior manager speculated that being asked for their opinion by the Ministry made staff who participated in the pilot feel like they had "an important role" and that they were doing something that was "really valuable for the system", as opposed to feeling like the Ministry was "coming from on high" and mandating them to use certain measures.

These differences in how staff participated during the longer GAIN pilot may have contributed to differences in how staff engaged in the pilot compared to the brief GAIN implementation. However, as I will explain later, the evidence was mixed, and several factors made comparing these implementations difficult. First, though there was more depth of participation during the longer GAIN pilot, as I will explain next, due to the external management of the pilot, staff had less control during the pilot than they did during the brief GAIN implementation or during other evaluation activities in general. Second, given the small number of participants who were interviewed, any differences between staff members' experience of the process may also have been due to participant characteristics. Specifically, the only frontline staff member who was interviewed regarding the pilot also had more enthusiasm about evaluation in general, which may have contributed to a more positive perception of the process overall.

Limited responsiveness to staff feedback. The lack of control among staff members also existed among managers and implementation leaders within the agency. They too could not change the GAIN tools. They therefore had limited ability to respond

to frontline staff member feedback on their concerns about the measures. One frontline staff member said:

We did do feedback through staff meetings and stuff, about how [the GAIN-SS] was working, was there any glitches, that kind of stuff. [...] But nothing was really changed because we didn't have the authority to really change that because it came from outside of the agency, how it was developed.

This is not to say that agency or implementation leaders were not generally responsive or engaged in helping address barriers to the use of GAIN tools. Staff reported that the onsite data team took actions that were within their control to support use of the brief GAIN, such as: introducing a scoring form, being available to respond to staff questions, agreeing to complete data entry, and eliminating redundant questionnaires. Yet, as will be discussed later, these responses did not appear to address some of the main issues that staff had with use of the brief GAIN.

Agency and implementation leaders' control was particularly limited during the pilot of the longer GAIN tools because the pilot was organized by an external agency and they were required to follow set protocols. A manager explained:

[The GAIN pilot] wasn't really something that we [...] had any ability to kind of alter. So, for other programs we have a little bit more flexibility in that regard. And we also have a little bit more ability to manage the data ourselves. So we can do things like allow counselors to do assessments later on in treatment or earlier on in treatment [...] whereas [...] with this project, we had to follow their framework.

Importantly, in contrast to previous case studies in which the primary goal of soliciting staff feedback was to make improvements to how the tool was used within the agency, feedback during the pilot was primarily solicited by the external agency to inform recommendations to the province about use of the GAIN tools. Agency or internal implementation leaders never had the intention to use and respond to staff feedback

regarding the longer GAIN. As a result, most frontline staff were not always aware of how their feedback was used. Even managers who were in direct contact with the external agency had mixed views about whether the input of the agency as a whole made a difference. One said that their organization's feedback led to an important shift in the recommended approach toward administration of GAIN tools:

The recommendation they've made to the province when they're adopting this new tool is, "Use of this tool shall always be made within the context of developing a clinical alliance, and client centered for the kid". [...] So, even the assessment, it's within the context of what's good for the client, and that's new. That's new, because before, the message was you are supposed to use this tool, that's it, the only message. Use the tool. Use the tool. It was about the tool not the client.

Yet, another manager said that their feedback about the longer GAIN being lengthy and overwhelming for clients to complete did not make the external agency question the feasibility of the measure for school-based addiction counsellors:

I understand they're still very strongly supporting the GAIN body of tools. [...] So I'm not sure [Laugh]. We'll see how much our voice was heard. [...] My feeling is that there's a little bit of... I don't know, motivation or sustained momentum behind that suite of tools or set of tools. [...] So I feel like the slant is a little bit on the idea of rolling it out more so than [...] addressing whether or not it's the right tool.

In general, it appears that it was more difficult for Org. 4 staff to see whether their feedback made a difference. This is in contrast to the previous case studies in which staff forums such as regular meetings provided opportunities for staff to see direct and clear evidence that their feedback helped shape improvements to how the tool was used. The previous case studies would suggest that the absence of such evidence during the pilot might have left staff with very few reasons to participate and provide input. I will describe whether this was the case in the next section.

Summary. In summary, the low adaptability of the GAIN tools limited staff members' control in the GAIN implementation process and managers' ability to be responsive to staff concerns about the tool. However, the tool itself was not the only factor that contributed to reducing staff control and managers' ability to be responsive. During the pilot, contextual factors (i.e., the pilot being organized and managed by an external agency) also contributed in these ways. In agencies that successfully implemented the CANS, participation and responsiveness were important characteristics of the implementation approach that promoted staff engagement and focused their interactions on how to make the best use of the tool. In the next section, I describe how the relative absence of these implementation characteristics contributed to staff interactions about the GAIN tools.

Characteristics of staff interaction. In successful CANS implementations, the degree of staff engagement and the "aliveness" of the CANS was reflected in their descriptions of the types of interactions they had. Staff reported that they were "talking CANS all the time" because of the roles they had in planning out and executing the implementation. Furthermore, staff interactions were action oriented, and focused on problem solving and "co-creating fit". As described in the previous section, Org. 4 staff had fewer opportunities to play an active role in the implementation process because the tools were not adaptable and because implementation of the longer GAIN was part of a pilot conducted by an external agency. I now describe how these factors affected staff interactions about the GAIN, and how these interactions compared to those in other agencies.

Similarities in staff interactions across GAIN and CANS implementations. First, despite these differences in the characteristics of the implementation approach, there were some similarities in staff interactions across projects. As with agencies that successfully implemented the CANS, Org. 4 staff reported discussing the brief GAIN extensively at the time of the implementation, both during staff meetings and informally outside of these meetings. One staff member reported:

Back then we used to have a 3½ hour staff meeting every Monday for the school-based team, and there were significant amounts of those meetings for weeks and months on end where we discussed, argued, pushed, and said all the reasons that we were concerned.

Thus, as with other agencies, there was persistent talk about the tool.

Additionally, program evaluation, in general, was “alive” in the organization and a salient topic of formal and informal discussions. One of the unique characteristics of Org. 4 was that it had an in-house data team, a small team of staff dedicated to program evaluation activities. These staff actively provided information and answered staff questions about evaluation tools and evaluation findings during staff meetings. However, unlike conversations about the CANS during successful implementation projects, these presentations were more unidirectional, with the data team presenting information to staff, rather than collaborative problem solving or planning discussions.

Staff also had more spontaneous and less formal conversations with the data team. These conversations were typically focused on exploring possibilities for future evaluation projects, and were not focused specifically on fine-tuning the brief GAIN. One staff member reported that she discussed making a shift to more strengths-focused assessments and that the data team listened to her ideas about potential measures “with

open ears”. Another described a spontaneous conversation with the data team about evaluation activities:

Any time I want I can go and speak to the data person about something. She’s offered that to me. [...] One of my conversations with her, you know, we were talking about our data entry and some of the problems I was having with that entry. And then I started -- we just started having a conversation and she started to tell me a little bit about how she actually tracks things and showing me the program. [...] And then she said, “Well there’s other things that we can document too. And if you have interest we can always do that.” And I thought wow that’s an amazing thing. So then I can go and say, “Hey, I would like to track this. Would you allow me to track it?” As long as I collect the data, she can do it.

However, these conversations were different from the persistent, pervasive, action-oriented conversations about the CANS in other agencies. They took place occasionally and were focused on different evaluation-related topics as opposed to being focused on refining one tool. Furthermore, the conversations were not geared toward making specific changes or decisions but were about exploring possibilities generally. It was unclear how much follow-up there was about the ideas that were discussed.

Differences in staff interactions across GAIN and CANS implementations.

There were also some differences in how staff interacted about the GAIN tools. As predicted based on the results of the previous case studies, limited participation and limited responsiveness to staff feedback may not have made a difference in terms of *how much* staff talked about the GAIN but it appeared to have made a difference in terms of *how* they talked about the GAIN. First, while staff did have lengthy conversations about the brief GAIN, these conversations were focused on concerns as opposed to problem solving. This was similar to how Org. 3 staff described talking about the adopted CANS during the “disaster” implementation. Although staff discussed concerns at agencies that successfully implemented the CANS, often these conversations were described as leading

to a collaborative search for solutions. Org. 4 staff described ongoing conversations about staff concerns that did not lead to any change. For example one said:

We mainly would debate it for 2 to 2½ hours at a time probably for 16 weeks in a row. It just went on and on and on. [...] People that didn't mind using it, and had no problem with it, would just get up and leave the staff meeting because it was the same conversation over and over and over again.

Similarly, another staff member indicated that asides from being “validating”, the conversations about the brief GAIN did not lead to other benefits. She said:

I think there was a sense of, okay, it's not just me not knowing how to do this tool, or whatever, it's, this is problematic throughout. So, I think that would be the main thing that came out of [the discussions] that was positive, because it helped that, but otherwise, I don't think it made any other difference.

Thus, conversations were described as being circular and focused on voicing problems that staff had about the brief GAIN without leading to any observable solutions.

Similarly, according to an implementation leader, staff did not appear to be engaged or oriented toward problem solving during the pilot of the longer GAIN. She described that staff appeared “passively avoidant” during the pilot and explained that she “had to be very proactive with following up” with staff about their participation. For example, she noted that when staff were asked to submit logbooks outlining their experiences and feedback about the GAIN tools, their log entries would be “very short”. She believed that this “passive avoidance” was because the pilot was conducted by an external agency and, therefore, staff did not have a sense of ownership of the process and of the longer GAIN tools. She stated:

This was something that was being asked of them to do for kind of a different project or different body. So, when they felt that it wasn't quite working, instead of trying to alter the protocol, or find something that works, or provide that feedback, they probably became a little bit more avoidant feeling that it wasn't

really that important to them at the time, or to their program, or to their clients. That's my feeling, anyway.

Another key difference in staff interactions about the GAIN, as compared to interactions about the CANS, was that the GAIN tools were not part of staff members' day-to-day interactions on an ongoing basis and across different groups of staff within the agency. This was particularly the case in some contexts. For example, a staff member who worked predominantly out of an offsite agency commented that the brief GAIN was not discussed and not "relevant" at the offsite agency:

They don't really do anything with the GAIN here. They just do it, and it's filed, and they're not really doing anything with the information. So, there's not really a lot of conversation I can have because it's not relevant.

Additionally, a staff member commented that conversations about the longer GAIN tools remained within the small group of staff who were involved in the pilot and did not spread to others in the agency. Furthermore, although school-based staff discussed the concerns they had with the brief GAIN when it was first being implemented, these conversations dwindled down after management reduced the duration and frequency of school-based staff team meetings. Staff explained that given that they all work out of different schools, there were few opportunities for conversations outside of these meetings.

How did the GAIN's features contribute to these patterns of interaction? The GAIN's limited adaptability may have interfered with staff having an active role in the implementation and taking ownership of it. As suggested by an implementation lead, this perceived lack of control and ownership may have led to less staff investment in working toward solutions. In fact, one frontline staff member believed that some of their "pushback" after they were asked to administer the brief GAIN was because they

perceived that they did not have any input into the decision to adopt it. When staff were asked for feedback about the brief GAIN in meetings, conversations may not have shifted from concerns to problem-solving, as they did in other organizations, because staff did not see themselves as having a role in terms of offering solutions. Additionally, solutions may have been more difficult to identify given that they had very few options in terms of modifying the tool and how it was used. Furthermore, perceiving that management was not responsive to the concerns that they did raise likely led them to focus further on their frustration and on concerns they had about the GAIN. Overall, staff had little reason to problem-solve if they perceived that they did not have a role in shaping the GAIN and how it was used in the agency.

In sum, conversations about the GAIN at Org. 4 were not persistent, pervasive, and problem-solving oriented, as they were in agencies that successfully implemented the CANS. I will now describe how this may have affected implementation outcomes.

Implementation Consequences

Previous case studies suggested that conversations were important because they were the mechanisms through which staff improved the tool's fit with their work and thereby increased their commitment and ability to use it effectively. Through these conversations, staff developed shared understandings of why using the tool was important to the work that they did (i.e., "understanding of fit"). They also identified solutions to improve the "actual fit" between the tool and their work, to make it more useful. In this section, I describe how the way in which staff interacted about the GAIN and engaged in

the implementation process may have affected their “understanding of fit”, the tool’s “actual fit”, and ultimately, use of the GAIN tools.

Did GAIN’s limited adaptability interfere with building “understanding of fit”? One proposition that this case study explored was that by not having as many opportunities to participate in adapting the GAIN or how it was administered and used within the agency, staff would have fewer opportunities to talk about the GAIN with their colleagues and discuss why implementing the tool was meaningful to them. My hypothesis was that staff would have had fewer opportunities to think about and discuss how using the GAIN tools could help them achieve what was important to them and to the agency, which according to the prior case studies, is an important contributor to staff using a tool meaningfully. This would mean that they would have come up with fewer responses to “the why” question (i.e., “Why are we doing this?”). I expected this pattern of results because prior case studies suggested that staff built a shared understanding of why using the tool was important through the rich conversations they had as they participated in adapting the tool and working out how it could be put into practice.

Staff did develop an “understanding of fit”. Unlike what I expected, Org. 4 staff articulated different ways in which administering the GAIN tools helped them achieve objectives that were important to them and to the organization. For example, several staff members indicated that the GAIN tools helped them conduct more systematic or comprehensive assessments. One staff member stated:

[We used an intake template informally but it was] not so systematic so that you could easily miss lots of things all the time. So when you have a tool like [the longer GAIN], it’s really making sure that you’re touching every area and you’re

not missing anything. So it had some real advantages in that. It just really guided you through a really in depth understanding of the client.

Similarly, another staff member said:

I think [the brief GAIN] painted a new picture of your clients for you, one that we hadn't necessarily seen because we hadn't been asking those specific questions in that specific way before.

She also saw assessment measures, including the brief GAIN, as being helpful for tracking client progress at both a program and a client level, objectives that were important to her personally:

[Having a tool to evaluate services] does make sense to me personally in my work. It allows you, one, to take a step back to look at a bigger picture. Is there movement in general with the people that I see and the people that my team sees? I think, two, on a case-by-case basis you're able to take it back to the client and say seven or eight months ago when I asked you this, this is how you responded, and today this is how you responded. Let's talk about what's changed in the meantime, how that's affected the way you're feeling, and the way you're evaluating yourself.

Another staff member stated that collecting data on client changes using measures such as the brief GAIN and sharing the aggregate results with the public was important to her. She believed this lent the addiction treatment field "legitimacy" and helped dispel myths and stereotypes against people with addictions.

We're trying to eventually show the public that people do recover from addiction because right now there's no belief in that. No one believes anyone recovers. [...] [The outcomes data] certainly informs that when we do the work that we do improvements happen, so that's important because those are the things I think people need to know, and that will help people go, "Oh, well you guys should treat this."

Thus, similar to staff reports following successful CANS implementation projects, staff saw the GAIN tools as being useful in ways that were important to them. In other words, they had developed some "understanding of fit".

There was also some limited evidence that staff developed a sense of why using the GAIN was important even if they had concerns about the tool or felt frustrated during the implementation process because their feedback was not taken into account. One staff member who described feeling frustrated and thinking that she had “no agency” when the tool was being put into practice also described finding the tool useful in ways that were meaningful to her.

Limited adaptability may have interfered with developing “understanding of fit” early on in the process. Although staff had come up with reasons for why using the GAIN was meaningful to them, there was some evidence that having fewer opportunities to be involved in adapting and implementing the GAIN may have interfered with them building these understandings earlier, before they had a chance to try it in practice. Thus, as expected, having fewer opportunities to be involved, may have interfered with staff developing an “understanding of fit” *during* the process.

This is not to say that there were no opportunities for reflection about the GAIN tools during the implementation process. Two staff members commented that receiving and providing training on GAIN tools created opportunities for reflection about assessment practices. A staff member who was involved in the pilot of the longer GAIN tools stated:

[Learning about the longer GAIN tools] gives me an idea of what they feel are the important questions or the information that they feel is important to gather. And it gives me an idea of where am I on that? Do I think this is important? Do I think something is missing? So that made me think about that whereas maybe if I hadn’t done that training I wouldn’t have thought about that at all. Wouldn’t even have occurred to me.

Thus, involving staff in the implementation, even if the involvement only includes receiving and providing training, creates opportunities for staff to take a step back, think about what they are trying to achieve, and whether the tool that is being implemented can help them achieve their objectives. This process of thinking through these questions is important for developing “understanding of fit”. The key advantage of an adaptable tool such as the CANS in this regard is that it offers more of these opportunities before the tool is put into use.

With the GAIN tools, staff predominantly began to develop an “understanding of fit” between the tools and their clinical roles after they used them and experienced the ways in which they were useful. For example, one staff member indicated that after administering the brief GAIN, she realized that she had previously not been assessing important areas, such as eating disorders:

It just really pointed out to me that I might have been ignoring or avoiding certain areas of discussion with my clients that maybe I was less comfortable in [...] Unless there was some sort of cry for help in front of me, then I wasn't exploring proactively into certain areas.

A senior manager also speculated that staff “learned an appreciation” for structured assessment tools, including the GAIN tools, *after* trying them. He explained that staff may have initially been biased against structured assessments and needed to experience working with them in order to learn about the benefits of using such tools.

This pattern of developing an understanding of why the GAIN was useful after using the tool appeared to be consistent with how staff attitudes about evaluation changed generally. One senior manager noted that while some staff were initially “outright

resistant” toward program evaluation, there was a gradual “evolution” as staff saw some of the benefits of evaluation:

I don’t know that we have any staff that are outright resistant; we had that for some time. It was a process. It really was a process to get people to actually complete the stuff because they saw it as time away from clients. [...It started with one team.] We brought everybody from where they were to the point where most of the staff were really okay with it, and then a few staff were so-so but there wasn’t anyone who was actually resistant. Got some results. Folks in other programs saw that, and then we started talking to other programs about evaluation, having demonstrated that it brings in revenue [...] and then other programs took it on. We’re still in that process.

Consistent with other Org. 4 staff member reports about the “understanding of fit” developing after using tools, the description of this process outlines that buy-in for evaluation was primarily built “post-hoc”, as staff saw the consequences or benefits of other staff completing evaluation activities.

In comparison, although staff in other agencies also highlighted the important role that “the using” of the CANS played in helping develop their understanding of how the CANS could be useful, they also described developing these understandings through their involvement in the implementation earlier in the process. During successful CANS implementation projects, the tool adaptation and implementation processes offered earlier opportunities for staff members to develop an understanding of how the CANS could be useful within their work. For example, one supervisor at Org. 2 said that they learned about some of the potential benefits of the CANS through their involvement in researching the tool at the time when they were deciding whether to implement it. This relative “delay” in developing “understanding of fit” at Org. 4 may explain why staff

were initially resistant when the brief GAIN was implemented – they did not yet perceive the tool as meaningful.

Did staff develop a shared sense of why the GAIN was important? I expected that having fewer opportunities to have rich conversations during the implementation process would interfere with staff developing a shared understanding, as a staff group, about how the GAIN fit with their program or agency objectives. It was unclear whether this was the case. Several staff members reported similar reasons for why using the brief GAIN was important based on shared experiences with using the tool (e.g., helps conduct more systematic and comprehensive assessments; helps identify the needs of the population with which we are working, which can help us develop and improve the program). Given how specific these reported reasons were, it is likely that they developed as a result of some discussion amongst staff. This would indicate that despite being less involved in the implementation process, staff found opportunities to generate shared understandings about how the measure could help them achieve professional and organizational objectives.

However, it is also possible that staff made similar observations about the benefits of the GAIN at a program or organizational level because they had shared experiences with the tool, and they had not yet integrated these observations through discussion into a shared understanding of why use of the tool was important. For example, staff members all heard about the finding from the brief GAIN data that eating disorders were prevalent amongst their clients. Thus, when asked during the research interview about how they used the brief GAIN, several referred to how the brief GAIN was used to identify needs amongst clients.

Summary. In sum, Org. 4 staff appear to have developed an “understanding of fit” despite their more limited participation in adapting and implementing the GAIN tools. However, they may have developed these understandings after trying the tools, rather than earlier in the implementation. Not knowing why using the brief GAIN was important when they were first asked to use it may have contributed to staff members’ initial “pushback”. It is also unclear whether they had integrated their individual observations about the benefits of the tool into a shared “understanding of fit” that gave them a shared sense of purpose in terms of effectively implementing and using the tool.

Did GAIN’s limited adaptability interfere with improving “actual fit”? In successful CANS implementation projects, staff worked together to resolve issues they experienced and to incorporate the tool in a smoother and more meaningful way within their work routines. This is what I referred to as improving the “actual fit” of a tool.

Org. 4 staff reported that in some ways the GAIN tools fit well with the demands of their work from the outset (e.g., brief GAIN was quick to administer). However, they also reported experiencing several issues with the GAIN tools. Some of these issues were related to characteristics of the GAIN tools (e.g., adolescent clients misinterpreting the language of the questions; questions being overly deficit focused), while others were related to the procedures for administering the GAIN tools (e.g., longer GAIN taking too long to administer). I have summarized staff comments about the “actual fit” of GAIN tools in Table 6.2.

Table 6.2

Staff Comments About the Actual Fit of GAIN Tools

	Reason	Quote
Perceptions of fit	<ul style="list-style-type: none"> -Brevity of brief GAIN perceived to be important when working with adolescents in community settings -Mental health questions (in addition to addiction questions) perceived to be important for providing comprehensive services -Motivational interviewing component of the longer GAIN fit with what staff were already doing 	<ul style="list-style-type: none"> - “[The brief GAIN] fit really well with the population, it fit well with the issues, it fit well with doing it quickly”. - “Addiction doesn’t tend to be a disorder in isolation” and the GAIN could help flag co-morbid issues - “Motivational interviewing is huge in addiction. So having a tool that actually contained a mode of working with someone that we already really support was nice as well.”
Perceptions of misfit	<ul style="list-style-type: none"> -May upset clients (“deficit-focused”, “invasive”, “daunting”, “painful”) -Youth may misunderstand some items related to psychosis, trauma, and disordered eating 	<ul style="list-style-type: none"> - “We are working with youth who have, for a long time, felt like they have been looked at from a negative lens [...] So I find the tool echoes that a little bit, ‘what criminal activity, have you been violent, have you stole from somebody, have you done these things?’ [...] I feel like it makes the young person think that I am formulating a negative opinion of them based on these kinds of deficit-based questions that are asked in the GAIN. - “We have a very difficult clientele who have gone through [many negative experiences]. And so to try and take someone through such a lengthy tool was almost painful. I thought it was unreasonable to ever think of doing that in one shot. That what you put that person through, you have to understand it’s a human being. And you’re touching on every single thing you could possibly touch on in what? the two or three hour [period].” - “[The brief GAIN is] not worded well for a youth audience.”
Perceptions of misfit related to tools in general	<ul style="list-style-type: none"> -May interfere with rapport or client engagement in counseling -Difficult to prioritize administrative tasks when clients present with “life or death issues” 	<ul style="list-style-type: none"> - “A lot of times initially when a client comes to you it’s a crisis situation and they have finally decided that they want to maybe pursue some sort of counselling because they are actively in crisis. So you can’t pull out a tool.”

Staff reported that they were not able to, or did not have “permission” to, make changes to the GAIN tools or their administration procedures. Thus, the problems were

not addressed. Additionally, there was little evidence that staff worked together to address general concerns about data collection that were not specific to the GAIN tools, such as the belief that administering questionnaires would interfere with rapport. Although these issues were not directly related to the GAIN itself, it is possible that having fewer opportunities to participate in the implementation process interfered with staff resolving these issues. Organizations that successfully implemented the CANS also encountered these general obstacles to CANS use and they described working together to overcome them – if not through making concrete changes, through challenging each others’ thinking. For example, at Org. 2, some staff were uncomfortable with the CANS because it required them to assess areas of need that fell outside the immediate range of their expertise. Staff commented that they were gradually helping each other step outside of their “comfort zones” and reminding each other of the importance of conducting a comprehensive assessment. Thus, staff in organizations that successfully implemented the CANS were able to bring up these concerns in conversations that were focused on seeking solutions. In comparison, staff at Org. 4 may have had fewer opportunities to have such conversations, which slowed the progress toward overcoming obstacles that interfered with use.

How did characteristics of the GAIN affect use of the GAIN tools? Previous case studies suggested that staff come to use tools in meaningful ways when: they know why they are using them (i.e., have an “understanding of fit”), they know how to use them, and when using the tools helps as opposed to hinders them from achieving what they and the organization want to achieve (i.e., “actual fit”). Thus far, the results that I have outlined in this chapter have suggested that the limited adaptability of the GAIN

interfered with staff modifying the tool or its administration procedures to address issues. It may have also interfered with staff working together to eliminate some of the more general data collection-related obstacles in order to make the tools more feasible and useful. As a result, I expected that staff would report less than optimal use of the GAIN tools. Although this was the case in some instances, it was not the case in others.

GAIN characteristics, or difficulties with “actual fit”, sometimes interfered with GAIN use. As expected, some staff initially resisted the brief GAIN, according to one staff member’s reports. This was in part due to concerns that staff had about how administering questionnaires would affect their relationships with their clients, as opposed to concerns that were specific to the brief GAIN. One staff member stated:

There was a lot of pushback when it was first introduced. A lot of us really felt that the nature of the client group that we have, being young, asking them to fill in a whole series of questionnaires, especially very early on after meeting us, just felt that rather than building rapport we were placing a corkboard between us so that we could get our questionnaires filled in.

Furthermore, the agency decided not to implement the longer GAIN tools (e.g., GAIN-Q3) after the pilot due to issues related to the “actual fit” of the tool. A manager stated that following the pilot, the staff response about the longer GAIN “as a general assessment to do with all clients as they come into the program” was “a pretty unanimous ‘never going to work’”. One staff member who saw several benefits to the longer GAIN versions, valued program evaluation activities, and was very invested in the organization and in serving the clientele explained why administering the longer GAIN versions in the way that they were intended was not feasible:

[The longer GAIN tools] would never be able to be done early in because the relation piece is so huge with youth. No relation, nothing. They don’t want to sit there and be asked 50 million questions. They can be very taken aback by that. It

started to dawn on me that for this particular group that would be a difficult tool to use unless we could administer it over time.

In sum, staff were reluctant to use GAIN tools when they perceived that using them interfered with what they were trying to achieve (e.g., establish a strong relationship with their clients). The concerns that staff had with the brief GAIN appeared minor compared to the problems they encountered with the longer GAIN versions. This might explain why the longer GAIN tools were not implemented, whereas there was only initial resistance in the case of the brief GAIN. These problems with the “actual fit” of the longer GAIN tools prevented the agency from implementing them even though some of the staff who piloted them thought that they could be useful and had some “understanding of fit” (e.g., can help us conduct comprehensive assessments). One possibility is that having an “understanding of fit” without “actual fit” might be insufficient to bring about meaningful use of a tool. Another possibility is that staff members’ “understanding of fit” in the case of the longer GAIN tools was relatively limited. This limited “understanding of fit” may not have been sufficient to motivate staff to overcome the issues related to the “actual fit” of the measure and continue using the tool.

GAIN-SS was generally used agency-wide for multiple purposes. Unlike what I expected, despite staff members’ initial resistance toward the brief GAIN and despite the concerns that they had about the tool, it was implemented and generally used agency-wide. Staff reported that they used the brief GAIN for multiple purposes, including: screening, treatment planning, progress monitoring, communication with other professionals, advocacy for clients and for individuals with addictions generally, program development, and program evaluation.

For example, staff in the school-based program reported that they used the brief GAIN in their clinical work with clients. One said:

What I found helpful was it gave me a good starting point, it gave me some good information to start with to use to dig deeper in developing a treatment plan and what needed to be worked on immediately.

Managers commented that they used the brief GAIN to evaluate programs and that this had helped obtain additional funding and contributed to the growth of the agency. Several staff members indicated that the data helped them identify trends in their client population, which was useful for informing decisions related to program development.

One said:

So that data's of -- it informs us. It was valuable. We would look at it and say, "Wow, look at all this other stuff that's going on that's very, very high". So the numbers were super high for eating disorders, for instance.

These statements suggest that staff used the brief GAIN meaningfully within their work.

However, staff did not use the brief GAIN meaningfully in all programs. One staff member who worked out of an offsite program for treatment of adolescent parents with addictions reported that the brief GAIN was not used clinically in the agency. She noted that she did "scan over it and quickly look at where the issues [were]" (i.e., to identify the primary treatment needs), but otherwise did not use the tool for other purposes. She stated:

They don't really do anything with the GAIN here. They just do it, and it's filed, and they're not really doing anything with the information. [...] It's not being used here as much for anything as in the school-based program.

She clarified that the lack of use of the brief GAIN tool was not due to it not being useful: “It’s not that it’s not useful, it’s that it’s not really being utilized to produce anything at this point.” She explained that the brief GAIN is utilized more at the school-based program because, unlike the offsite agency, they collect pre-post data:

Well, the data was very important because if you did it at the beginning of the school year, or when a student came in, and then one at the very end of the school year, and then it was the progression of change in the different groupings.

The most likely explanation for the brief GAIN not being used in the offsite agency as much as in the school-based program is that staff in the offsite agency did not have a well-developed understanding of how the tool could be more effectively used to serve their objectives. In other words, their “understanding of fit” was not well-developed. Furthermore, they had not worked out implementation details such as what time points the measure should be administered at in order to monitor progress. Thus, the “actual fit” of the tool could have also been improved. More so than the characteristics of brief GAIN, what likely contributed to these issues was that, at most, only two staff members were involved in running the program at the offsite agency. Given that it was a small program compared to the school-based program, there had been fewer efforts and fewer conversations to build an understanding and plan as to how the brief GAIN would be used within the program.

Chapter Summary

The objective of this case study was to examine how the characteristics of a tool may influence how measures are received by staff and put into use within agencies. Specifically, the focus was on how the GAIN’s limited adaptability may have affected the

way in which staff thought about the tools, responded to the tools, and ultimately how they used the tools in practice.

What the findings showed was that the limited adaptability of the GAIN reduced the depth of staff participation in the process of rolling out the tools within the agency. This was in part because putting the GAIN tools into practice involved fewer activities and decisions, compared to adapting and implementing the CANS. Staff were less involved in working out solutions to the problems they encountered or in addressing concerns they had about the tools. A few staff members felt that they had limited “agency” in the process, particularly during the agency-wide implementation of the brief GAIN. Their conversations during the brief GAIN implementation were predominantly focused on staff concerns, and were described as being circular and as not leading to the identification of solutions.

Despite having fewer opportunities to reflect on and discuss why using the GAIN tools was important during the implementation process, staff developed their own opinions about the benefits of GAIN tools. In comparison to agencies that successfully implemented the CANS, these opinions were often developed “post-hoc”, after staff had had a chance to try using the tools, as opposed to during the implementation process. Furthermore, although staff saw the tools as useful, they may have had a limited shared sense of how using the tools was important for achieving program or agency objectives.

In the end, the extent to which staff made meaningful use of GAIN tools varied depending on the version of the tool and on the program in which it was implemented. Between the longer GAIN tools and the brief GAIN, the longer GAIN tools clashed more

with staff members' workflow and the needs of their clients. Although some staff saw benefits to using the longer GAIN tools, they could not be implemented in the agency after the pilot because using the tools as intended was not feasible for staff and staff believed that modifying the tool or its administration procedures would reduce the reliability of results. The brief GAIN was implemented agency-wide after some initial staff resistance. Once it was put into use, staff within the school-based program, which was one of the agency's largest programs, reported using it for multiple purposes and finding it helpful in the work that they did. However, the tool was not used in this way in a small, offsite program for adolescent parents, where there appeared to be a much less developed plan in place for how the tool could be used toward the program's objectives.

In conclusion, the characteristics of a measure play an import role in how staff ultimately respond to a tool and use it. Tools that do not clash with staff members' workflow and do not interfere with staff achieving what they value within their work can be put to use with minimal participation from staff during the implementation process. Asking staff to use such tools is sufficient to overcome their resistance, and through use of the tools, staff begin to develop a sense of how the tools are useful. However, even with tools that generally "fit" a program, not having a well-developed plan in place that all relevant staff are aware of and committed to can interfere with meaningful use of the tools.

On the other hand, the flexibility and adaptability of a tool become much more important when there are substantial issues with "fit". In cases where the characteristics of a tool, including its administration procedures, interfere with the way staff work or what they are attempting to achieve in their work, using the tools becomes unfeasible.

Adapting such tool and making adjustments to how they're used can help facilitate implementation. Furthermore, taking a participatory approach and engaging staff in collaborating toward improving the fit between the tool and the program or agency may also be of more importance in such cases. Taking a participatory approach may facilitate a deeper, shared sense of purpose in terms of why using the tool is important to the agency. This in turn may increase staff members' commitment to the tool and foster efforts to create fit when there are issues with fit.

Chapter 7: General Discussion

Chapter 7: General Discussion

The present study sought to examine the implementation of clinically relevant tools, such as the Child and Adolescent Needs and Strengths assessment (CANS; Lyons, 2009) and the Global Appraisal of Individual Needs (GAIN; Dennis et al., 2003), in community-based mental health agencies serving children and adolescents. Specifically, I was interested in what contributes to effective implementation, and the consequences of staff participation in the implementation process.

Multi-purpose clinically relevant tools such as the CANS and GAIN are intended to be useful for enhancing services at the individual client, program, organization, and system levels. However, recent research has shown that many staff do not consistently use such tools or the information they generate (Mellor-Clark, Cross, Macdonald, & Skjulsvik, 2016). Furthermore, there is increasing recognition in recent literature that how these measures are put into practice affects how they are used and how useful they are (de Jong, 2016). Yet, research on how these measures can be implemented effectively is scarce (Boswell, Kraus, Miller, & Lambert, 2015). Thus, by examining the process of implementing the CANS and the GAIN, this study addressed an important gap in the literature.

The study placed a specific focus on staff participation because of the existing literature suggesting that engaging staff in the process of developing such measures and working out the details to put them into routine practice may be one strategy to facilitate uptake and effective use of the measures. For example, research on participatory approaches to program evaluation suggests that staff participation in evaluation can lead to a range of benefits, including increased staff ability and willingness to conduct

evaluation and use evaluation findings (Amo & Cousins, 2007). Furthermore, implementation literature suggests that staff participation in adapting and implementing innovations may help increase the relevance, feasibility, and usefulness of the innovations to staff and the populations they serve, thus contributing to increased staff commitment to use the innovations (Forehand et al., 2010; Bickman et al., 2012). Additionally, based on anecdotal evidence, researchers who have been involved with implementing clinically relevant measures suggest that effective communication and interactions amongst staff may help address staff concerns and increase their understanding of the benefits of the measures, thus increasing their buy-in and commitment (Boswell et al., 2015; Mellor-Clark et al., 2016). These studies motivated me to examine the role and consequences of staff participation in implementation.

Overview of Research Questions and Theoretical Propositions

The following questions guided the current study:

1. How can clinically relevant measures such as the CANS be implemented effectively?
2. What are the perceived consequences of staff participation in adapting and implementing a version of CANS and how do these consequences come about?
3. How does the implementation context affect the process and its outcomes?

From the program evaluation, organizational change, and implementation literatures, I developed a number of theoretical propositions that I used to guide the study. One of the main propositions was that staff participation in the tool adaptation and implementation process would contribute to a range of positive consequences, including effective use of

the tool. Another proposition was that the adaptability of the CANS would facilitate staff participation and thus have a positive influence on implementation outcomes. Other propositions were more descriptive and served to outline some of the factors and processes that I thought would be relevant to the implementation. For example, I expected that the implementation context, as well as both planned and unplanned processes would affect the implementation of clinically relevant tools. This led me to examine these factors and processes during the case studies.

In this chapter, I will first summarize the overarching findings related to each of the guiding questions. I then provide a thematic discussion of the findings and describe how they compare to the existing research. Subsequently, I discuss some of the limitations of the current study and outline possibilities for future research. Finally, I discuss some of the implications of the findings for research and practice.

Summary of Findings

In this section, I summarize findings for each of the study's research questions. Details regarding the findings will be discussed in the Thematic Discussion section that follows.

Question 1: How can clinically relevant measures such as the CANS be implemented effectively? Results from the current study point to factors and mechanisms that contribute to effective implementation of clinically relevant tools. Factors associated with effective implementation in the four agencies that were studied included: fit between the measure and staff members' values and priorities; adaptability

of the tool; organizational resources and conditions that enable staff participation and interaction; and effective leadership.

The primary mechanism that appeared to contribute to effective implementation was the social, interactive process of co-creating fit. Through their participation in the implementation process, staff both developed shared understandings of the fit between the measure and their work (i.e., developed “understanding of fit”) and better incorporated the tool in their work, thus increasing “actual fit”. Once staff created this fit, they were more committed to using the measure effectively. Agency leaders play a key role in enabling this fit-making process through: encouraging and supporting a participatory approach to implementation, creating implementation structures and following through with planned activities, and being open and responsive to staff feedback.

Question 2: What are the perceived consequences of staff participation in adapting and implementing a version of CANS and how do these consequences come about? Results of the current study suggest that when staff participate in the process of adapting and implementing a tool like the CANS, they have more opportunities to interact and help “co-create” better fit between the measure and their work. This increased fit then contributes to greater staff commitment and ability to effectively use the measure. As expected, results suggest that staff participation leads to other benefits as well, in addition to more effective use of the measure. These include: improved staff morale, sense of camaraderie and mutual support during the process, and learning about the organization, intervention techniques, communication with other professionals, and adult teaching.

Question 3: How does the implementation context affect the process and its outcomes? In the organizations that were studied, the implementation context affected implementation in the following ways. First, contextual factors such as agency resources and staff members' workloads influenced the feasibility of staff participation in the implementation process and their ability to make effective use of the tool. Second, the implementation context affected the initial fit between the measure and staff members' work. Third, the implementation context provided reasons or incentives for implementation, thus contributing to motivation to implement the tool.

Thematic Discussion of Findings

In this section, I discuss the overarching themes that I identified in the study findings. Overall, the findings address important gaps in the literature. As discussed in the Literature Review chapter, while there is research on implementation of innovations in general, systematic research specifically on effective implementation of clinically relevant tools is scarce. Furthermore, the implementation literature frequently identifies factors associated with effective implementation without exploring underlying mechanisms that contribute to effective implementation. Findings from the current study offer a possible explanation about how effective implementation of clinically relevant tools takes place. The study identifies possible relationships among different factors and a chain of processes and consequences that eventually lead to effective use of clinically relevant tools. This possible explanation is discussed in the following sections.

Co-creating fit. One of the main findings of the current study was that taking a participatory approach to implementation provided staff with opportunities and reasons to

interact with one another about the CANS. It was through these interactions that staff helped shape both their “understanding of fit” and the “actual fit” between the CANS and their work, which ultimately led to their effective use of the tool. Yet, not all types of interactions were associated with positive implementation outcomes. Results suggested that “productive” conversations were persistent, pervasive and problem-solving oriented. These types of interactions about the CANS appeared to be facilitated by a set of conditions. I will first summarize findings regarding the factors or conditions that influenced the productiveness of staff participation and interaction.

The role of leadership in enabling the fit-making process. Consistent with literature on implementation (Aarons et al., 2011; Meyers et al., 2012) and program evaluation (Cousins & Bourgeois, 2014), the current study suggests that agency leaders play a key role in facilitating effective use of measures. In the organizations that were studied, leaders supported the co-creation of fit through creating the conditions necessary for staff to have productive conversations with one another about the use of the measure. In successful implementations, the CANS was a very salient topic of conversation amongst diverse groups of staff. Staff had day-to-day conversations that were focused on problem-solving regarding how the tool could be used more effectively. For staff to become engaged to this degree, they needed to have leaders who: allowed and encouraged them to play a role in the process; and provided them with venues, opportunities, and reasons to have conversations about the measure. In successful implementations, leaders maintained staff engagement by setting up implementation structures and creating momentum behind the implementation by following through with planned implementation activities. Furthermore, by being responsive to staff feedback,

leaders both reinforced staff participation and used the feedback to improve “actual fit”. In these ways, leaders kept the CANS “alive” within the organization and created opportunities for staff to continuously improve its use.

Other factors that influence the feasibility of co-creating fit. The feasibility of staff participation, and agency leaders’ ability to support staff involvement, depended on contextual factors such as agency resources, staff members’ workloads, and the physical proximity of staff members’ workspaces. I found that even when leaders valued staff participation, involving staff in the implementation of measures was not feasible when staff had many competing demands. This finding was consistent with de Jong (2016) and Barwick et al.’s (2004) observations that multiple, simultaneous organizational changes can interfere with the effective implementation of clinically relevant tools. Collaboration also became difficult when staff worked offsite.

Furthermore, the degree of control staff had to create fit depended on factors like the adaptability of the tool and whether the implementation was initiated and managed internally or externally. When a group external to the agency was leading the implementation and when there were few options in terms of adapting the tool to improve its fit, staff, including agency leaders, had fewer opportunities and reasons to make the tool work for them, which led to less effective implementation. Aarons et al. (2011) also highlight that the degree to which innovations can be adapted to improve innovation-values fit is a factor that can influence implementation outcomes.

In sum, the current study found that contextual, leadership, and tool-related factors can influence whether staff have opportunities to engage in identifying how the

adopted tool fits with their work, and in working to improve the fit so that they can use it most effectively. I now turn to discussing findings related to how staff co-create fit once the conditions are right for them to engage.

Answering “the why” question. One of the themes that emerged across case studies was that in order for staff to use measures in a committed and effective way, they need to understand why they are using it, and have an answer (or answers) to “the why” question. Answering “the why” question involves making it clear how use of the tool fits with existing values and priorities. Consistent with Klein and Sorra’s (1996) implementation model and Conceptualized Feedback Intervention Theory (CFIT; Riemer and Bickman, 2011; as cited in de Jong, 2016), results of the current study suggest that staff need to understand how use of the measure fits with their clinical values and higher level goals. When staff understand how the measure can help them achieve objectives that are important to them and to their organization, they feel motivated to work toward incorporating the tool within their practice.

Co-creating “understanding of fit” through interaction. I found that in agencies that successfully implemented the CANS, staff developed a shared “understanding of fit” through the interactions they had during the implementation process. Through these interactions, staff identified and communicated what was important for the success of the organization and for providing quality care to their clients. Moreover, they tied together this understanding with their interpretation of what the CANS could help them accomplish or achieve.

This interpretation of the uses or benefits of the CANS itself developed over time as staff became exposed to new information about the CANS through their involvement in implementation activities, as they experienced using it, and as they discussed these experiences with their colleagues. Consistent with Cousins and Bourgois (2014), I found that staff participation in implementation activities provided opportunities for staff to learn about the benefits of the CANS, such as how the data is used at a systems level, that they may not necessarily have had the opportunity to learn through formal training activities or through using the CANS. When staff were involved in activities such as sitting in on CANS implementation committee meetings or training other staff on the use of the tool, they also had more occasions and reasons to discuss what they had learned with their colleagues. As suggested by Boswell et al. (2015), I found that when staff became champions of the CANS through these experiences and shared their views about the benefits of the CANS with their colleagues, enthusiasm for the CANS easily spread within the agency.

Yet, by studying the less participatory implementation of the GAIN-SS, I also found that it is possible for staff to develop “understanding of fit” independently through using the tool, experiencing its benefits, and reflecting on how these benefits fit with their values and goals. However, based on the results, I hypothesize that when staff are not involved in tool adaptation and implementation, this meaning making process is delayed until after use of the tool. This delay may contribute to initial difficulties engaging staff in learning about the tool and applying it.

Furthermore, the reduced interaction may contribute to each staff member developing their own answer to why the tool is being used as opposed to staff

formulating shared answers to “the why” question. As will be discussed later, differences in staff perceptions about why the tool is being used can contribute to different approaches to using the tool, which may contribute to difficulties with inter-rater reliability and some staff using the tool less effectively than others. Furthermore, shared answers may be necessary to motivate *collaborative* efforts toward implementing the tool. If staff do not have a shared sense of why using the tool is important, they may have very few reasons to work together toward putting it into practice. Thus, although staff can reach independent conclusions about why using the tool is important when a participatory approach is not taken, an important benefit of taking a participatory approach may be that staff gain opportunities to consolidate and synthesize these views.

In this section, I have outlined findings about how staff develop shared understandings about how the tool fits with their work. In the next section, I describe how the implementation context was found to influence developing an “understanding of fit”.

Implementation context provides incentives or reasons for implementation. The implementation context provided the “building blocks” that staff used to put together their rationale for using the CANS. Consistent with Aaron et al.’s (2011) work, both “outer” (e.g., sociopolitical and funding contexts) and “inner” (e.g., staff members’ values and goals) contextual factors provided incentives or reasons for implementation. The most frequently reported rationale was related to the “outer context” of the organization and involved the belief that tracking treatment outcomes was important for ensuring continued funding and for enhancing the reputation of the agency. This common belief about the importance of outcome monitoring may have been a result of provincial initiatives in Ontario such as the screening and outcome measurement initiative and the

Drug Treatment Funding Program. Although these initiatives may not have succeeded thus far in getting all agencies to agree on using a set of common assessment and outcome monitoring tools, results of the current study suggest that they raised awareness within child and youth mental health agencies about the importance of assessing client needs and tracking treatment outcomes.

It is unknown to what extent this shared provincial context affected the results, and their generalizability to contexts in which there have not been similar provincial initiatives to promote assessment and outcome measures. On the one hand, across all agencies, staff referred to these initiatives as having influenced their decision to adopt an assessment and outcome monitoring tool. Thus, there is strong evidence that this contextual factor played a role in helping staff answer “the why” question, and engendering their commitment to use the CANS and the GAIN. This leaves me to ask whether organizations that do not operate out of a similar broader context would have more difficulty finding incentives or reasons to adopt such tools. Yet, the degree of consistency between the current study’s findings and studies conducted in the U.S. and Europe suggest that this broader context did not play so influential a role so as to make the findings entirely context-specific.

Another outer context factor that frequently became the reason for implementing the CANS, also consistent with Aarons et al. (2011), was that using the tool would facilitate work with other partner agencies. The “inner context” of the organization was another source from which staff drew their motivation to use the CANS. Rationales that related to the inner context often involved the belief that using the CANS could help staff

provide effective, quality services to their clients. This set of reasons will be described next.

Implementation context affects initial measure-values fit. Consistent with Klein and Sorra's (1996) propositions, organizational values influenced whether a particular measure was perceived by staff as helping or hindering them from providing effective, quality care to their clients. When use of the measure was perceived as supporting organizational values, staff had more reasons and more motivation to adopt and use the tool. Common values-related reasons that staff reported for using the CANS were that it could help provide strengths-focused and client-centred care. Some agencies placed an emphasis on how the CANS could help staff from different disciplines and programs speak a "common language" and thus better collaborate to provide "wraparound care". While some of these values were shared across different organizations, each organization uniquely emphasized certain values over others. This led to different variations of answers to "the why" question in different agencies, which led to subtle differences in how staff used the CANS (this will be discussed shortly).

Co-creating "actual fit". The current study suggests that in addition to fit between the measure and staff members' values, another dimension of fit that affects implementation effectiveness is the "actual fit" between the tool and staff members' work. "Actual fit" involves congruence between the demands of using the tool and staff members' tasks, workflow, and work demands. Thus, similar to measure-values fit, the organizational context affects the "actual fit" of the tool. None of the measures I studied was a perfect fit with staff members' work when the organization first adopted the tool. Staff reported barriers to the use of CANS and GAIN tools that were very similar to those

identified in other qualitative studies related to other clinically relevant measures (Gleacher et al., 2016; Hall et al., 2014; Unsworth et al., 2012; Wolpert et al., 2016). These included: clashes between the administrative demands of using the tool and staff members' busy, crisis oriented work routines; concerns about the tool interfering with clinician-client rapport; difficulties incorporating the tool efficiently within the therapy session; and limited relevance of some measure items with the specific populations being served. Yet, I found that in successful implementations, given that staff had an evolving "understanding of fit", they felt motivated to work toward addressing these barriers and improving the tool's "actual fit".

This process of improving "actual fit" often involved staff discussing their experiences with using the tool, identifying common barriers to use that were experienced by multiple staff, collaboratively identifying solutions for removing the barriers, and making concrete changes to the tool or to how it was used. This finding is consistent with the literature outlining the importance of ongoing problem-solving to address barriers that interfere with effective use of clinically relevant measures (Gleacher et al., 2016). Through better incorporating the CANS in their workflow, and sorting out details regarding when and how it should be administered, staff improved both their commitment to use the tool and their ability to use it consistently and effectively.

Implementation outcomes. One of the contributions of the current study was that it provided a description of a range of implementation outcomes within the context of multiple efforts to implement clinically relevant tools. In so doing, the study provided a better understanding of the indicators of effective implementation, as well as how the concept can be operationalized. The study found that when measures were implemented

effectively, not only were the tools used consistently for multiple purposes by all relevant staff, but staff also had a shared understanding about why they were using the tool and a shared commitment to improving the use of the tool within the agency. While completion and feedback viewing rates of measures have commonly been identified in the literature as indicators of effective implementation (e.g., Bickman et al., 2016), other indicators of effective implementation that were identified in this study, such as a shared understanding amongst staff about why they used the tool, have received less attention.

Ultimately, the implementation context, leadership, and the fit making processes affected both whether the measures were used and *how* they were used. When the fit between the measure and staff members' work was poor, and when staff were not or could not be engaged in efforts to improve the fit, measures were either not used or were used ineffectively. Ineffective use involved compliance with completion of the measure without staff perceiving the measure as being useful to their work. It also involved use of the tool in a manner that was inconsistent amongst staff (i.e., low inter-rater reliability) and unresolved confusion about how the tool was intended to be used.

When there was adequate fit between the measure and staff members' work from the outset of the implementation effort, or when staff were able to work together to improve the fit between the measure and their work, measures were successfully put into practice and used. Interestingly, *how* the same measure (i.e., the CANS) was used in different agencies varied depending on how staff viewed the measure within the context of their work and their organization. As discussed previously, depending on the values, priorities, and activities of each organization, staff developed different understandings of how the CANS could be most helpful to their work. For example, if staff believed that

completing the CANS collaboratively with clients would help them stay true to their organizational value of providing client-centred care by allowing the client to participate in identifying their own needs, staff used the CANS collaboratively with clients as intended (Lyons, 2009) and valued this feature of the CANS. On the other hand, if staff believed that completing the CANS collaboratively with clients would overwhelm the clients and would interfere with the organizational value of providing trauma-informed care, they did not complete the CANS with clients. These latter group of staff found having the option to complete the CANS outside of the therapy session one of the benefits of the tool. Thus, the CANS was perceived differently and took different forms when it was put to use in different contexts.

Consequences of staff participation. Many of the consequences of staff participation in adapting and implementing the CANS were related to increased uptake and use of the tool. However, staff participation also led to other, mainly beneficial, consequences. I say “mainly beneficial” because staff reported a negative consequence (i.e., feeling frustrated) when they were asked to participate but there was limited or delayed responsiveness to their feedback. However, when there was responsiveness, staff participation led to perceived consequences similar to those observed in studies on the consequences of staff participation in evaluation activities (Amo & Cousins, 2007). These consequences included: improved staff morale, sense of camaraderie and mutual support during the process, and learning about the organization, intervention techniques, communication with other professionals, and adult teaching.

Overall Discussion of Findings

In this section I provide some reflections on the findings overall and how they relate to the existing literature. As a reminder, the term “innovation” refers to any practice that is being newly implemented in a setting (Klein & Sorra, 1996).

Value of innovation flexibility and fit making. Overall, the findings of the current study were consistent with literature suggesting that the degree of fit between an innovation and the organization’s values and activities is a critical factor that influences whether the innovation will be used effectively and whether its use will be sustained (Meyers et al., 2012; Chambers et al., 2013). The findings touch on the fidelity-flexibility debate (Forehand et al., 2010), and highlight the value of allowing for flexibility in innovations. The findings suggest that flexible innovations that are adapted using end-user input become more relevant to the users and thereby increase their commitment to use the innovations (Forehand et al., 2010). In addition, the flexibility creates opportunities for staff participation and engagement in fit making, which can contribute to the development of a shared understanding amongst staff about the value and role of the innovation within the organizational context, as well as other benefits.

While findings from the current study suggested that adaptations to the CANS improved its fit and increased staff commitment to use it, it did not explore the impact of the adaptations on the tool’s effectiveness. Without data on the outcomes of using the tool in the different ways in which different organizations used it, it is difficult to assess whether all adaptations were steps in the right direction and served to improve the tool’s effectiveness. As suggested by Chambers et al. (2013), studying the impact of these

adaptations on clients or on the service delivery provides rich opportunities to learn about the key components of innovations, such as the CANS, that contribute to their impact on client or service outcomes. Practice-based evidence from such studies can be used to better inform organizations that are undertaking their own fit making process about which aspects of the CANS can be adapted and which aspects need to be maintained in order to ensure its effectiveness (Lee et al., 2008).

What is fitted to what? Findings from the current study suggested that staff in all case organizations attempted to fit the CANS into the organization by making changes to the CANS, as opposed to the organization. While staff made changes to some of their operational procedures so that administering the CANS became part of their workflow, staff generally reported that the process of implementing the CANS had not led to “second order change” within the organization, or change in the underlying structures and assumptions of the organization (Sylvestre, 2014). For example, staff members’ shared reasons for believing that it was important to use the CANS (i.e., their “understanding of fit”) were related to how CANS could help them adhere to and achieve their pre-existing professional and organizational values and goals. There was little evidence that staff made changes to their own or their organizations’ values and goals because of the CANS.

One explanation for this could be that there was no trigger or reason for second order change to occur within the agencies because agencies self-selected to adopt the CANS due to its congruence with their values and priorities. This raises the question of what would happen if the values, priorities, and operations of an organization were radically incongruent with the CANS. In the current study, when the CANS was a poor fit for sub-groups of staff, those staff reported being resistant to using the tool. Thus,

consistent with the implementation literature (Aarons et al., 2011; Chambers et al., 2013), results from the current study suggest that in situations where there is poor fit, the likelihood of the agency adopting the innovation is low. Even if the innovation is adopted, effective implementation and sustained use of the innovation become difficult to achieve. In other words, it is unlikely that the organization will change in response to the implementation of the CANS.

Another question is what would happen if staff, or a subgroup of them, perceive some value in a tool even though the tool is incongruent with the values, priorities, and operations of the organization overall. This appeared to be the case in the pilot of the longer GAIN at Org. 4. Although staff who piloted the tool saw some value in it, the combination of the amount of time it took to administer the assessment and its perceived focus on client deficits made it a poor fit for the agency. Given that there was not much flexibility to adapt the tool and improve its fit, it was not implemented.

Klein and Sorra (1996) argue that in such situations innovations can be implemented if the subgroup of staff who see value in the innovation hold power within the agency. They argue that this subgroup of staff can use their power to create a strong implementation climate for the innovation, thus increasing the likelihood that the innovation is used. However, they add that in such circumstances staff may resist the innovation and engage in compliant as opposed to committed use. These propositions may explain why the brief GAIN was put into use agency wide at Org. 4, although there was initial staff resistance and some staff reported a poor fit between the measure and their values. The agency's leadership saw value in using the tool and created an

imperative that it be used. In contrast, perhaps the longer GAIN was not ultimately used because the agency's leadership did not see strong value in it being used.

Perhaps in these kinds of circumstances, in which a subgroup of staff with power see value in a measure and yet there is poor fit, strategies can be used to change the organization to enable better innovation-organization fit. According to Chambers et al. (2013), the ARC (for Availability, Responsiveness, and Continuity) organizational intervention model (Glisson et al., 2010), is an example of a set of strategies that can be used to change the culture, climate, and structure of an organization in order to improve fit. Perhaps if such strategies are effective, implementation of an innovation can lead to second order change in organizations.

In sum, what I am suggesting is that while the current study identified one pathway to achieving effective implementation (i.e., making the tool fit the organization), there may be other pathways that can lead to effective implementation under other circumstances (e.g., making the organization fit the tool).

Conceptual Contributions of the Study

The present study is one of the first to examine the process of adapting and implementing clinically relevant tools such as the CANS, and the role of staff participation and interaction in the process. As such, it makes important contributions in terms of advancing our understanding of: what effective implementation of clinically relevant tools look like in practice, what factors may contribute to effective implementation, and the benefits of staff participation in the process. Many of the themes identified in the current study overlap with factors and processes identified in existing

implementation models and frameworks (e.g., the importance of innovation-organization fit, leadership support, and a strong implementation climate). This overlap serves to add evidence in support of existing implementation models and frameworks, including: Klein and Sorra's (1996) implementation model, Meyers et al.'s (2012) Quality Implementation Framework, and Chambers et al.'s (2013) Dynamic Sustainability Framework. The overlap is also an indicator that the implementation of clinically relevant tools may involve factors and processes that are largely similar to the implementation of innovations in general. Thus, these models and frameworks, as well as findings from the current study, can be used to inform efforts to implement clinically relevant tools.

One of the unique contributions of the current study is its description of the implementation process, or more specifically, its description of *how* different factors may contribute to implementation outcomes. Many publications on implementation outline factors such as innovation-values fit that are posited to influence implementation outcomes, yet they provide little information about the processes through which those factors are thought to contribute to implementation outcomes, nor do they provide information about how innovation-values fit may develop or change (e.g., Klein & Sorra, 1996; Aarons et al., 2011). Furthermore, although the fit between clinically relevant measures and staff members' values and higher level goals is posited as influencing effective implementation of these tools (de Jong, 2016), there is little discussion and empirical investigation of the meaning making processes that staff engage in when they appraise a newly adopted tool and when they think about how the tool can fit in the context of their work. The current study illuminates the experience of staff as they engage in meaning making about the CANS and the GAIN. It suggests that these social,

interactive, meaning making processes are central to effective implementation. Based on my review of the implementation literature, this theme has not received much attention. Thus, the current study provides some propositions about how effective implementation occurs that can be built upon through future research to advance our knowledge about how we can help agencies put measures and measurement systems into practice so that they can be most useful.

The current study also has implications for research on staff participation in program evaluation processes and for research on evaluation capacity building (e.g., Amo & Cousins, 2007). To my knowledge, it is one of the first studies to explore the perceived consequences of staff participation in the process of adapting and implementing a measure, as opposed to the process of designing, planning, and executing program evaluations. Findings suggest that staff participation in these activities yield similar perceived consequences as those observed in studies on staff participation in program evaluation processes (Amo & Cousins, 2007), even though the focus and objectives of the activities in which staff are engaged are different. Thus, it adds evidence in support of the proposition that staff can learn and benefit from engaging in such processes.

However, the findings also extend our understanding about the benefits of participation by describing how the perceived consequences differed when the main activity in which staff participated was implementation rather than evaluation. Specifically, the findings suggest that participation contributes to more effective implementation of measures used for data collection. To my knowledge, how staff participation contributes to implementation of measures and consequently their improved ability to collect data on program outcomes, has not been described in other research

studies on implementation or program evaluation. The study serves to integrate research in these areas by describing how engaging staff in incorporating a clinically relevant tool in their routine practice is one strategy to build evaluation capacity.

In sum, there is considerable overlap between the findings of the current study and existing research on implementation and program evaluation. The main contribution of the current study is its description of how staff participation and interaction contribute to implementation outcomes.

Study Limitations and Suggestions for Future Research

The current study has a number of limitations. In addition to describing these, I will make some suggestions for future research that could help address the limitations of the current study and explore questions that this study could not answer.

Perhaps one of the main limitations of the current study is its nearly complete reliance on staff interview data. Yin (2009) writes that one of the strengths of the case study method is that multiple sources of evidence can be gathered through multiple methods (e.g., qualitative and quantitative) to study the same phenomenon and corroborate findings. Although I did review documents that helped to corroborate some of the points that staff made, and although I triangulated by speaking to staff with different experiences of using the tools and different roles within the agency, I did not broadly collect data from different sources using different methods. In particular, a limitation of the study is that I did not gather data on implementation outcomes through means other than asking staff directly. As a result, I cannot corroborate staff reports about the degree to which they used the tools and how they used them.

Future studies can address this limitation by gathering corroborating data, including quantitative data on implementation outcomes and program documents related to the implementation process. For example, similar to Hall et al.'s (2013) study, a case-note audit method can be used to review clients' case-notes or charts and calculate the percentage of clients for whom CANS assessments were completed at various time points. In addition to completion rates, another indicator of implementation outcomes is the degree to which staff use the assessments to guide treatment. This implementation outcome can also be measured using chart review and measures similar to the Service Process Adherence to Needs and Strengths (SPANS). The SPANS was designed to be used in conjunction with the CANS to review the degree to which clients' charts reflect that staff followed through with addressing the high priority client needs that were identified. Thus, using a measure like the SPANS would provide a way to quantify effective use of the CANS. In addition to gathering quantitative data, another strategy that could help corroborate information about the implementation process is to gather and review implementation-related documents such as meeting agendas and minutes. This could, for example, help verify staff reports about the extent to which implementation was discussed in formal meetings.

Such corroborating evidence and quantitative measures of implementation outcomes would provide opportunities to draw conclusions about the links between implementation context, processes, and outcomes with more confidence. For example, using quantitative measures of participation and quantitative data on implementation outcomes, future studies can explore whether more participatory approaches to implementing clinically relevant measures are associated with better implementation

outcomes. Additionally, given that the ultimate objective of implementing clinically relevant measures is to improve the efficiency or quality of services, another informative avenue for future research using quantitative data is to further explore how the way in which measures are implemented affect service outcomes.

Quantitative measures would also allow comparisons between different implementations to be made with greater ease and confidence. A challenge that I faced in the current study was that given the differences between the nature and context of implementations in different agencies, it was difficult to make comparisons with confidence. For example, I could only gain a general impression, based on the reports of a few staff members, of whether conversations in one implementation were more focused on problem-solving compared to another, or whether leadership was more or less responsive to staff feedback. The current qualitative study provided important information about the main processes and factors that appear to contribute to implementation outcomes. The next step is to use quantitative studies to test and confirm the implementation model that was identified through this study.

There are a few examples of quantitative and qualitative studies that investigate the relationship between implementation context and process factors and implementation outcomes, as well as the relationship between implementation outcomes and client treatment outcomes. Bickman et al. (2016) calculated an implementation index that provided a “crude” (p. 418) measure of the degree to which measures were completed and used at two different agencies. They then used this index to investigate whether there was a relationship between the degree to which the measures were used and the extent to which clients improved. The implementation indices also provided a means to compare

implementation effectiveness across the two agencies. In a related study, Gleacher et al. (2016) then used qualitative and quantitative methods to explore the factors that contributed to the different implementation outcomes observed across these two sites. As another example, De Jong et al. (2012) have used quantitative methods to examine the relationship between therapist attitudes toward measures, their use of the measures, and the effect of these factors on client outcomes.

Yet another limitation of the current study is its retrospective design and the reliance on staff members' recall and reporting of their experiences during the implementation process. As Miller, Cardinal, and Glick (1997) note, citing the work of Golden (1992), Huber and Power (1985), and Wolfe and Jackson (1987), retrospective recall and reporting by key informants in organizations may not provide the most accurate account of past phenomenon due to "inappropriate rationalizations, oversimplifications, faulty post hoc attributions, simple lapses of memory" and attempts by key informants "to present a socially desirable image of themselves or their firms" (pp. 189-190). This may especially be the case when informants are asked about abstract concepts such as their past beliefs, as they were in the current study, rather than concrete events (Miller et al., 1997). Several features of the current study helped address these issues and increase the trustworthiness of interview data, including: interviewing multiple informants, using a qualitative interview method as opposed to questionnaires with forced response options, and asking about the more recent as opposed to distant past (Miller et al., 1997). However, future studies can help provide more trustworthy information by using prospective observational and interview methods to study implementation as it unfolds. In addition to addressing issues with recall and reporting, I believe prospective

methods are also better suited to studying unplanned or emergent organizational change and the role of conversations in the change process.

In sum, the limitations of the current study mainly pertained to: using predominantly one source of data and not corroborating findings using data from different sources; not gathering quantitative data related to key implementation-related factors to make more accurate comparisons across different implementation projects; and relying on staff members' recall and reporting of past events. Given these limitations and the qualitative, cross-sectional, multiple case design of the study, the study was not well-suited to determining generalizable findings about implementation of clinically relevant tools; nor was it well-suited for determining causal explanations about the relationships between factors. The findings are valuable because they highlight some of the consequences of staff participation within the context of implementation, as well as the main factors at play during the implementation of clinically relevant tools. However, until these factors, and the tentative conclusions about the relationships among them, are tested in future studies with different designs and methods, they must be regarded as preliminary. I made a number of suggestions within this section about future studies that can serve to expand our knowledge about implementation of clinically relevant tools and the role of staff participation in the process.

Implications of Findings

Here I outline some of the implications of the findings from the current study, both for research and for implementation practice.

Implications for research. The current study raises a number of opportunities for future research, both to confirm the findings in other contexts, and to further refine and elaborate our understanding of the processes involved in effective implementation of clinically relevant tools.

First, in the previous section on study limitations, I made several recommendations regarding future studies that could address the limitations of the current study and extend our knowledge. To summarize and build on these recommendations, I believe that quantitative and survey methods could help validate the proposed model that was developed in this study. Furthermore, while qualitative and case study methods in this study allowed me to gather in-depth information about implementation and staff participation in four agencies, these methods did not allow me to gather information broadly from a large number of agencies. Future studies can seek statistical versus analytical generalizability, as I have done in this study, by using quantitative methods.

Second, the model proposed in the current study (Figure 4.1) can be used to generate a number of hypotheses and research questions for future quantitative studies. Specific research questions can include whether there is a statistically significant correlation between:

1. The degree of staff participation in the implementation process and effective use of the implemented tool (as measured by completion rates, data viewing rate, and/or documentation of use of the data in decision making)?
2. The degree and quality of staff interactions (i.e., persistent, pervasive, and problem-solving oriented conversations) and the degree of fit (both

- “understanding of fit” and “actual fit”) between the implemented tool and staff members’ work?
3. The degree of measure-organization fit and effective use of the measure?
 4. The beliefs and behaviours of implementation leaders (e.g., valuing staff participation, openness and responsiveness to staff feedback, creating momentum behind the implementation, creating venues and structures to encourage staff participation, intentionally discussing the tool with staff) and: (1) degree and quality of staff participation, (2) degree of measure-organization fit, and (3) effective use of the measure?

Third, as discussed in the limitations section, prospective and longitudinal research can help refine and elaborate our understanding of the mechanisms through which staff interaction and participation contributes to implementation outcomes.

Implications for implementation of clinically relevant tools. Although I do not assume that the results of the current study are generalizable to all agencies attempting to implement any clinically relevant tool, the results do provide some lessons about the effective implementation of these tools that may be relevant for informing implementation efforts. These practical implications are described here.

Choose a tool that fits. One of the lessons from the current study is that the more congruence there is between a measure and the values and activities of an organization, the simpler it will be to achieve effective implementation. Thus, when possible, it can be helpful to choose a tool that fits the unique values and activities of the organization. Involving staff in making the initial decision about which measure to adopt may be an

effective strategy to ensure that there is some degree of fit between the measure and the organization from the outset. In contrast, mandating organizations to implement inflexible measures that are incongruent with their values and activities may lead to difficulties achieving commitment from staff to use the measures effectively.

Develop understanding of fit. Another lesson from the current study is that it is important for staff to have a shared narrative or understanding about both why they are using a tool and how use of the tool will help them achieve objectives that are important to them and to the organization. I believe that the development of this shared narrative amongst staff is one of the first steps for garnering staff engagement in working toward effective use of the tool. When staff have shared answers for why the tool is being used, they may not only have a higher tolerance for “misfit” or issues related to use of the tool, but they may also be more likely to contribute to *solving* any existing issues as opposed to raising the issues as reasons for not using the tool.

Keep the tool “alive” within the organization. Though I found that the development of “understanding of fit” was largely an emergent, unplanned process, certain conditions appeared to stimulate interaction and meaning making. Of note, I found that it was important to keep the tool “alive” within the organization by creating opportunities and reasons for staff to have regular, action-oriented conversations about use of the tool. Opportunities and reasons for such conversations can be created by: giving staff a role to play in the implementation process, identifying or inspiring local champions for the tool, creating implementation structures, making the tool a regular agenda item, using staff suggestions and feedback to make concrete changes or address barriers related to use of the tool, and finding multiple uses for the tool.

Encourage and support co-creation of “actual fit”. Based on the results of the current study, I believe that by creating the conditions that stimulate regular, action-oriented conversations about use of a tool, agency leaders also set the stage for staff to work together toward improving the fit between the measure and their work. However, creating “actual fit” also requires that staff have some control to make concrete changes. Many clinically relevant tools are not adaptable and cannot be changed. Using them in the same format and as they are intended is important for maintaining the reliability and validity of the resulting data. Yet, even for these tools, there are many decisions to be made on an ongoing basis related to how the tools should be used or how problems should be addressed, such as: how often the tool should be administered, who should have access to the resulting data, and how the data should be used. If a participatory approach is taken toward implementation, staff can exercise control over these decisions and make choices that will lead to a better fit between the tool and the work that they do. Thus, once again, the results underline the value of staff participation as a strategy for improving fit, and ultimately, increasing effective use of clinically relevant measures.

In sum, the current study raises opportunities for future research that can help to validate and refine my findings. Furthermore, although case study findings are not intended to be generalizable, some practical lessons can be drawn from the study about effective implementation of these tools that can help inform implementation efforts.

Summary and Conclusions

In summary, the present dissertation study examined how measures such as the CANS and GAIN can be implemented effectively within child and youth mental health agencies. It also examined the role to of staff participation in the process of incorporating these measures into their routine practice.

Findings highlight the value of staff taking part in making adjustments to the tool or how it is used to “tailor make” the tool so that it fits both conceptually and operationally with their work. When staff have a role in the process of implementing clinically relevant tools, they have more opportunities and reasons to discuss the measure, to think about how it applies to their work and to best serving their clients, and to become engaged in finding solutions for addressing any existing barriers to use. Thus, staff participation helps to keep the tool “alive” within the agency so that staff are regularly thinking about how it can be used more meaningfully and effectively. Findings suggest that this regular engagement and fit making then contribute to increased staff commitment and effective use of the tool. However, by being part of the process, staff also gain opportunities for learning (e.g., about evaluation, about the organization) that contribute to beneficial consequences in addition to consequences related to their use of the tool.

Lastly, the study suggests that several factors related to the implementation context, agency leadership, and the tool itself affect both the feasibility of engaging staff in making fit between the measure and their work, as well as how fit is made. The implementation context, the approach of the agency leadership, and the adaptability of

the tool can affect whether staff have opportunities to participate and how much control they have to make concrete changes. Furthermore, contextual factors, such as the population that the agency serves, affect the fit between the measure and staff members' work. In addition, findings suggest that the implementation context provides incentives or reasons for adopting a tool and putting it into practice. In effective implementations, staff develop shared narratives about why it is important for them to use the tool by weaving together what they think a tool will help them achieve with prevalent values and priorities that exist within the implementation context.

The present dissertation study tells a story that has not often been attended to in past research. Namely, it tells the story of how staff work together to put clinically relevant tools into their routine practice in a way that they can get the most use out of them. In some ways, the study tells the story of how data is produced (Sylvestre, Bassi, & Bendell, in press) in child and youth mental health agencies. It raises our awareness about the many steps that must be taken before agencies can produce data that is useful to them for multiple purposes.

Above and beyond telling this story, the study makes a number of important contributions. It is one of the first studies to systematically examine the implementation of the CANS and other clinically relevant tools. Through comparing and contrasting implementation experiences across four agencies, the study helped develop a conceptual model that offers propositions regarding the factors and processes that contribute to effective implementation of clinically relevant tools. The study goes beyond identifying factors associated with effective implementation, as many implementation frameworks do (e.g., Aarons et al., 2011), and proposes "co-creating fit" as an underlying mechanism

that contributes to implementation outcomes. This is an important contribution because it can help clarify: which factors may be more central than others, what role different factors play and why they are important to attend to, and what processes (e.g., pervasive, persistent, and problem-solving oriented conversations) may be helpful to encourage or stimulate when implementing a clinically relevant tool.

Another important contribution of the current study is its integration of research from different fields of inquiry (i.e., program evaluation, evaluation capacity building, organizational change, and implementation science). In particular, although evaluation capacity building researchers and researchers studying effective implementation of clinically relevant tools share the objective of increasing meaningful use of data on program and treatment outcomes, to my knowledge, this is the first study that bridges these fields. This bridging is important because it allows us to use knowledge from one field to fill in gaps in the other.

In conclusion, routine use of clinically relevant tools holds immense potential for improving mental health services. In order to reap the benefits of these tools, continued research attention to factors and processes underlying effective implementation is of critical importance.

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Appendix A: Case Summaries

Implementing the CANS at Org. 1: Case Summary

April 24th, 2014

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Introduction

Org. 1, a small, rural, community-based child and youth mental health agency, implemented an assessment measure called the Child and Adolescent Needs and Strengths (CANS) in recent years. The current case study describes the implementation process that took place, and examines the perceived consequences of staff participation in the implementation process. Twelve interviews were conducted with Org. 1 staff by two researchers. These interviews were then transcribed verbatim and analyzed to identify common themes across participants. The preliminary results of the analysis are summarized below.

Background

Org. 1 provides a wide range of services organized under three main service clusters: Youth Justice, Family Support (including Early Intervention), and Mental Health. Org. 1 has undergone several important changes in the past decade. A change in Executive Directors (ED) in XXXX led to a change in leadership approaches, several training sessions, and a decision to become accredited as a Child and Youth Mental Health Agency.

In addition, Org. 1 was one of the first organizations that was selected to participate in a provincial initiative called XXXXX. This initiative required four agencies to pilot four different assessment measures and discuss the advantages and disadvantages of each. The CANS was one of the measures that was piloted at Org. 1 and ultimately

was chosen by the members of the organization as the measure that had fit best with the needs of the organization.

Prior to the appointment of the current ED, Org. 1 had been mandated to use the Child and Adolescent Functional Assessment Scale (CAFAS). However, according to staff, they had stopped using the measure and found that the CAFAS was not as user-friendly as the CANS. Thus, Org. 1 staff were not uniformly using any assessment measures for treatment planning and program monitoring.

The Process of Adapting and Implementing the CANS

A version of the CANS was adapted at Org. 1 to make it more suitable for staff in the Youth Justice program. The adaptation was completed by the ED and [the CANS developer]. Other staff from Org. 1 were not involved in this adaptation process.

The implementation process initially involved providing training to all staff. Most staff attended training sessions offered by [the CANS developer] and those who had been hired more recently completed an online training program. Staff were also required to complete a reliability certification test at the end of the training and after each year. Org. 1 also appointed an in-house CANS trainer or champion. This individual provided training support to staff who were struggling with using the CANS or completing the CANS certification. She also provided CANS training to individuals and organizations outside of Org. 1. Several staff members commented that having someone who was enthusiastic and well-informed about the CANS at Org. 1 was very helpful in terms of learning how to appropriately use the CANS and trouble-shooting any difficulties. According to several staff members, one of the most successful implementation steps was

hosting a local CANS conference. Staff remarked that they walked away from this conference with more motivation and knowledge to make meaningful use of the CANS.

Implementation of the CANS is an ongoing process. Regular meetings are held to discuss topics like how to make better use of the CANS or how to better incorporate the CANS within staff members' work routines. For example, staff were discussing questions like how often the CANS should be completed, which staff members or groups should complete which versions and sections of the CANS, and how the CANS can feed into treatment planning, progress monitoring, and report writing. Management also monitors use of the CANS and advocates for its use in supervision and program evaluation.

Characteristics of Participation

Though staff were not directly involved in the adaptation of the CANS for the Youth Justice program, they felt very much part of the implementation process overall. The decision to implement the CANS was one that was made by management in line with the goals and values of the organization. However, all staff were invited to work out implementation details and they also participated in the implementation decision by sharing their feedback about CANS in the XXXXXX pilot. Staff were invited to sit on different implementation teams that each drove different changes in the organization. Staff expressed that they perceived management to be very responsive to their suggestions and concerns related to the CANS. One staff member said, "everyone is invited to be a part of every discussion that happens around CANS and any decision making. So, it's our, we're invited to come to all meetings. We're invited to do more if

it's an area or passion or if that's an area of interest to us. We're invited to do as much or as little but we have to do a certain amount."

Context

This section describes the context of the implementation process and how factors related to context may have influenced the process and its consequences.

External Influences. External influences are factors related to how systems, agencies, and forces outside of Org. 1 may have affected the CANS implementation process. The main factor that was referenced by staff was the prediction that there would be a transformation in how children's mental health services are managed in Ontario, and that the organization needed to be prepared for this change in order to maintain its funding and independence as an organization. Furthermore, there appeared to be a provincial movement toward outcome monitoring as evidenced by the XXXXXX initiative and the mandated use of different assessment measures by other agencies in the province.

Being involved in the XXXX initiative and other collaborations also allowed Org. 1 staff to gain information on practices and experiences in other agencies. Staff often commented on how the popularity of the CANS in other agencies and its pervasive use by partner agencies positively influenced their attitude toward the CANS. Another external influence was the ministry's power to mandate different assessment measures and the uncertainty about which assessment measure will be mandated in future years. Staff members said that they were required to complete the CAFAS along with the CANS

and that this put a demand on their time. Also, not knowing whether the CANS will continue to be required in the future made some staff less invested in the measure.

Organizational Characteristics. Org. 1 was a dynamic organization going through a period of flux when the CANS was introduced. Thus, a “climate of change”, as one staff member described, was present and staff were accustomed to changes in the organization. In addition, a culture of organizational improvement and movement toward increased accountability was prevalent in the organization. However, the multiple organizational changes that were occurring at the same time as the CANS implementation process put a lot of demand on staff time and led to reduced attention to the CANS at times and some frustration related to not having sufficient time for core clinical activities.

The CANS implementation process was facilitated by the leadership and organizational support for the CANS, a management team that encouraged staff participation and showed openness to hearing staff feedback and concerns, and a warm and supportive collegial atmosphere among staff. These factors combined influenced staff to perceive the CANS as important, to participate in the CANS implementation process and contribute to improving the use of CANS at Org. 1, and to raise their questions and concerns about the CANS and have them addressed.

Several organizational characteristics made the CANS a good fit. First, the strengths-focussed aspect of the CANS was in line with the organization’s values. Second, the organization consists of several teams that provide a heterogeneous range of services and the CANS was a measure that could be completed by staff on all teams. Third, the organization serves a rural community and some staff members mentioned that they often

have some background information on clients before they seek services at Org. 1. They added that having a structured assessment tool helps prevent them from making hasty assumptions.

Trainer Characteristics. Several staff members commented that [the CANS developer's] presentation of the CANS and the fact that he personally provided the training left an impression on them and led to a more favourable attitude toward the CANS. They mentioned that [the CANS developer's] personal investment in and commitment to the CANS was apparent. Several staff members commented that [the CANS developer] had an engaging presentation style because he made use of humour, illustrative stories, multiple interactive teaching techniques (e.g., role plays), and used "common language". Staff members also mentioned that they appreciated the fact that he was flexible and non-dogmatic in terms of applying the CANS, and open to hearing and addressing staff concerns related to the CANS. Staff members also said that [the CANS developer's] teaching of the CANS was clear and that they felt comfortable asking questions about the appropriate use of CANS.

Participant Characteristics. Several staff commented on how their previous work experience, particularly experience with assessment measures and data collection, influenced their attitude toward the CANS. Those who had been required to complete time intensive assessment measures in the past, often found the CANS relatively more user-friendly and less time consuming. The length of time that staff had been working at Org. 1 also influenced their reactions to the CANS. Some staff members who had been at Org. 1 for a longer period had a harder time adjusting to the change. However, some

found that the CANS was a helpful addition to their previously established work routines. Those who had been hired more recently were unable to comment on whether the implementation of the CANS led to any changes in the organization. Staff members also differed with regards to the extent of their initiative and enthusiasm for participating in activities of the organization, including the CANS implementation process. Other participant characteristics that may have played a role in the extent to which staff participated in and benefited from the CANS implementation process include: their ability to fit the CANS efficiently into their assessment routine, their extent of socialization and collaboration with other staff members, and their general work satisfaction.

Role of Conversation

One of the objectives of the present study was to look at unplanned aspects of the implementation process, in particular, conversations that staff had amongst themselves about the CANS. The intention was to see whether conversations played any role in contributing to the consequences of the implementation process. What was learned about conversations at Org. 1 regarding the CANS is summarized here.

Interviews with staff at Org. 1 suggest that staff predominantly spoke about how to improve the use of CANS in the organization. Their conversations were centred around implementation questions like: How frequently should we complete the CANS? and How can we make the process of administering the CANS more efficient? This suggests that staff felt a sense of ownership over the process and felt that they could contribute meaningfully to organizational decisions around the CANS. These positive, action-

oriented conversations about the CANS are consistent with the general organizational theme of working together to improve the agency and better serve the community.

However, aside from talking about how to improve CANS use and the benefits of the CANS, staff also spoke about problems that they were encountering with the CANS, and vented frustration (mainly frustration related to the difficulty of the certification process). Staff mentioned that some of the initial conversations after the CANS was introduced were focused on CANS being more paperwork and an extra burden on staff time. However, they added that this initial reaction gradually changed to a focus on the benefits of the CANS and implementation questions.

In terms of venues for conversation, staff mentioned that both formal and informal conversations took place regarding the CANS, and added that there was a sense that the CANS was a pervasive topic of conversation. It was discussed in meetings and around the "water cooler".

Perceived Consequences of Participation

Through their participation in the implementation process, staff contributed to making the CANS administration and use procedures a better fit for their day-to-day work. Also, when staff see that their suggestions are incorporated, they likely gain greater motivation to participate further. Staff mentioned that their participation led to greater buy-in and a sense of ownership over the measure and the implementation process. Some staff added that being included in making major agency decisions led them to feel valued as employees and improved their morale. They also said that through their participation

they gained a better sense of the value of the CANS (e.g., learned its different uses in training, saw some of the "wins" with implementation and use).

Staff also indicated that participation in the implementation process facilitated their learning about the application and use of the CANS. Some said that they learned better when they were informed about changes as they arose, that being involved helped keep the CANS salient and relevant to their work, that it increased motivation to learn and attention to training, and that it made it easier to ask questions about CANS use. In addition to learning how to use the measure, staff stated that their participation allowed them to learn: adult teaching and presentation skills, diverse treatment approaches and intervention techniques (from coming into contact with different professionals), and how to communicate with professionals from different professions. Staff also stated that the implementation process allowed them to “step back” and reflect on their day-to-day work. In particular, one staff member said that she thought about the agency’s assessment practices at the time and whether they were more or less effective than the CANS, as well as some of the clients she was seeing.

Some staff mentioned that through participation there was a shift in their attitudes toward data collection and evaluation. They indicated that they learned that measures can be useful, and that measurement is necessary to assess progress, maintain funding, and increase accountability. Furthermore, they mentioned that the CANS implementation process brought measurement and “checking things out” into the language and culture of the organization.

At a broader level, implementing the CANS was a joint venture that Org. 1 undertook with several other agencies across the province. Through conferences, learning collaboratives, and meetings, staff gained opportunities to network with others and build professional relationships. In addition, some staff explained that working on the CANS with staff from different agencies and sectors allowed them to build a culture of partnership and to improve the continuity and quality of services for clients.

Use of the CANS at Org. 1

A majority of staff indicated that they found the CANS useful in their work. However, they added that some staff were initially frustrated by the addition of more “paperwork” to their workloads. Some described a shift in staff attitudes toward the measure over time: while they may have initially viewed the CANS as a form that needed to be completed, they gradually began to see the potential benefits and uses of the measure. Some staff in the Youth Justice program did not always find the CANS useful in their work for multiple reasons: they often saw clients on a short-term basis, found that clients were often not honest about their needs and difficulties, believed that a comprehensive assessment of needs was not necessary for the type of service that they were providing, and found that the judicial partners that they worked with had different expectations regarding assessment and intervention with delinquent children and adolescents.

Staff said that the CANS provides a quick visual display of the client’s needs and strengths, and is used to: 1) make triage decisions after intake, 2) prioritize treatment goals and make treatment plans, 3) stimulate a discussion with the client (child and/or

family) about treatment goals, 4) communicate with other professionals involved with the client's care, 5) discuss client care in supervision, 6) and summarize information in clinical reports. Org. 1 had started using aggregate CANS data to identify gaps in services and make program-level decisions. Staff were hopeful that aggregate CANS data would be eventually used to provide information on program outcomes. Staff indicated that some of the advantages of using the CANS were that it allowed them to conduct a more comprehensive assessment, identify strengths as well as needs, be "more organized" in the delivery of their service, and articulate assessment results more clearly.

Summary

Org. 1 staff appear to have embraced the CANS and to be finding it useful in their work in multiple ways. They are integrally involved and invested in working out implementation details and getting the most out of the CANS. Some of the factors that may have led to this successful implementation include: a provincial movement toward outcome monitoring, leadership support and advocacy for the CANS, fit of the CANS with agency values and goals, [the CANS developer's] personal involvement in training staff on CANS, and the enthusiasm and initiative of staff who championed the CANS at Org. 1.

The process of implementing the CANS at Org. 1 involved: training, reliability certification, training an in-house CANS trainer, and meetings to discuss ways to improve CANS use. Staff said that they shared their reactions to the CANS with other staff in conversations. These conversations were mainly focussed on how to improve CANS use, but at times staff also vented frustration related to the difficulty of learning how to use the

CANS or discussed problems that they were encountering in using the CANS in their practice.

Staff identified some benefits of being involved in the CANS implementation process, including: greater buy-in and a sense of ownership over the measure, learning skills and information related and un-related to the CANS, more positive attitudes toward data collection and increased use of data in decision making, and networking with other professionals and building a culture of partnership.

Implementing the CANS at Org. 2: Case Summary

Oct. 30th, 2014

	Research Team
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Executive Summary

This report summarizes the findings from a study of the process of implementing the Child and Adolescent Needs and Strengths (CANS) assessment at Org. 2. It describes the context of the process, what the process entailed, and the outcomes of this process. Information about the process was obtained through nine individual phone interviews with Org. 2 staff conducted by the first author, and a review of internal documents relevant to the implementation. Interview transcripts were analyzed to identify key themes across staff participants. A summary of the analysis results was presented to 12 staff during a focus group at Org. 2 in August 2014. Staff elaborated on the findings and suggested some changes, which have been incorporated within this report.

Context. The search for an assessment and outcome monitoring measure at Org. 2 began due to a desire to improve the agency's assessment process and evaluate services in a more formalized manner. It was also in part influenced by the greater emphasis that the Ministry of Children and Youth Services (MCYS) and accreditation bodies were placing on outcome measurement, and in part by a need to systematically manage the increasing number of referrals that were being made to Org. 2. The CANS was seen as an attractive option because it was being widely used and endorsed by reputable agencies in Canada and the U.S., fit with the agency's values and activities, and could be used by all staff. The implementation process was facilitated by support from the organization's supervisors and managers for the CANS, and the strong leadership of the implementation leads. Staff had different responses to the introduction of the CANS, in part, based on their different roles in the agency and their previous training.

Implementation Process. Implementation of the CANS at Org. 2 was a well-researched and thought-out process, that included a consideration of whether the CANS

was the right choice for the agency and how best to proceed with adapting and rolling out the measure. Org. 2 staff developed their own version of the CANS by selecting items from four different CANS versions. The implementation process started with a four phase implementation plan. Staff were trained by [the CANS developer] and a core group of CANS Champions received train-the-trainer training. CANS Implementation and CANS Champions committees were formed to lead and sustain the implementation. Feedback was sought from staff to improve the CANS and how it was used within the agency. The CANS was regularly discussed and practiced in clinical team meetings. At the time of this study, Org. 2 was in the process of analyzing CANS data to look at program outcomes.

Implementation Outcomes. Consistent with the results of an internal survey conducted to assess staff reactions to the CANS, as described in the “CANS Early Implementation Summary Report”, the CANS was being used pervasively at Org. 2 and the majority of staff found it useful in their day-to-day work. Staff indicated that the CANS helped them conduct comprehensive, family-centred, and strengths focused assessment. It facilitated conversations with families, and helped develop treatment plans and monitor client progress over time. Some problems related to CANS use were also identified, including concerns about not being able to accurately capture the needs and strengths of families at intake and the inter-rater reliability of the CANS (i.e., whether different staff were completing the CANS consistently).

Staff reported that staff participation in the implementation process helped: build investment and buy-in; improve staff morale; and shift attitudes toward, and build awareness of, outcome measurement.

Introduction

Org. 2 is a large (~100 staff) early child development and mental health agency located in XXXXX Ontario. Org. 2 implemented the CANS assessment in 2011. The

current study describes how the CANS was implemented at Org. 2, the outcomes of the implementation process, and the factors that contributed to these outcomes. Information related to the implementation of the CANS was obtained through nine individual phone interviews conducted by the first author, as well as a review of relevant internal documents. Interviews were audio-recorded, transcribed, and analyzed for key themes. A summary of the analysis results was presented to 12 Org. 2 staff during a focus group. Staff elaborated on the findings and made some suggestions for changes, which have been incorporated in this report. The results of the analysis are summarized below.

Background

Org. 2 had been searching for an assessment and outcome monitoring measure that could be used “across the board”, by all staff in the agency, for some time. This was motivated by a desire to improve the agency’s assessment and service planning process, and to evaluate services in a more formalized manner. Initially, there was also the hope that such a measure would help to systematically manage the increasing number of referrals that were being made to Org. 2.

Prior to the implementation of the CANS, the intake team had developed an Intake Assessment form. A research student conducted an outcome evaluation of the services provided through Org. 2 using the information that had been gathered using this form. This process highlighted the limitations of the measure for outcome monitoring. Furthermore, staff were concerned that there was limited consistency in how the form was used by different staff members. These concerns prompted a small group of

supervisors to search for a standardized assessment measure that could be used at both a clinical level and at a program level.

The search process involved conducting a review of available measures, looking at what measures similar organizations were using, and consulting with knowledgeable individuals and agencies like the XXXXX. Once the CANS was identified as a viable option, it was compared with the Intake Assessment form to see if there was any overlap in the types of information that each helped gather. The comparison revealed that the measures captured similar types of information, especially if certain adaptations were made to the CANS.

Another factor that influenced the decision to implement an assessment and outcome monitoring measure was the awareness that the MCYS and accreditation bodies place an emphasis on outcome monitoring. Having an outcome monitoring system in place was seen to be important to maintain funding at a time when funding cuts were being made and children's mental health services in Ontario were being restructured. In the words of one participant: "Being able to have a way that we can show that what we do works, that what we do is effective, that what we do is helpful, is also part of making sure that we can show that our agency has value and importance particularly in times like we are right now where we've got government cuts and not a lot of funding and potentially a lot of competition for the government dollars there are."

Context

Both the decision to implement the CANS and the implementation process itself were influenced by contextual factors that have been organized under the following three categories: External Influences, Organizational Characteristics, and Staff Characteristics.

External Influences. The decision to implement an outcome measure at Org. 2 was influenced by the greater importance that the MCYS and accreditation bodies were placing on having outcomes data. In addition, many other organizations had embraced the notion of being “data driven” and “evidence based”, to the extent that it had become “a little bit of a mantra” in different organizations. Thus, Org. 2 was also influenced by this provincial movement toward outcome monitoring.

Staff commented that they became more confident in their choice of the CANS after seeing how widely it was being used and endorsed by reputable agencies within Canada and the U.S.. Being in touch with agencies that used the CANS was also helpful in terms of getting information and resources related to how the CANS can best be incorporated within Org. 2.

However, one staff member commented that staff in some local partner agencies did not know about the CANS and therefore could not interpret or use CANS assessments. The staff member found this discouraging and said that it interfered with being able to use “CANS language” to communicate about clients in a consistent manner across agencies. During the focus group in August 2014, Org. 2 staff members commented that partner agency staff were now aware of the CANS and saw some of the advantages of the assessment. However, they continued to be unable to interpret CANS score forms without the help of a narrative summary of the client’s CANS assessment results. Thus, while the

CANS was being used widely in Canada and the U.S., its minimal use by local partner agencies interfered with implementation to some extent.

Another external influence at the time of the implementation was that children's mental health services in Ontario were being restructured and there was some uncertainty among staff at Org. 2 about what this would mean for them. According to one staff, "not knowing where we'll be a year, two years, three years from now" had led to a "general atmosphere of some tension". One staff member indicated that evaluating the effectiveness of services offered by Org. 2 in order to maintain funding had become more of a priority in light of the system restructuring. However, staff members believed that this system restructuring did not directly impact the implementation of the CANS.

Organizational Characteristics. Org. 2 is a dynamic organization that has undergone many changes in the past decade, including: organizational restructuring, changes in how intake services were delivered, and changes in mandate and size of the organization. As a result, staff were accustomed to change when the CANS was implemented. Org. 2 also had a number of resources that facilitated the implementation including a research student and an IT department.

Based on staff comments, one of the reasons that the CANS was embraced at Org. 2 was that it was a good fit for the services that were provided and the organizational values. One staff member explained why finding an outcome measure was a challenge: "Because our age group is so young there haven't historically been a lot of good questionnaires or measures to be using; and then as well, too, we do quite a lot of different kinds of things in terms of the depth and breadth of the services that we offer.

So it's been challenging I think to find a measure or something that would be effective for us." The CANS Implementation Committee at Org. 2 was able to create a measure that would capture both developmental and mental health needs by drawing from four versions of the CANS.

The CANS also fit with organizational values of providing family-centred, strengths-focused, and evidence-based care. Org. 2 also valued providing multi-disciplinary and integrative care. One of the problems that the organization was facing at the time was that staff conducted assessments differently based on their professional training and comfort areas. The CANS addressed this problem by providing a uniform, comprehensive, and structured assessment method that all professionals could use.

One of the key facilitators of the implementation process was the leadership of the organization's supervisors and managers and the actions they took to manage the process. Staff said that the organization's leaders were uniformly supportive of the CANS and endorsed the implementation process by ensuring that staff were trained and certified, monitoring use of the CANS, building CANS into organizational policies, allowing staff to modify their workload if their participation in CANS implementation activities was taking too much time, and allowing the implementation leads to attend conferences and participate on provincial committees. The implementation leads were described as being "very knowledgeable and excited" about the CANS, "methodical", "exacting in assuring that [the CANS] keeps its validity and doesn't get watered down", and able to use their clinical skills to adapt CANS for the specific needs of Org. 2. They "expected input" from staff and were "honest" about how their feedback would be incorporated, and kept

the “momentum going” by regularly scheduling meetings to work on CANS implementation.

Staff commented that changes in the organization were usually led by management and that frontline staff were sometimes involved in organizational decision-making by participating in committees. Within the CANS implementation process, “feedback loops” and regular discussions about the CANS during team meetings allowed staff to participate in adapting the CANS and seek help with difficulties. Larger, “sweeping” decisions were made by the clinical, expanded, and executive management teams. Some staff commented that although the implementation leads were open to feedback, at times there was some “mystery” around when and how some concerns and questions about the CANS would get addressed. One staff member explained, “I think sometimes these things get held up at the management level and we don’t always know what the outcome is but it has been discussed and as far as I know it is being looked at but when that will get resolved, I don’t know.”

Staff Characteristics. Staff described that different staff members had different attitudes toward change and learned at different paces. “There’s some staff that picked it up and ran with it and kind of adopted it right away and saw the benefits. It’s just staff have their, you know, learn at different paces.” Staff members’ level of interest in measurement and program monitoring, their clinical skills (interviewing, negotiating differences in perspective), and their preferred approaches to assessment differed, sometimes as a result of the influence of their previous training. This in turn influenced their attitude toward the CANS and the way that they used it. One theme that came up in interviews was that some staff members were uncomfortable being led by the CANS to

assess sensitive areas that fell outside of the immediate range of their expertise, especially if these areas did not appear to be directly related to the family's presenting problem. Staff commented that they were gradually helping each other step outside of their "comfort zones" and reminding each other of the importance of conducting a comprehensive assessment.

Staff members' roles within the agency also influenced the extent to which they found the CANS useful, and how often they were required to use the CANS. Completing a CANS assessment did not always fit well with the role of "specialist staff", because their roles were limited to working on specific needs (e.g., "to strictly deal with communication concerns") and the CANS is a comprehensive assessment of several domains. As a result, they were only required to provide input about their areas of expertise on the CANS. Staff members' roles also shaped their interactions with other staff (e.g., whether they spoke to other staff about the CANS) and the types of agency activities they would engage in (e.g., whether they participated in "committee work").

How the CANS was Implemented at Org. 2

Early into the process, a CANS implementation committee was formed and a written implementation plan was created with the help of a graduate student and informed by adult learning principles. The implementation committee initially consisted of supervisors and managers, but later grew to include frontline staff. Though senior management was not directly involved in "engineering" the implementation process, they encouraged and supported the process and were consulted and informed about the progress of the implementation on a regular basis.

The implementation plan consisted of “Pre-Implementation” (e.g., decision making regarding CANS, training, informal practice), “Early Implementation” (e.g., identifying champions, eliciting staff feedback, making modifications to CANS), “Full Implementation”, and “Evaluation” (e.g., aggregating CANS data) phases. Implementation was completed in a stepwise fashion, with some teams (including the intake team) being designated as early implementers.

The implementation committee believed that it was necessary to adapt the CANS to make it fit the needs of the agency. The team combined the CANS Preschool Ontario, CANS Autism profile, CANS Massachusetts 0-4, and the CANS Wisconsin Department of Children and Families to create a tool that could be used with the 0-6 age range and that addressed factors related to development in some detail. This process was completed in consultation with [the CANS developer] and his approval on the adapted version was obtained.

To ensure the momentum of the implementation process, the agency invited [the CANS developer] to provide training to all staff after the decision to adopt the CANS was made. Several staff commented that the fact that [the CANS developer], being the individual who developed CANS, was personally involved in training staff lent credibility to the measure and helped increase buy-in. Some staff attributed this to his thorough knowledge of and confidence in the measure: "There's something about that gut knowledge, you know, it's his being... He knows it inside out and backwards. Like he doesn't doubt any part of it. That confidence and competence with it, if you will, really came through." In addition, staff mentioned that he had an engaging presentation style and was able to address staff concerns and answer questions related to use of the CANS.

[The CANS developer] also provided consultation to implementation leaders and the management.

Late hires completed training and certification online. One specialist staff member who had completed the online training said that she struggled with the reliability certification test because she had difficulty interpreting the CANS items as they were intended. She explained that, because of her specialized training, she initially had difficulty setting aside the way she was used to interpreting the constructs that the CANS measures. Several staff members commented that completing the CANS based on vignette case descriptions, within the context of the reliability certification test, was more difficult than completing the CANS with clients because they could ask clients for more information and clarification whereas this was not possible with vignettes. Furthermore, online training was perceived to be less helpful than the face-to-face training with [the CANS developer].

A CANS Champions committee, consisting of staff who had more in-depth knowledge of the CANS, was formed. All staff on the intake team and some others received train-the-trainer training from [the CANS developer] and became part of the CANS Champions committee. Early implementers were asked to try the measure and provide feedback to the CANS Implementation committee. Their feedback (e.g., suggestions on changes to the wording of some items, decision rules) was taken into account and the measure was revised. CANS champions were spread across the agency so that there was at least one champion on each team. Org. 2 also conducted an internal survey with family members and staff who had participated in a CANS assessment to obtain their feedback on the CANS.

Several ongoing activities are conducted to support the implementation process. To practice using the CANS and to stimulate conversations, staff members were asked to present their CANS assessments in team meetings. To better respond to staff questions about the CANS as they arose, email groups were created and staff members were instructed to use these groups when they had questions. A Q&A document was also created to provide some clarification and direction related to common issues or questions. At the time of this study, Org. 2 was in the process of analyzing CANS data. CANS use is also monitored by program supervisors.

Facilitators and Obstacles of the Implementation Process

Some of the factors that made the implementation process proceed more smoothly and increased effective use of the measure are the following: 1) CANS fit with the “agency philosophy”; 2) [the CANS developer]’s involvement in providing training and consultation; 3) knowledge, enthusiasm, clinical skills, and consistent follow-through of implementation leaders; 4) staff involvement, and the openness and responsiveness to feedback of implementation leaders; 5) support and endorsement of upper management; 6) having an implementation plan in advance that was research informed; 7) practice with and use of the CANS over time; and 8) having discussions about the CANS and being able to ask for help from champions and colleagues.

Some of the factors that made implementation difficult or interfered with effective CANS use include: 1) length of time required to complete CANS, assessment reports, and discuss CANS in team meetings; 2) some community partners being uninformed about the CANS; 3) insufficient training; 4) other organizational priorities interfering; 5)

some teams ended up with no champions or individuals who were well-practiced in administering CANS after organizational restructuring; 6) stepwise implementation led to some staff, including supervisors, getting “a little left behind and a little out of the loop” (i.e., having less experience with and knowledge about the CANS, and having difficulty remembering the CANS training content); and 7) supervisors were not in a position to use the CANS and did not have first-hand experience with administering it.

Outcomes of the Implementation Process and Staff Involvement

This section describes any outcomes that resulted from the implementation process itself, including outcomes associated with the participation of staff in the process. Generally, staff thought the involvement of staff with different roles within the organization was essential for implementation success. One staff member said, "I don't think it would have worked without it. There wouldn't have been the investment." Being involved allowed staff to take ownership of the process and increased buy-in. Through participation and "healthy questioning" staff got to make up their own minds on whether they "believe" in the CANS, "endorse it", and whether it's "meaningful for them". Another staff member described how being asked for feedback on the CANS led to increased reflection among staff: "Being part of the implementation process really made us reflect on how we were using it, why we were using it, and how people were responding to it. By the time it rolled out to all the staff, they were just doing it and I don't think they were doing as much reflecting as to how it was being used." Staff confidence in the CANS grew as they searched for and obtained more information on the

CANS. "The more we were learning about the CANS, the more intrigued we were with it."

Staff involvement also improved staff morale. "It just felt more open so people were willing and able to bring that feedback forward so it made them feel included in the process. And I mean that always makes people feel better about themselves, the job, and the organization." Collaborating on the implementation process also led to a sense of camaraderie. Staff on the implementation committee said that they supported each other when they faced challenges with the implementation process. Other staff commented that they were less anxious about learning how to use a new tool like the CANS because they knew others were "on the same boat" and that staff were "growing together". In contrast, one staff member shared that she felt "frustrated" and "dismissed" when she raised a concern about the CANS and there was no adequate response on how it could be addressed.

Staff participation in the CANS implementation process helped build capacity for conducting evaluations and program monitoring. The processes of selecting an outcome measure and adapting the CANS likely helped clarify the information needs of the agency. Some staff commented that their attitudes toward or awareness of outcome monitoring changed throughout the process. For example, one staff member described how seeing family members' responses to measuring change using CANS helped her see the importance of this: "When I saw how parents responded to seeing that concrete identification for them of the change, it really brought home to me how important it is to celebrate the small successes." Another staff member said that being involved in the

discussions of the implementation committee had made her curious about what the aggregate CANS data would show.

Other outcomes of the CANS implementation process were: staff learning more about how decisions and changes are made at Org. 2, and changes in organizational procedures. Some of these changes in procedures include basing treatment plans on the CANS assessments and holding transfer meetings between intake and the start of treatment.

Use of the CANS at Org. 2

The CANS is being used by a majority of staff at Org. 2. It is used during the initial phone contact with families to highlight primary areas of need, then at intake, and finally when the case is reviewed or terminated. "I think [the CANS] is just interwoven into all aspects of the service that we do now. Like from front door to back door. Yeah, it's part of who we've become. It's part of our practice." While "specialist staff" (e.g., physiotherapists) are not required to complete a full CANS assessment, they provide input about areas of need that are directly related to their areas of expertise that gets incorporated into the CANS assessment by other care providers.

Consistent with the results of an internal survey conducted to assess staff reactions to the CANS, the majority of staff who were interviewed as part of the current study also reported that they found the CANS useful in their day-to-day work. Many staff indicated that learning to administer the CANS in a flexible and time-efficient manner took time. "It's only after doing it several 1000 times that you understand the flow to it."

They added that staff became more comfortable with administering the CANS and saw the value of it more the more they used it.

At the level of clinical service provision, staff reported that the CANS helps conduct a strengths-focused, comprehensive and family-centred assessment. One staff member said that the CANS has served as a “staff development tool” because it helps staff to assess areas that are outside the immediate range of their expertise. The CANS also allows staff to conduct a family-centred assessment and to stay “true to what the family’s needs are”. Staff indicated that the CANS helps facilitate discussions with families and is “a nice way to engage families in the process of identifying their needs.” In particular, they added that it can be helpful in clarifying and negotiating differences in perception regarding areas of need, and in prompting families to discuss sensitive concerns that they would otherwise have difficulty bringing up spontaneously (e.g., the possibility of an Autism diagnosis). Others added that the CANS allows clients to visually see the areas that will be discussed during an intake and the progress that they have made during a follow-up assessment.

Staff indicated that the CANS is used to determine which services would best meet the needs of a family, for treatment planning, and for monitoring clients’ progress over time. One staff member mentioned that some staff previously had trouble setting specific treatment goals and added that the CANS gave staff “something very concrete to build goals around”. It also provides a “common framework” to ensure that treatment goals are focused on the client’s priorities as opposed to the comfort areas of the clinician. This is particularly helpful for monitoring treatment planning and progress in supervision. One staff member speculated that setting clear goals in this manner has helped staff

provide more focused and time-limited services. Furthermore, staff commented that the CANS reminds staff to stay focused on identifying the clients' current needs (the "what") as opposed to the potential causes of the presenting problems (the "why"), and to avoid making assumptions when there is no supporting evidence.

The CANS also has uses at an organizational level. Use of "CANS language" provides staff with a common way of communicating about clients. The CANS also helps increase accountability. Org. 2 was in the process of analyzing aggregate CANS data to determine treatment outcomes. There were also discussions of using CANS data to help inform program development and restructuring at Org. 2.

Staff indicated that they were experiencing the following problems with using CANS. First, staff who started using the CANS during the second round of implementation had not yet begun to feel comfortable with administering the CANS. Some staff continued to have trouble using the CANS flexibly, in a time-efficient manner, and as part of a conversation. One staff member indicated that she did not always find the CANS helpful because the quantitative, check-box format of the CANS left out many useful qualitative details that were previously captured by the Intake Assessment form. This problem was in part addressed by adding a section to the CANS to capture necessary qualitative information. A few staff members commented that certain items were difficult to assess accurately at intake due to limited rapport and familiarity with families. One staff member had observed that needs tended to be under-endorsed and strengths over-endorsed at intake. She was concerned about the inter-rater reliability of the measure (i.e., whether different staff were completing the measure consistently), particularly when the measure was completed by different professionals.

Implementing the CANS at Org. 3: Case Summary

June 11th, 2015

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Executive Summary

Study Objectives and Methods. This report describes the process that Org. 3 staff went through to develop and implement the Child and Adolescent Needs and Strengths-XXXXX (adapted CANS). It also outlines the context in which this process occurred and the outcomes or consequences of the process. The findings presented in this report are based on five interviews with Org. 3 staff members and a review of relevant internal documents. This study was part of a larger study examining the implementation of outcome monitoring measures in four community-based child and/or youth mental health agencies.

Implementation Background and Context. Org. 3 staff initially began using the XXXXX version of the CANS (i.e., the adopted CANS) because they agreed to take part in a pilot multi-site evaluation project. Results from this pilot evaluation helped them realize that the adopted CANS was not a good fit for the population they served and was also not completed in a consistent manner by all staff. This led Org. 3 staff to develop the adapted CANS.

Several contextual factors helped facilitate the implementation process, including: (1) a trend within the child and youth mental health sector toward outcome monitoring, (2) mandates or expectations from funders and their flexibility regarding choice of measures, (3) the wide-spread use of CANS by other agencies in [the region], (4) partnerships with other agencies and sharing of resources related to conducting evaluation, (5) the emphasis within Org. 3 on continuous quality improvement, (6) the fit between adapted CANS and the activities and priorities of Org. 3 (e.g., providing “wraparound care” and strengthening treatment plans), and (7) the dedication of staff to

their jobs, their close collegial relationships, and their previous professional training and experiences that made them more receptive toward outcome monitoring.

The primary obstacles that initially interfered with smooth implementation of the CANS included being short-staffed and the multiple demands on staff time. In addition, staff had difficulty learning how to complete the CANS in a consistent manner, particularly when using the adopted CANS, due to the reported subjectivity of the measure and the discrepancies in the manual regarding how items should be rated.

Implementation Process. The adapted CANS was developed by selecting items from different versions of the CANS that were most relevant to working with XXXXXX. Staff were trained on the CANS using a mix of both in-person and online training, and all completed a reliability certification test. To ensure inter-rater reliability, staff held a series of meetings during which they completed CANS assessments based on vignettes and discussed how they were each rating the cases. One staff member was seen as the CANS champion and coach, and provided assistance to staff who were newer to using the CANS. At the time of this study, staff were in the process of having their CANS data analyzed.

Staff participated in the implementation process to varying extents, yet they all seemed to share the same understanding about why the tool was important to their work and the agency. Staff interactions during the implementation process, and their understandings of the CANS tool, appear to have been influenced by contextual factors such as demands on staff time.

Implementation Outcomes. Org. 3 staff indicated that being involved in the implementation process led to a number of benefits including: the development of a tool that was well-suited to their work, increased investment in the adapted CANS, improved staff morale, and improved working relationships and communication among staff from all departments.

Staff currently use the adapted CANS for treatment planning and program evaluation. They reported that they find the tool useful, particularly because it allows them to be proactive, to prioritize students' needs, and to bring staff from all departments on the same page regarding the treatment goals of students.

Introduction

Org. 3 is a non-profit agency located in XXXX that serves adolescent mothers and their children. Org. 3 offers a broad range of services, including: (1) mental health and addictions counselling as well as social supports through the XXXXX, (2) childcare and education through the XXXXX, and (3) secondary education through the XXXXX.

Org. 3 began implementing the Child and Adolescent Needs and Strengths (CANS) assessment measure in 2011. This report describes the process that Org. 3 went through to create an adapted version of CANS and roll it out in the agency. It will also outline the contextual factors that facilitated or hindered the implementation. Lastly, the report includes a summary of how staff from the XXXX Program participated in the implementation process, and what they saw as the consequences of their participation.

This case study was conducted as part of a larger multiple-case study looking at the implementation of outcome monitoring measures in community-based child and/or youth organizations. Information related to the implementation of the CANS at Org. 3 was obtained through four individual face-to-face interviews and one individual phone interview conducted by the first author. Only XXXX Program staff members and a senior manager were interviewed because they were most centrally involved in the implementation of the CANS. The staff members interviewed had between 10 months to seven years of experience at Org. 3 and held diverse positions within the [program]. Interviews were audio-recorded, transcribed, and analyzed for key themes. A focus group was held in May 2015 to review the findings and allow the five staff members who had

participated in interviews to verify, elaborate on, or correct the findings. The results of the analysis are summarized below.

Background

Org. 3 representatives were part of a XXXX Committee that comprised of partner XXXXX programs across the region of Eastern Ontario. The committee had collectively decided on using the [adopted CANS] in a multi-site pilot evaluation study supported by the XXXXX. Org. 3 participated in this pilot study during the 2012-13 school year. According to staff, results of the pilot did not reflect their perception of the extent to which their students had progressed. Furthermore, the pilot showed that Org. 3 was an outlier among the other agencies that were evaluated.

After receiving these results, staff began unpacking the findings and discussing the various factors that could have contributed to the results being unreflective of their work. They reached the conclusion that the adopted CANS was a poor fit for pregnant and parenting youth and that this poor fit had led to staff having difficulties with interpreting and rating items in a consistent manner (i.e., inter-rater reliability was low). These realizations propelled staff to develop a version of the CANS for XXXXX(i.e., adapted CANS).

“We realized that we were outliers and then we started to look at why. And it was the ‘why’ that propelled us into developing our own form because we felt strongly that it was a good form. It was just not a good fit.”

The adapted CANS was finalized in November 2013, and used in an evaluation project during the 2013-14 school year that was conducted jointly between Org. 3 and two other agencies in the community involved with treating XXXX youth with mental health or addictions challenges.

Context

Both the decision to implement the CANS and the implementation process itself were influenced by contextual factors that have been organized under the following three categories: External Influences, Organizational Factors, and Staff Characteristics.

External Influences. External influences refer to factors separate from Org. 3 that played a role in the implementation of CANS. One external influence was a trend in the education and child and youth mental health sectors toward collecting outcomes data and making data informed decisions. Two staff members indicated that the importance allotted to outcome monitoring within these sectors had influenced their own attitudes. Furthermore, it had become common for funders, including the Ministry of Children and Youth Services, to expect data from programs that they helped fund. For this reason, staff generally shared the perception that engaging in evaluation activities was important for maintaining and acquiring funding.

In addition to this trend, an external influence that contributed to the decision to implement the CANS in particular was that the CANS was a Ministry-approved measure that was widely used. This made Org. 3 staff more favourable toward the CANS for several reasons. First, its use by reputable agencies within [the region] made staff feel that it was a “well-respected”, “well-researched”, and “valued” measure. Second, staff were motivated by the prospect that if used by multiple partner agencies serving the same population, the CANS might serve as a shared language and facilitate communication of client information when they

“If we can sort of all get on board and use the same tools then we’re all speaking the same language and I think that’s really helpful in the mental health area.”

transition from one agency to the next. Third, the popularity of the CANS within the region meant that information about the measure was readily available.

One staff member indicated that agencies in [the region] that serve children and adolescents generally collaborate very well. In particular, partnerships between Org. 3 and other agencies facilitated the implementation process, as these agencies were able to support evaluation processes, such as data analysis, that Org. 3 could not complete internally. Additionally, the CANS was available free of charge.

Organizational Factors. Several factors related to the organization facilitated the implementation of the CANS. Org. 3 was described as an “ever changing, ever

“I do feel [Org. 3] is always up and coming. We’re always using the most recent data and the most recent tools. Ever changing, ever growing. We’re not stuck and set in our ways.”

growing” agency that prides itself in staying up to date with the latest evidence-based approaches. One staff member noted that there are ample opportunities for professional development, receiving training on

assessment and treatment approaches, and spearheading different initiatives within the agency. Several staff commented on the substantial degree of change that the agency has undergone during the past five years: change in Executive Directors, staff turnover, piloting of several assessment measures, and a move toward becoming an accredited mental health facility. These changes had led to a spirit of “reinvigorating the [...] department” and there was a receptivity within the Centre for introducing new approaches that would lead to program improvement.

In addition to Org. 3 being receptive to change, several organizational priorities and values made Org. 3

“This is a brilliant organization [...], and just to be accredited gives us that much more credibility as far as a treatment center. It truly is a treatment center. It hasn’t been an accredited treatment center and that’s what we need, you know, the ministries to understand.”

fertile ground for implementing an assessment/ outcome monitoring measure. One of the priorities at the time of the CANS implementation was enhancing the treatment plans that staff created for clients and ensuring that they were “data-informed” (i.e., based on valid and reliable assessments). It was also important for Org. 3 to be better known in the community, and to be known as a treatment centre in particular. By engaging in data-informed treatment planning, Org. 3 hoped to highlight its role in providing treatment services in addition to secondary school education. Furthermore, several staff indicated that being accountable to clients, funders, and the community at large was important to the Centre and consequently tracking the outcomes of the work that they did was important to them.

The adapted CANS was consistent with several of the Centre’s values and practices, such as providing trauma-informed and strengths-based care, placing an emphasis on both the adolescents’ and infants’ mental health, focusing on the parent-child dyad and their attachment, collaborative problem solving, and providing “holistic, wraparound” care and working with “the whole girl”.

Staff explained that some of the main obstacles that interfered with CANS implementation were being short-staffed for a period, and having multiple competing demands on their time. When CANS was first being implemented at Org. 3, there were only two frontline staff members, compared to five currently, who shared the caseload and administered the CANS. Staff were also piloting multiple assessment measures in addition to the CANS. This

“Sometimes it’s just like, do I complete this assignment or assessment, or do I work with this girl out here who’s having a meltdown because she doesn’t have a house to live in? So that’s reality. Or do I really shut my door when a girl needs -- the CAS is on their back and they’re going to lose their baby.. Those are the kinds of things you deal with on a day to day.”

led to some “assessment fatigue” among both staff and students. Although this period of “burn-out” had passed, dedicating time to completing the CANS was an ongoing challenge as staff continued to be busy with tasks such as accreditation and meeting the urgent needs of their students.

More generally, several staff members reported that they found it difficult to dedicate time to tasks with potential long-term benefits for the organization (e.g., completing work related to accreditation or funding applications) when they were faced with students’ immediate and serious needs. One staff member indicated that it is very important for her to know that whatever work she does directly serves students in some way. Despite these challenges, several staff members reported that they continue to be committed to completing the CANS because they believe it is important for the success of the Centre. This underscores the value of staff buy-in and a shared understanding of how completing such measures benefit students in both direct and indirect, immediate and long-term ways.

Staff Characteristics. The dedication of Org. 3 staff to the improved well-being of their students was evident during staff interviews. When asked about organizational priorities, several staff commented that their number one priority was their “girls and their babies”. Staff appeared to share a sense of pride about the agency and a “helping perspective”- a desire to make a difference in the lives of the students they serve. This dedication fueled staff to continuously seek out and use practices that could benefit the students. An example of this dedication was putting in the work necessary to develop the adapted CANS.

“At a non-for-profit organization, people are here because they want to -- they believe in the organization and what the organization is doing.”

Staff also described having supportive personal relationships with their colleagues. This was described as facilitating the implementation process in several ways. First, staff supported each other around completing CANS assessments by the designated deadlines. Second, staff trusted that if colleagues with more knowledge about the CANS were enthusiastic about the tool, they must have a reason. This allowed the enthusiasm of the CANS champion to “bleed through” the XXXX team. Third, when they received unfavorable results from the adopted CANS pilot, they did not engage in “finger pointing”, but rather began a series of “problem-solving discussions” which launched them toward the development of the adapted CANS.

Another staff-related factor that influenced the CANS implementation was staff members’ previous professional training and work experience. Staff members’ professional background influenced their beliefs and expectations regarding assessment, outcome monitoring, evaluation, and CANS as a measurement tool. For example, one staff member spoke about how her previous exposure to the CANS at a different agency had led her to value it, and another spoke about how her prior training in research methods had led her to value research activities.

How the CANS was Implemented at Org. 3

Management Approach to Implementation. The management of Org. 3 strongly believed that in order for the administration of measures like the CANS to be a success, staff must find the measures useful in their work. Management worked with frontline staff to pilot and identify measures that were user-friendly, and that could be used to drive programming and to evaluate the program. Although the Ministry had

initially mandated Org. 3 to complete the Child and Adolescent Functional Assessment Scale (CAFAS) and the Brief Child and Family Phone Interview (BCFPI), after conversations with a senior manager, the Ministry allowed Org. 3 staff to choose an assessment measure from a basket of Ministry-approved tools that they found better suited to their population. Management staff explained that eliminating measures that were less useful helped reduce the “assessment fatigue” that staff and students were experiencing.

“I’m a very big, big believer that if you’re going to get people on board with a project, they have to see their role during the implementation process. If you’re going to get buy-in, they have to be involved.”

Org. 3 management also believed that it was critical for staff to participate in the implementation process. Consistent with this belief, one of the frontline staff members was asked to attend the XXXXX Committee where the rationale behind choosing CANS was discussed. This exposure helped gain the staff member’s buy-in and she became one of Org. 3’s champions for the CANS.

Org. 3’s management were also described as being uniformly supportive of the CANS, and several staff members stated that this was another facilitator of the implementation process.

Development of the adapted CANS. After the 2012-13 pilot study, Org. 3 staff began developing a version of CANS that would be better suited for assessing the needs of pregnant and parenting youth. One of the staff from the [program] took the lead and drafted the measure by selecting items from different versions of the CANS that were most relevant to Org. 3’s students. This draft was refined through discussions with other [program] staff

“We kind of got more into this research mode of looking and trying to make the tool work for us. And then it got exciting and then it got interesting.”

and the ED, and verified by [the CANS developer]. Staff also presented on the adapted

“[We’re] constantly dialoguing about how [we] can make it...not just easier but more meaningful.”

CANS during a conference and obtained feedback on how the tool could be improved. Org. 3 staff treated the adapted CANS as a “living document” – a tool that could continuously be

adapted to better meet their needs. At the time of this study, staff were continuing to share feedback about what items would be useful to add to the adapted CANS (e.g., a module on XXXX compliance with health factors).

Training and Reliability Certification. Staff completed a mix of online and in-

person training, and all completed a reliability certification test.

“I found that in my opinion the correct responses weren’t necessarily what I would have seen as the best fit based on the item definitions.”

Following consultation with [the CANS developer], in-person training was completed in order to help staff improve their inter-rater reliability. Some staff found that the one-day in-person

training was packed with too much information and indicated that they needed to apply the information in order to fully grasp how to use the tool. Staff indicated that learning how to complete the CANS, especially for those who were newly exposed to it, was a challenge because of the subjectivity involved in rating students’ needs and strengths, and the discrepancies in the manual’s instructions on how items should be rated.

“Assessor Moderations”. Org. 3 staff and staff members from a partner agency who were participating in the 2013-2014 evaluation project held a series of “moderation” meetings to ensure that they were completing the adapted CANS consistently and to increase inter-rater reliability. During these meetings, staff completed the CANS based on different case vignettes and discussed how they were each rating the cases.

Informal Coaching and Ongoing Support Activities. The staff member who

had taken a lead role in developing the adapted CANS was informally seen by staff as the

“I think the ability to consult with each other about it and get support from other staff members who have more experience is extremely helpful.”

CANS champion and coach. Several staff members noted that having an approachable colleague from whom they could ask questions about the CANS on an ongoing basis was very helpful.

Other activities that support ongoing use of the CANS

include: setting deadlines for CANS completion and monitoring CANS use, ensuring that all staff are appropriately trained, and making the adapted CANS manual available to all staff as a reference. At the time of this study, data from the 2013-14 administration of the CANS was in the process of being analyzed with the help of partner agencies.

Staff Participation and Communication During the Implementation Process

One of the objectives of the current study was to examine the unplanned or informal aspects of the implementation process. This section will describe how staff were involved in implementing the CANS, how they interacted and communicated during the process, and how they came to their own understanding of the CANS, its purpose within the agency and how it should be used. The CANS implementation process at Org. 3 is interesting from a research perspective because the Centre went through two phases that can be compared and contrasted with each other: an early phase where the implementation of the adopted CANS was seen as not being a success; and a later phase where the implementation of the adapted CANS was considered a success. This section

will also describe how staff involvement, interactions, conversations, and understandings of CANS were different during the two phases.

Staff Participation. Staff participated to varying extents in implementing the CANS at Org. 3: one had been extensively involved since the conversations at the XXXX Committee about using CANS in the pilot study, whereas another had worked at Org. 3 for under a year, received training on the adapted CANS and administered it three times. Although some staff had not been part of the initial conversations about why CANS was implemented, all shared an understanding of why CANS was important to the agency and echoed comments about CANS being helpful for strengthening treatment plans, accreditation, funding, highlighting the treatment services that they provide, and multi-disciplinary collaboration. Staff also did not participate in choosing the CANS. The decision to use the adopted CANS in the initial pilot study was made by the XXXX Committee. However, two indicated that they trusted that those who had more control over the choice must have chosen the measure for good reasons. Most [program] staff were involved in discussions about the pilot study results and inter-rater reliability, and in providing suggestions and feedback during the development of the adapted CANS.

Comparison of adopted CANS and adapted CANS Implementation

Phases. Staff who had been part of both the early adopted CANS pilot phase and the later more successful adapted CANS implementation phase highlighted some key differences between the two phases. During the adopted CANS pilot, the XXXX team was short-staffed and staff were feeling overwhelmed by the number of assessments

“We had sort of little venting sessions [about CANS] and trying to share tricks with each other about how we can make it faster and what we liked, what we didn’t like. That kind of thing.”

they were piloting. This sense of “burn out” and the related need to complete tasks quickly and efficiently were the prominent themes in the [program]. Conversations centred on frustrations related to how long it was taking to complete CANS and how the adopted CANS items were a poor fit for their students. They shared tips or “tricks” on how to complete CANS more quickly. Staff came to see the adopted CANS as a measure that was not ideal for the agency because it was time consuming and a poor fit. They completed the adopted CANS to the best of their ability given their time constraints but did not have conversations to resolve some of their confusion about how some of the items that were a poor fit should be rated. There was a focus on efficiency as opposed to using the CANS in a way that would meaningfully inform their work. What emerged from this early phase was a shared understanding that the adopted CANS was not being completed consistently and that it was a poor fit. Additionally, staff likely gained an understanding of what needed to be in place in order to gather data that was more reflective of the program.

The realizations that emerged from the adopted CANS pilot launched staff into the more successful adapted CANS development and implementation phase.

In contrast to the earlier adopted CANS pilot phase, there were more staff in the department and fewer measures that staff were required to complete. The predominant themes in the department shifted to how they could best meet the needs of their students and move ahead as an agency. Conversations centred on how they could meet various clinical complexities, how they could make the best use of CANS, as well as organizational priorities such as strengthening treatment plans and

“So a lot of the conversation is how can we find a tool that can maybe help us narrow down the clients’ needs and prioritize them. So that’s what we use our assessment tools and CANS for.”

accreditation. Staff came to see the adapted CANS as a measure that was useful and that fit with organizational priorities. Staff had more time to discuss why and how they were completing the CANS. This led to a richer understanding amongst staff about why the CANS was important to the agency and a more consistent approach to administering the CANS.

What the comparison between these two phases highlights is that staff interactions and their understandings and use of tools are influenced by the predominant “themes” within the teams in which they work. These themes are in turn influenced by contextual factors such as organizational resources and demands on staff time.

Outcomes of the Implementation Process and Staff Participation

This section describes any outcomes that resulted from the implementation process itself, including outcomes associated with the participation of staff in the process. It is important to note that two staff members were centrally involved in both the adopted CANS pilot and the adapted CANS implementation. The other three staff members interviewed were less centrally involved or joined the [program] after the adapted CANS was developed. The staff members who were more centrally involved reported gaining more from the implementation process than those who were less involved.

One of the benefits of staff being involved in the implementation process was that they had the opportunity to learn from the challenges they encountered. By reflecting on and discussing the results of the adopted CANS pilot, staff gained insights into how they needed to change the CANS, and the way they administered and used it, in order to get

the most from the measure. Staff shared that the discussions they had, after they received the pilot results, about how they each completed the CANS led them to reach a consensus on how items were to be rated and increased inter-rater reliability. Furthermore, their input into the development of the adapted CANS led to the measure being a better fit for the agency.

“Had we not gone through those bumps we never would have created this tool in the first place. We would have just went along and done this tool and it would still be taking 45 minutes. So I see all of the bumps in the road to have been such a learning experience -that it’s all been so valuable and it’s done nothing but provide really positive results for the Centre and for the clients and for the staff.”

Several staff members indicated that they became more invested in the CANS through their involvement. Staff explained that this was in part due to learning more about the CANS and its implementation, such as learning the rationale behind the decision to implement the measure, the possibility of adapting it to better fit the agency’s needs, and the benefits of using the measure. Staff investment in the measure in turn led them to become further engaged in collaboratively identifying ways to make the CANS more meaningful to their work. Staff buy-in spread from one or two CANS champions to other staff in the [program]. Staff in other departments became informed about and invested in the measure after [program] staff began consulting them during the process of completing CANS assessments.

One staff member commented that the process helped her and other staff understand the importance of conducting assessments and collecting data on students’ progress. Staff also became more engaged in thinking about the data that they were collecting, and two indicated that they were looking forward to

“I am definitely seeing and understanding more about why we use the tools that we use. [...] I learned about how they can really help the agency grow and really help the clients. And I’ve seen that in action, which has been really neat.”

receiving the results from the most recent analysis of adapted CANS data.

Discussions during the development of the adapted CANS, enhanced staff members' shared understanding of the students and activities of the Org. 3. They gained a shared awareness of what needs their students typically present with and reached an agreement regarding what they needed to know about their students, which treatment

"Oh my goodness, [developing the adapted CANS] was professional education in itself. Right? Because we were discussing our girls at length. What were the kinds of things that we needed to know about them? What were the profiles of our girls? So what needed to be included, what needed to be abandoned. Did we need to... We needed for instance some self-regulation items but did we care as much about classroom behavior as we did mental health items?"

goals were greater priorities, and what approach they needed to take toward delivering services.

For example, one staff member indicated that the process helped emphasize collaboration with staff from other departments when conducting assessments and developing treatment plans.

Staff also noted that the process led to improved staff morale, confidence, and increased dedication to the Centre. Staff believed that development of the adapted CANS had increased the "visibility and credibility" of Org. 3 in the community. This left staff with a sense of pride for having been part of the process.

Some staff members commented that the process either reinforced or helped them develop attitudes or skills related to leading change. One staff member indicated that the process reinforced the importance of staff participation and of being flexible regarding the pacing of change. Another said that she learned about Ministry guidelines and how decisions are made at a systems level.

"I think it's really been a boost to morale in the department that we're really doing cool work and that other people are looking at us and going, 'Wow. You guys are doing that assessment in such a meaningful way.'"

The process also helped staff get to know each other better, build trust, and become more authentic in their communications. Staff reported that involving staff from other departments in completing CANS assessments had increased communication and collaboration across disciplines. One of the changes in program procedures that staff reported was that [program] staff now share students' treatment plans with staff from other departments.

Use of the adapted CANS at Org. 3

Org. 3 staff indicated that they found the adapted CANS useful, both within their direct work with students and for program-level purposes. Several noted that seeing that the adapted CANS informs their work was important for gaining their buy-in. In contrast, one staff member noted that the adopted CANS “didn’t feel valuable” because it was not useful within their day-to-day work.

[Program] staff administer the adapted CANS to students three times a year: first within 30 days after the start of the school year, then approximately six and nine months later. One staff member explained that the 30 day window grants staff time to get to know the students and develop some rapport before completing CANS assessments. At the time of this study, Org. 3 staff were not sharing the raw adapted CANS assessment results with students, as they believed that some students might feel overwhelmed by seeing all of their needs identified during the initial stages of their care. Staff explained that ensuring that students did not feel triggered or overwhelmed was particularly important to them given the value they place on providing trauma-informed care. Staff were continuing to discuss whether directly sharing the adapted CANS results with

students would be a better approach after receiving some feedback from [the CANS developer] about this issue.

Although the raw adapted CANS results are not shared with students, staff use the

“[The CANS] is kind of a good capture of a moment, right? It’s like taking a picture of that client and where are you at? What are you needing? What are you struggling with? And where can we go?”

assessments to prioritize students’ needs and identify strengths that can help students work toward addressing their needs. Several staff noted that completing the adapted CANS allows them to dedicate some time to focusing on each

student and the comprehensiveness of the tool helps them assess areas that they would have missed otherwise. Two staff members added that the format of the CANS and the way it is administered at Org. 3 help facilitate its use. For example, the four point rating scale of the CANS and the corresponding “action levels” help staff to easily identify needs that require immediate intervention.

Priority needs and relevant strengths from the CANS assessment are then used to identify goals and develop treatment plans with students. The treatment plans are

discussed and shared with students and staff from the three departments. Staff indicated that sharing the treatment plan facilitates conversation and helps the student and various staff involved in her care discuss differences in perspective and reach a consensus. They also

“The child care worker, the support worker, the educator, and the girls sit together and talk about what do I see their needs are. And I might be right off base and we’ll talk about that; and maybe this isn’t something you want to work on right now and if you don’t let’s find something else but it does start the discussion and it does help us understand the girls because we might see something as a need that they don’t see at all.”

mentioned that developing treatment plans is important for ensuring that they engage in proactive care versus ongoing crisis management. The process of developing treatment plans collaboratively with students sometimes also helps reveal information about

students that is used to refine the CANS assessments. Furthermore, staff indicated that completing the adapted CANS holds them accountable to their students, the community, and their funders.

At a program level, the adapted CANS is used to conduct program evaluation and guide programming. The CANS provides aggregate data on students' needs so that programming can be geared to meet those needs. Staff also reported that the CANS helps highlight the treatment services they provide, and that gathering data using the CANS is a step forward in terms of becoming an accredited mental health agency and obtaining additional funding.

Staff also reported some challenges and concerns related to using the CANS. Their primary challenge was the time it took them to complete CANS assessments.

However, several staff noted that they became more efficient with administering the

“So I would say it was more time consuming at the beginning whereas now I can be a lot more efficient.”

CANS as they became more familiar with the tool and the students. Staff also had some lingering concerns about the subjectivity of the CANS and inter-rater reliability. They

believed it was important to continue their efforts at ensuring that staff all understand how to complete the CANS consistently. Staff commented that while the language of the adapted CANS was simple and clear to the staff, some phrases were difficult for youth to understand (e.g., “resiliency”). Consequently, staff had to explain the assessment results in simpler language when they were discussing them with the youth.

Staff reported difficulties with accurately rating students' needs at intake. They explained that students often have difficulty trusting staff when they start at Org. 3 due to

fears about losing custody of their child. This leads to an under-reporting and under-rating of needs at intake. By the second CANS assessment, students develop some rapport with staff and this leads them to reveal needs that they

“Our girls come into the Centre and they have big issues with trust, so often the first CANS is not necessarily a really good reflection of what their need is because until they develop that therapeutic relationship we’re really not finding out the depth of some of their needs. So I would say our second CANS is more illustrative of what the real needs are. So we have a dip. We have like a therapeutic dip in the second CANS because we’re finding out what the straight goods are.”

had previously under-reported. Furthermore, staff have had more opportunities to observe and get to know students, which allows them to have a better sense of the students’ needs. Hence, when assessment data is aggregated, it appears as though students’ needs increase between the first and second assessment. Staff indicated that they believe the first CANS assessment will never be a completely accurate reflection of students’ needs. They used this initial assessment to tackle some of the students’ most urgent and apparent needs, the “low hanging fruit”, with the understanding that they would be able to “drill down” and get a more elaborate understanding of students’ needs by the second assessment. Staff also had decided to compare students’ ratings on the second and third CANS assessments, as opposed to the first and third assessments, to assess the extent of students’ progress during the school year.

Conclusion

In conclusion, this case study highlights the many interacting influences that together led to the successful development and implementation of the adapted CANS. The study shows how the implementation context influenced staff interactions and the way they made sense of the new assessment measure. It also outlines the benefits of staff

involvement in the implementation process and in the discussions about how and why the measure is being used.

Implementing the GAIN and CANS at Org. 4: Case Summary

March 28, 2016

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Executive Summary

Study Objectives and Method. This report describes how Org. 4 staff rolled out or piloted the Global Appraisal of Individual Needs (GAIN) tools and the Child and Adolescent Needs and Strengths (CANS) measure. It also outlines the context in which these tools were implemented or piloted, as well as the outcomes or consequences of these efforts. The findings presented in this report are based on six individual interviews with Org. 4 staff and a review of relevant internal documents. This study was part of a larger study examining the implementation of outcome monitoring measures in four community-based child and/or youth mental health agencies.

Implementation Background and Context. Org. 4 has implemented various measures to evaluate its different programs and inform quality improvement efforts. The GAIN Short Screener (GAIN-SS) was implemented in 2010 to evaluate the school-based program and was subsequently implemented agency-wide. In 2012, Org. 4 participated in a pilot project that was being run through an external agency to try out the longer versions of the GAIN (e.g., the GAIN-Q and GAIN-I). In 2013, the CANS was used to evaluate the Org. 4 program based out of [offsite agency]. Subsequently, in 2014, the CANS was piloted in the school-based program to consider the possibility of expanding its use to this program.

Staff described several contextual factors that influenced the implementation of these measures. Factors that facilitated the process included: (1) a system-wide trend toward increased accountability, (2) a push to adopt common assessment measures to increase integration of care and help with system planning, (3) value placed on program

evaluation at Org. 4 and resources dedicated to evaluation activities (e.g., data team), (4) organizational openness toward change and innovation, (5) fit of some measures' characteristics with the school-based program, and (6) staff members' interest and investment in evaluation activities. Factors that impeded implementation included: (1) poor fit of some measures' characteristics with the agency's unique needs, (2) limited resources or support for evaluation activities in some contexts, (3) working offsite and separate from other colleagues, (4) working within school settings, and (5) some staff members' lack of interest or resistance toward evaluation activities.

Implementation Process. The implementation of the GAIN and CANS tools were similar in several respects: they involved initial decision making and planning, support from external agencies, training, obtaining feedback from staff on their experiences with administering the measures, and ongoing activities to support staff members' administration of the measures. Frontline and middle-management staff participated in decision making related to the implementation of these tools to varying extents, depending on the specific evaluation project in which the measures were used. Furthermore, the extent to which they understood the rationale behind the use of the measures also varied. When possible, staff modified how the tools were administered to better fit the needs of the agency. However, this was not always possible and at times staff felt that their concerns about some measures were not addressed. According to staff, some staff members actively or passively resisted the implementation of measures. However, resistance toward measures that were used long-term gradually decreased with time.

Implementation Outcomes. Staff reported that the process of putting these measures in place had both negative and positive consequences. Negative consequences reported by staff included: feelings of frustration, lack of buy-in to use measures or a loss of motivation, excessive meeting time spent on discussing the questionnaires, burnout due to the demands of completing measures, and low quality or missing data. Positive consequences reported by staff included: learning and reflection, greater openness toward assessment measures and evaluation, increased capacity for completing evaluations, improved staff morale, and strengthened partnerships with other agencies.

GAIN-SS was put into use agency-wide and staff reported that they administered it on a regular basis. However, the longer versions of the GAIN were not put into use following the pilot because they were perceived to be impractical. The CANS was used for the evaluation of addiction services provided through [offsite agency] and there were thoughts about expanding its use to other programs. In general, staff saw some benefits to using these measures. They commented that the measures allowed them to complete more comprehensive assessments, and that they were useful for screening clients, treatment planning, and monitoring clients' progress. However, they also expressed concerns about the GAIN-SS interfering with rapport, being deficit focused, and the data not being accurate or trustworthy. Furthermore, they stated that, in general, setting time aside for completing and scoring questionnaires was a challenge given how busy they were and the urgent, serious nature of their clients' presenting problems.

Introduction

Org. 4 is a community-based charitable organization based in XXXXX that provides treatment and support to adolescents and adults struggling with addiction. Org. 4 provides a wide range of services to varied groups of individuals and works in partnership with several community agencies. An example of Org. 4's services includes an extensive school-based program in which Org. 4 counsellors work out of high schools to support adolescents experiencing difficulties related to their own or a family member's addiction. Several Org. 4 counsellors also provide addiction treatment services out of [offsite agency], a community-based agency serving young pregnant women, young parents, and their infants.

Org. 4 has been committed to monitoring and assessing its services and using data to inform quality improvement efforts since its formation. Org. 4 has implemented or piloted a number of measures to achieve these objectives: the Global Appraisal of Individual Needs- Short Screener Modified (GAIN-SS) was implemented agency-wide starting 2010. The longer, more comprehensive versions of the GAIN, such as the GAIN-Q and GAIN-I, were piloted in 2012. Furthermore, the Child and Adolescent Needs and Strengths (CANS) measure was implemented at [offsite agency] and piloted in the school-based program in 2013 and 2014, respectively.

This study was conducted to examine how Org. 4 went about piloting or rolling out these measures within the agency. The study is part of a larger study looking at four community-based agencies serving children and/or adolescents and how they rolled out similar measures. Information about Org. 4's implementation of the GAIN and CANS

was gathered through six individual face-to-face interviews with Org. 4 staff members and a review of the agency website and relevant agency documents. The staff member participants held varying roles within the agency (e.g., frontline to management, and from different programs) and had been employed at Org. 4 between 2 and 28 years. Interviews were audio-recorded and transcribed verbatim. The transcripts were then analyzed to identify themes across participants.

The current report summarizes the findings from this study, including: the steps that Org. 4 staff took to pilot or roll out the measures, the outcomes of these efforts, and the factors that helped or hindered staff from making the best use of these measures.

Background

According to staff members, Org. 4 has had a long history of evaluating its services. The GAIN-SS was first implemented to evaluate the school-based program in 2010. One motivation that drove this evaluation was to have evidence of the school-based program's effectiveness to support applications for additional funding at a time when the program was expanding.

In 2012, Org. 4 volunteered to take part in a pilot project that was being run through the [external agency]. The pilot was part of the [provincial initiative] and its objective was to identify and obtain feedback on an assessment and outcome measure that could be used by addiction treatment agencies across Ontario. The [external agency] team selected the GAIN family of tools as the most appropriate set of measures. Org. 4

"I think the priority was to develop a way of measuring the outcomes for this new school-based program because they were expanding [...] into all the schools. [...] So I think Org. 4 really wanted to find a way to evaluate and measure the student outcomes so they could take it back to the funders and say, see, it is worth the money because these are the outcomes."

agreed to pilot the measures and provide feedback to the [external agency] organizing the pilot.

A different evaluation project led to the implementation of the CANS. In 2013, Org. 4 partnered with [offsite agency] and another community-based agency serving pregnant and parenting adolescents to conduct an evaluation of their services, with support from the XXXXX. Given that the CANS was already in use at the other community-based agency, it was selected as the outcome measure of choice for the evaluation. Org. 4 staff working out of [offsite agency] were then trained to administer the measure to clients of [offsite agency] services.

Following the use of CANS at [offsite agency], Org. 4 staff began piloting the CANS in the school-based program to see if it could be a useful tool within that context. They were conducting this pilot at the time of this study.

Context

This section will outline the context in which the GAIN and CANS tools were piloted or implemented. The contextual factors that played a role in how staff responded to these measures have been organized under the following three categories: External Influences, Organizational Characteristics, and Staff Characteristics.

“I think there was a long time where the assumption was counsellors were doing their job, and there wasn’t a whole lot of attention paid to how that was being done, or what was being done. For the most part, the schools that had the service were happy with the service. That was really the benchmark. And now I think that there’s more of an emphasis on having numbers that we can point to, to say this is what’s happening.”

External Influences. External influences refer to influences from the larger or external system, context, or environment in which Org. 4 operates. Staff described several external influences that contributed to Org. 4 adopting program evaluation

practices and to how they responded to specific measures. First, several staff members described a shift in the addiction treatment field toward greater accountability to funders and the public regarding how services were delivered and what outcomes the services achieved. An “expectation” had emerged for agencies to evaluate their services. Although staff described Org. 4 as being proactive with respect to conducting program evaluation, implementation of the measures occurred within the context of these shifts in funders’ expectations and mandates.

The emphasis on program evaluation within the larger system meant that more resources were available for agencies conducting evaluation and that evaluation led to benefits such as funding. Org. 4 was able to access supports and resources for program evaluation through sources such as the XXXXX and by collaborating with other community agencies on joint evaluation projects.

Second, there was a need within the system for assessment and outcome measures that could be used by all addiction treatment agencies across Ontario. One staff member explained that the system was “fragmented” and a frequent complaint by clients was that they were required to undergo a different assessment process at each agency. Thus, there was a push for agencies to adopt common assessment measures in order to better integrate services. There was also a need for “common data sets, to get a profile of all the clients in Eastern Ontario... to see what was going on.” Hence, as one staff member recalled, another primary reason the GAIN-SS was implemented was for system planning purposes.

Given the emphasis on using shared measures, one factor that influenced the choice of assessment measures was how widely the measure was used by other agencies.

Several staff members predicted that some version of the GAIN tool would be mandated for all addiction treatment agencies in the coming year, and therefore thought that investing in the implementation of the GAIN was a good idea. Other staff commented on how the use of the CANS by other agencies, in particular partner agencies, and its perceived popularity was one factor that led to the selection or consideration of the CANS for some evaluation activities.

“[Another staff member had mentioned that the CANS] is becoming very popular. And so if Org. 4 was an agency that was using that tool it would be a good thing. It holds quite a bit of clout.”

These mandates or expectations and the efforts to implement a shared or common assessment measure influenced how evaluations were conducted at Org. 4. Some staff members had the opinion that at times these influences resulted in evaluation practices that were not the best fit for the organization. For example, one staff member, while supportive of efforts to use a shared assessment measure, was concerned that such measures would inevitably be either too general or include questions that would not be relevant to Org. 4. In fact, one of the motivations behind the agency decision to take part in the [external agency] pilot of GAIN tools was to ensure that the agency’s needs were taken into consideration so that the measure that was chosen for use system-wide would be appropriate for the agency.

Another staff member believed that the quantitative measures they used sometimes did not measure the areas that she worked on with youth during counseling sessions, or that they did not capture the small changes that the youths were capable of

making (e.g., attending school three days a week as opposed to once a week). She understood that having “numbers” was important for “funding purposes” but believed that qualitative evaluation methods could better capture the difference that their program made. Thus, attempting to meet the expectations of funders related to program evaluation placed some constraints on the types of measures they chose.

Several staff members indicated that the stigma associated with addictions, and public perceptions related to how addictions should be treated were other influences on the agency that motivated or shaped the agency’s evaluation efforts. First, several staff members believed that because of the stigma, they needed to have more convincing evidence of the organization’s effectiveness to obtain funding, compared to agencies targeting other difficulties. This increased staff members’ motivation to evaluate their services using methods that would be convincing to funders. Second, some staff were motivated to collect and use data to advocate for individuals with addictions and correct misperceptions. Third, some managers were motivated to use data on their programs’ effectiveness to provide staff with a sense that they were making a difference, and reduce staff feelings of helplessness and burnout. One senior manager explained that the agency’s approach to treating addictions (i.e., working with family members of individuals with addictions, or not taking an “abstinence only” approach) was different from the approach that most addictions treatment agencies took. Thus, staff were like “rogues in the field” and received increased criticism from their colleagues. The senior manager wanted to use data to counter these criticisms and reassure staff that their work was effective.

Organizational Factors. This section describes factors related to the agency that influenced program evaluation activities and choice of measures.

Characteristics of Org. 4. Org. 4's defining characteristics were consistently

"Our approach is to offer help to anyone, any individual, group, organization, community, population that is in distress from addiction."

described by staff as being the comprehensiveness and flexibility of its services. Staff explained that Org. 4 offers diverse services to meet varied client needs and serves a wide range of individuals affected by addiction. Furthermore, these services are offered in a

flexible and "fluid" manner that allow, for example, clients to transition from one service to another as their needs change.

Org. 4 was also described as "progressive", "proactive", and "dynamic"; an agency in which there is "a real striving to be at the front and to have excellence". For example, staff indicated that Org. 4 stays abreast of the latest practices and innovations in the field and is open to trying out these practices to see if they can be helpful to their clientele. One staff member stated that this was likely one of the reasons that Org. 4 volunteered to take part in the [external agency] pilot of GAIN tools. Another example of how Org. 4 is proactive, according to two staff members, is the use of program data to identify emerging issues or needs within their target population, and their development of programming to address these needs. Org. 4 was also described by several staff members as being very "research oriented" and valuing program evaluation. They added that as a result, the agency was searching for measures that would accurately represent the outcomes of their services.

“Organization Within Transition”. Several staff members highlighted the many changes that were occurring at Org. 4: change in managers and management structure, changes in regulations around taking vacation and working overtime, staff turnover, and changes in file management processes. In general, staff commented that Org. 4 had started out as a small, grassroots agency but had grown over the years to a much larger size, from 8 to 63 staff members. Several staff members identified that the growing size of the agency had resulted in moving toward standardizing the organization’s processes. It had also made it difficult for staff to make agency decisions in the “informal conversational way” that they were accustomed to during the early years. Furthermore, the responsibility for directing and managing initiatives rested less with the ED and more with managers and program directors. Additionally, with the increased numbers of “outreach” staff who worked offsite, staff had become less connected and more distant.

“The larger an organization is, the more difficult it is to do things your own way.”

Organizational Priorities. When asked about current areas of priority for the organization, staff listed a number of different areas that were frequently the focus of their conversations and efforts. One was providing the best care for clients. Another was “improving Org. 4 as an employer”: maintaining staff long term, supporting staff

"I would say the priorities were always just best care for our clients."

members’ professional development, and ensuring that staff have sufficient training and meet current professional standards. Staff shared that the school-based program placed an emphasis on prevention and that a recent priority in the program was to move away from providing

long-term counseling toward short-term interventions. Another focus of the program was forming partnerships and learning to work effectively with other community agencies.

Factors that Influenced Outcome Measurement. Staff spoke to the uniqueness of the school-based program and reported that characteristics of their clientele and their work necessitated that the assessment measure and approach they used have certain features. The majority of staff members who were interviewed described the difficulties with and importance of establishing rapport with youth. They explained that given how difficult it was to get youth to trust them and to engage in counseling, the measures they used had to be quick to administer and relevant to the reasons the youth were seeking help. It was necessary for the assessment approach to be client-centred, because starting with and focusing on what was important to clients was an effective way to engage them in the process.

“[Youth] don't want to sit through a long series of assessments that in particular ask them questions that have nothing to do with what they're asking for help with.”

Staff also indicated that their clients have a diverse range of needs, and that these needs are typically serious and urgent. Given the value that the agency places on providing comprehensive services, it was important to the staff to use a measure that assessed different domains of difficulties as opposed to solely focusing on difficulties related to addiction. Another staff member stated that given the frequency of clients who have had past abuse experiences, it was important for the assessment approach to be “trauma-informed” or for questions about past abuse to be asked with sensitivity.

Resources and Constraints Relevant to Implementation of Measures. Staff noted that the presence of certain resources at Org. 4 dedicated to evaluation helped facilitate use of outcome monitoring measures. For example, staff commented that having an in-house data team allowed them to complete internal evaluation work. Several shared that having the staff who conducted the evaluation work nearby allowed them to drop by their

office and ask questions they had related to data collection or analysis, or to have conversations about future research or program evaluation projects. In contrast, some staff members spoke about how limitations in resources and organizational support within certain contexts (e.g., shortages in staff members trained to administer a particular measure) made administration and use of some measures challenging.

Several staff members also commented on how working offsite and within school settings impacted administration of outcome monitoring measures. Staff who worked off-site indicated that they had fewer opportunities to receive support, have conversations with their colleagues related to the implementation of measures, or be part of the implementation discussions as the process evolved. One staff member spoke about how being the only individual who piloted a measure at her site made her feel like she was a little behind, or lacking the most recent information, compared to those who piloted the measure as a team at a different site. However, some staff members also share an office at Org. 4 and one stated that this provided opportunities for many informal conversations about assessment measures.

Some staff members spoke about other challenges that working within a school setting presented. Specifically, one staff member explained that fire drills, the website timing out, and school staff dropping in to consult made it difficult for them to complete administrative tasks such as completing assessment forms. Another staff member indicated that obtaining information from other school staff involved in a student's care in order to complete the CANS was time consuming in schools that did not hold multi-disciplinary meetings.

Staff Characteristics. This section outlines factors relevant to Org. 4 staff that influenced the implementation of measures.

Staff Members' Dedication. Staff described a strong commitment to Org. 4 and the clients they served. They were proud of the organization and believed that it had “quite a bit of impact” within the community. Some were very engaged in organizational activities and in advocating for individuals with addiction within the community at large. Additionally, for some staff members, helping individuals with addiction was more than a professional role they played because they themselves had had previous struggles with addiction. This personal experience strengthened their commitment to making a difference in the lives of those who were currently impacted by addiction.

Staff members' interest and investment in different initiatives helped fuel various changes within the organization. For example, a senior manager indicated that the staff members who participated in piloting the measures had an interest in the tools and the pilot process, and that this helped facilitate the implementation. Another staff member described how the efforts to develop programming for adolescents with eating disorders occurred “organically” because there were several staff members who had interest in eating disorders and acted as “change agents” within the agency. Additionally, staff described other characteristics such as curiosity, love for learning, and a desire to do things well that contributed to their full engagement in piloting the measures.

Attitudes Toward Program Evaluation. All staff members who were interviewed valued program evaluation activities and made reference to the multiple purposes that it served for them. However, they indicated that other staff members had mixed attitudes.

One stated that most staff were frustrated by data collection activities and did not find “tallying numbers” the most exciting part of their work. Two indicated that the staff members who had been at the agency for longer periods of time, and who had experienced the greatest extent of change, were often the ones who struggled the most with further changes.

Professional and Personal Backgrounds. Several staff members commented on how their professional and personal backgrounds had played a role in how they approached the implementation of outcome monitoring measures. Most frequently, staff indicated that their educational backgrounds had led them to value evaluation. Others spoke of how their educational and professional backgrounds had influenced how they conducted evaluation activities. For example, one staff member described initially taking a very “academic approach” to designing evaluation studies as a result of her previous training. Another stated that her previous teaching experience helped her when she was training other staff on the administration of a measure. Furthermore, some staff members had previous experiences with the measures, which influenced their attitudes toward the measures.

How the Measures Were Piloted or Implemented at Org. 4

This section will outline the steps that were taken to pilot or implement the GAIN or CANS tools at Org. 4. The similarities and differences in the ways in which the agency approached the implementation of these tools will also be described.

Decision Making and Planning Activities. According to staff, the agency went about identifying and planning out the implementation of the GAIN and CANS tools in

different ways. Some recalled that the decision to implement the GAIN-SS was made by managers because they felt that the tool fit the needs of the agency. Similarly, the decision to participate in the pilot of the GAIN family of tools was made by managers because they believed that it was important for Org. 4 to have a voice in the province's efforts to identify a common tool for use by addiction treatment agencies.

In comparison, a more participatory approach was taken to identifying the CANS and planning out the implementation or pilot. The decision to evaluate Org. 4's program at [offsite agency] was made after a senior manager from a different community-based agency approached Org. 4 and asked for support to conduct an evaluation of their agency. This resulted in a partnership to jointly evaluate programs for pregnant and parenting youth at [offsite agency] and the other agency. The measures that were used in the evaluation, including the CANS, were selected through discussions with managers and frontline staff of the two agencies, taking into consideration the tools that were available, mandates related to outcome monitoring, and what tools the agencies were using already.

Both the CANS implementation at [offsite agency] and the pilot of the GAIN family of tools were completed with support from or in partnership with external agencies, namely, the XXXXX and XXXXX. For the evaluation at [offsite agency], the agencies completed some preliminary planning (e.g., developed program logic models and an evaluation framework) prior to applying for support through the XXXX. The XXXX then provided some support to the agencies to help them "keep on track" with their evaluation plan and to enhance their capacity for conducting and using evaluation. One staff member indicated that in comparison with the GAIN pilot, the evaluation using

the adapted CANS was largely driven by the agencies, as opposed to the external partner, and “much more geared toward increasing [their] capacity to do evaluation”.

For the CANS pilot, management sent out an email asking whether staff were interested in piloting the CANS within the schools. Interested staff then met in order to plan out the pilot and decide on implementation details. For example, they discussed potential barriers to using the tool, how it would be used within the schools, and when to complete the first CANS assessment. Staff set a goal to complete five CANS assessments each and meet again to discuss their experiences.

Training. Staff reported that they were trained on how to administer the tools, and in some cases, on how to train others to administer the tools, prior to their use of the measures. Staff received a half-day training on the administration of the GAIN-SS by an external consultant. Some staff also received train-the-trainer training and were responsible for training new staff and supporting staff members’ administration of the GAIN-SS following the training.

For the pilot of the GAIN family of tools, three staff members received intensive train-the trainer training in Illinois on all aspects of administering the GAIN, including Motivational Interviewing. Following the training, they each had to train one or two other staff members in order to become certified as trainers. Staff from [external agency] also came to Org. 4 and provided two days of training on the protocols for administering the GAIN family of tools within the context of the pilot study.

Staff found both sets of training helpful. In particular, they noted that they found it beneficial to practice the administration of the GAIN through role plays during the

training and to receive feedback. One staff member who had attended the training in Illinois added that she found it helpful that the trainers were very knowledgeable about the GAIN measures, that they could respond to questions, and that they provided feedback in a positive and constructive manner. Staff also noted that they found some aspects of the training unhelpful, including: initially feeling overwhelmed with information during the GAIN training in Illinois, and not receiving much information on the clinical use of the GAIN-SS during the half-day GAIN-SS training.

Staff completed a mix of in-person and online training for the CANS. They commented that they found the in-person training with [the CANS developer] beneficial but that the online training was less helpful and lacked some directions related to how to elicit the necessary information to complete the tool (e.g., a script demonstrating how the conversation would be structured).

Certification. In order to become certified to administer the measures, staff had to meet various requirements. For the GAIN family of tools, staff were asked to audio-record themselves as they administered the GAIN measure to a client, and then send in the recording as well as the score form to the trainers. To become certified, staff had to meet a certain level of reliability. The trainers also provided feedback on staff members' administration of the GAIN tools. Similarly, staff were required to complete a reliability certification test following the CANS training and achieve a level of reliability in order to become certified. They were required to complete this test on a yearly basis to maintain their certification.

Ongoing Supports with Use of the Tools. Staff received support on the administration of all tools on an ongoing basis, through formal or informal means, from trainers, managers, or other colleagues. For example, the external trainers made themselves available to answer staff questions about the GAIN family of tools via telephone or email. During the implementation of the CANS at [offsite agency], Org. 4 staff met with staff from the partner organization who were also using the CANS to discuss how they were completing the CANS forms and ensure they were all taking a consistent approach to completing the assessments.

Other ongoing activities to support implementation included: sharing resource material on the tools (e.g., manual and website for GAIN-SS), creating a scoring sheet for the GAIN-SS to ensure that staff were scoring the tool accurately and following up with flagged issues, monitoring staff members' completion of the tools and following up with staff who had not done so, and analyzing data that was gathered using the tools and sharing findings with staff.

Obtaining Feedback. During the implementation of all measures, mechanisms were in place for soliciting staff members' feedback about the tools. For example, during the pilot of the GAIN family of tools, staff who participated in the pilot were asked to maintain a log of their experiences with administering the GAIN tools. The data team manager then collected this feedback and relayed it to the [external agency] in charge of the pilot. Following the completion of the pilot study, [external agency] staff provided a report with the findings of the pilot and visited Org. 4 to gather additional feedback from staff about their experiences with administering the measures. During the CANS pilot, the process for providing feedback was more collaborative. Staff who had participated in

the pilot discussed their experiences with administering the CANS amongst each other and with the data team manager. They shared the challenges they had encountered and whether these can be addressed.

Informal Aspects of Implementation

This section outlines the informal or unplanned aspects of the implementation of the various tools, such as: staff participation, communication, and staff reactions to the tools.

Participation. Staff expressed that, in general, they were encouraged to participate in various agency initiatives and that their input and feedback about agency decisions was valued. For example, one staff member indicated that they were each encouraged to take on their own project within the agency, such as helping gather information on different assessment tools or working toward developing programming for treating co-morbid eating disorders.

Staff members also expressed that the degree to which they had control over evaluation initiatives varied depending on the project. Within this study, the word “control” means the ability to modify aspects of the tool or its administration, or the ability to decide on the evaluation framework. For example, staff had a low level of control during the pilot of the GAIN family of tools because the pilot was organized and led by an external agency and therefore they were required to follow the protocols outlined by [external agency]. Similarly, frontline staff members also reported having a low level of control over the implementation of the GAIN-SS within the school-based program. In this case, the implementation was more of a manager-led initiative and thus

middle and senior managers had relatively more control compared to frontline staff members.

In comparison, staff members collectively had a moderate level of control over the implementation of the adapted CANS within [offsite agency]. They had some input into the choice of the CANS, although their decision-making power was somewhat limited because they had to select the measure in collaboration with other partner agencies. Additionally, although one staff member from [offsite agency] participated in the development of the adapted CANS, her involvement was limited because she worked separately from other staff collaborating on the project.

Staff reported having a high level of control over other evaluation activities such as evaluations in small or adult/group programs, and the CANS pilot within the school-based program. One staff member explained that in such cases, the projects are organized and run from within the agency with the help of the data team and they have more flexibility because there is no pressure to conform to the requirements of a funding body. For example, one staff member indicated that during the CANS pilot in the school-based program, staff input was genuinely solicited to determine whether the CANS was a good fit for the program and to decide on administration details.

"There was a lot of pushback when it was first introduced. A lot of us really felt that the nature of the client group that we have, being young, asking them to fill in a whole series of questionnaires, especially very early on after meeting us, just felt that rather than building rapport we were placing a corkboard between us so that we could get our questionnaires filled in."

Staff members' limited control in certain evaluation projects restricted their ability to respond to concerns that were raised or issues that staff experienced. Several staff members commented that while staff had lengthy discussions about all the concerns they had about the GAIN-SS,

management continued to request that the tool be completed. While some changes were made to address some staff concerns (e.g. creating a score form), concerns about the overall administration of the tool were not addressed. Similarly, staff reported that while their feedback about the GAIN family of tools was taken into consideration by the [external agency] organizing the pilot, the team did not reconsider the feasibility of the tool within community-based settings.

Despite these restrictions on modifying administration procedures and evaluation processes, staff made modifications based on their context. For example, they decided that they would only pilot the GAIN tools on clients who were stable and who had been seeing their counsellor for some time. Another example is that they did not complete the CANS form with the client present and found this feature (i.e., being able to complete the form independently) as one of the strengths of the tool. Staff indicated that this meant that youth would not have to sit through a lengthy administration of a tool, thus preventing issues related to the development of rapport.

"Using new, raw kids that might leave after your second interview was not useful to anyone."

Additionally, staff reported that at times staff actively or passively resisted administering the measures or participating in evaluation processes. For example, staff reported that some staff members were very vocal about their concerns in staff meetings, and that some may have passively resisted the measures by not completing the assessments or providing minimal feedback when asked. Staff attributed this resistance to multiple factors, including: being overburdened by administrative tasks, counsellors placing greater value on addressing clients' difficulties and seeing evaluation activities as "time away from clients", and having limited agency in some evaluation projects.

Communication. The extent to which staff felt informed about the rationale behind evaluation activities and the extent to which they were engaged in conversations about evaluation also varied. Some reported that the data team discussed evaluation activities with staff on a regular basis and was available to staff for more informal discussions. One staff member indicated that due to this, she had understood the importance of evaluating programs to ensure that they are effective. Furthermore, staff indicated that the availability of the data team “on site” allowed them to drop by and ask questions or explore possibilities related to future evaluation activities. Staff also indicated that evaluation results are routinely presented to staff during meetings or published in reports that are shared with staff, although some were unsure about how many staff members read these reports. In addition to the data team, one staff member commented that the Executive Director also communicated the rationale behind using outcome measures with staff. She found that this was particularly helpful in increasing staff acceptance of the tools.

“There’s maybe just a clearer explanation that comes from [the Executive Director]. We get his perspective from the person who does the bulk of the grant proposal writing. This is what he needs from us so that he can continue to request the funding. Then there’s a deeper level of understanding of the bigger picture of the organization.”

Other staff indicated that they had a general idea about why they were required to complete different assessment measures, however, they were not sure whether their

understanding was accurate. Similarly, some staff were unsure about how the data was used. Some staff attributed this to staff working out of different locations and having limited time to meet and have discussions with their

“I know [GAIN-SS data is] being collected, I’m not sure collected for what.”

colleagues.

Changes in Staff Reactions Over Time. Staff members recalled that staff reactions toward tools that were used over a longer term within the agency (e.g., GAIN-SS) gradually changed over time. They explained that this was in part because staff gradually learned about the benefits of evaluation as they saw or heard about the outcomes of different evaluation activities. Others felt that the resistance decreased after staff were told that they were required to administer the measures and given deadlines by which the tools had to be completed. Furthermore, one staff member noted that acceptance of the measures increased as new staff joined the agency, because they were required to complete it from the beginning of their role at Org. 4.

Outcomes of Piloting or Implementing Measures

Staff reported that the process of piloting or implementing the different measures led to a range of outcomes or consequences. In general, staff reported positive outcomes. However, they also noted that they had negative experiences during these processes in some instances or that they did not benefit in any significant way from the processes. For example, one staff member believed that staff were less invested and engaged in the pilot of GAIN tools because the project was initiated and managed by an external agency. She

sensed that staff did not have the same level of ownership that they

would normally have with internal evaluation projects.

Several staff members also reported experiencing frustration in some cases. One staff member said that some staff

“There were times, because we were having so much discussion, it felt we had some say in the decision. But then to ultimately not really have any say in the decision may have worked well for some people, but I think for others it really was frustrating.”

felt frustrated when their feedback was not taken into account in a meaningful way.

Furthermore, staff reported that these discussions about measures were lengthy and took up substantial time during staff meetings. One believed that the discussions may have amplified staff concerns and anxiety about the measures because they became exposed to the concerns that other staff had. However, another staff member indicated that she felt validated after realizing that the challenges she was running up against were commonly experienced by other staff.

One staff member noted that administering assessment tools and collecting data was an added demand on staff time. Another staff member indicated that not having the adequate supports in place for some evaluation activities may have interfered with completing the assessments or the quality of data collection.

One staff member discussed the pitfalls of administering a measure in isolation and without the support of a team of colleagues. She believed that measures should be administered by staff “across the board or not at all”. She explained that there are many benefits to working within a team when implementing measures, such as exchanging ideas or keeping each other motivated.

While staff reported the above mentioned negative experiences resulting from pilots or implementations of measures, they also reported different ways in which they benefited from these processes. These reported benefits are described below.

“If you feel like you're off track, if you're falling behind, or you're not really understanding, or maybe you're just losing motivation in it because you're not really seeing the purpose anymore, or nothing seems to be happening. When you're part of a team you can talk about it, you can discuss it, you can trade off ideas, you can do lots of things. But when you're a lone person doing it, it can be isolating.”

Learning and Reflection. Staff indicated that they learned various skills or gained knowledge as a result of taking part in the pilot or implementation of different measures. Several reported that through the training, conversations with colleagues, and practice with the administration of the tools, they learned how to administer and interpret the GAIN and CANS tools. In particular, one noted that participating in the development of the CANS helped her know the measure “inside and out” and to understand why each item was included. She said that although she was trained on the GAIN-SS, she did not have as thorough an understanding of that tool because she was not involved in its development or refinement.

Other staff reported that being trained on the administration and use of these measures helped make them aware of the different domains that are important to assess or the different questions that are important to ask clients.

“[Learning about the GAIN-Q] gives me an idea of what they feel are the important questions or the information that they feel is important to gather. And it gives me an idea of where am I on that? Do I think this is important? Do I think something is missing? So that made me think about that whereas maybe if I hadn’t done that training I wouldn’t have thought about that at all. Wouldn’t even have occurred to me.”

Additionally, two staff members commented that receiving or providing training made them reflect on their own assessment practices.

In addition to learning about the tools and reflecting on assessment practices, staff also reported that they gained other skills such as: how to engage staff in evaluation processes, how to respond to staff questions

and concerns, how to discuss clients’ progress in therapy with clients, and how to provide training.

Openness Toward Assessment Measures and Evaluation. Another benefit that staff described related to their involvement in piloting or implementing measures was increased staff openness toward evaluation activities. For example, one staff member indicated that taking part in the CANS pilot and being informed about why the pilot was being completed had increased her buy-in. More generally, several staff members commented that more and more staff members were getting “on board” with evaluation activities as they heard about the purpose of these activities or saw the benefits of these activities. For example, one staff member commented that as staff saw the success that some programs had with evaluation, they became increasingly interested in evaluation and their resistance toward these activities decreased.

Staff also indicated that learning about structured assessment tools exposed them to the benefits of conducting assessments in a structured format. One staff member believed that staff may have been biased against structured assessments and thus this exposure may have provided an opportunity for them to question some of their attitudes. For example, one staff member indicated that after administering the GAIN-SS, she realized that she had previously not been assessing important areas, such as eating disorders.

“It just really pointed out to me that I might have been ignoring or avoiding certain areas of discussion with my clients that maybe I was less comfortable in [...] Unless there was some sort of cry for help in front of me, then I wasn’t exploring proactively into certain areas.”

Capacity to do Evaluation. One staff member reported that the agency’s capacity for conducting evaluation increased as a result of piloting or implementing the GAIN and CANS measures. She added that through these processes, Org. 4 has moved toward developing and fine-tuning its procedures for collecting, managing, and analyzing data. Over the years, Org. 4’s

evaluation activities have expanded from evaluating single programs in isolation to evaluating all programs using common measures and tracking clients' progress over multiple years. She noted that the process for implementing the CANS in particular was helpful for capacity building because they were asked by the XXXXX to evaluate their evaluation process. This stimulated increased reflection about how they were completing the evaluation activities.

Improved Staff Morale. Several staff members commented that being included in

“You feel like your company is connected to you and they want you to initiate change and they want everybody to be on the same page and be excited. It’s more of an empowering experience than for somebody to come in and say, you are all going to do this.”

piloting or implementing the GAIN or CANS tools made them feel valued and empowered as employees. Staff also commented that they felt proud of their agency for conducting evaluation activities, ensuring that staff use best practices, and for participating in efforts to enhance assessment practices system-wide.

Strengthening of Partnerships. Three staff members reported that developing and implementing the CANS collaboratively with another community-based agency helped “solidify and formalize” partnerships between the agencies. A staff member who participated in these activities reported that the process provided an opportunity to get to know staff from the partner agency and to learn more about the agency’s activities and services.

Use of the GAIN and CANS Tools at Org. 4

Staff reported that the GAIN-SS was widely used across the agency for multiple purposes. The longer versions of the GAIN were not adopted for use agency-wide after the pilot. Staff who participated in the pilot felt that the longer versions of the GAIN (e.g., GAIN-Q) could be used with some clients a few sessions into the therapy process, after they have become engaged and rapport has been developed. Furthermore, they believed that multiple sessions would be required to complete administering the GAIN-Q. However, using the tool in this way would be inconsistent with the intended administration procedures of the tool and would not meet the agency's program evaluation needs. Thus, the GAIN-Q was deemed not be a good fit for the agency.

"[The GAIN-Q] would never be able to be done early in because the relation piece is so huge with youth. No relation, nothing. They don't want to sit there and be asked 50 million questions. They can be very taken aback by that. It started to dawn on me that for this particular group that would be a difficult tool to use unless we could administer it over time."

The CANS was used for the evaluation of [offsite agency] and there was some talk about expanding its use to other programs and using the tool for treatment planning purposes. However, these conversations were just beginning at the time of this study.

Uses of GAIN-SS and CANS. In general, staff believed that both the GAIN and CANS tools were useful to their work in several ways. Several indicated that the GAIN-SS was "quick and easy" to administer. It allowed them to screen clients and identify "flags" such as suicidal ideation and areas that needed to be explored further. One staff member said that using the tool for screening purposes was particularly useful in group treatment programs. Another explained that the GAIN-Q could be used to follow up on client issues that are identified using the GAIN-SS. Staff also indicated that they used the

GAIN-SS for treatment planning purposes. One said that she used the results of the GAIN-SS to have a conversation with clients about the areas in which they were

"What I found helpful was it gave me a good starting point, it gave me some good information to start with to use to dig deeper in developing a treatment plan and what needed to be worked on immediately."

experiencing difficulties, the areas in which they were doing well, and the areas that they would need to target in treatment. One staff member indicated that the CANS, once put in use, may be more useful for treatment planning purposes because it is more comprehensive than

the GAIN-SS.

Staff indicated that the GAIN-SS and CANS tools were also used to evaluate several of Org. 4's programs, such as the school-based program and the addiction and mental health counseling program based out of [offsite agency]. Several staff members stated that using the tools for this purpose (i.e., to ensure that the services they offer were making a positive difference) was important to them personally. Additionally, several staff members reported that conducting ongoing evaluation has been useful for obtaining funding. One added that the agency has grown in size and funding over the years as a result of evaluation activities. Furthermore, some noted that evaluation data are used to advocate for people with substance use difficulties. Information from the data is used to inform the public about this population and counter some of the common misperceptions people hold against individuals with substance use disorders.

Staff also described using these measures and others (e.g., the Drug Taking History Questionnaire) to monitor client changes and progress on an ongoing basis. Several added that having this measure of change allowed them to have conversations with clients about how they have changed throughout treatment.

In addition to monitoring clients' changing needs on an individual basis, staff reported that the measures were used at Org. 4 to identify trends in the needs of their client group as a whole and to guide program development. For example, they reported that their GAIN-SS data helped flag the prevalence of eating disorders among their clients. They then responded to this identified need by developing programming for eating disorders.

Staff indicated that the tools, when used in common with other schools and organizations, also help facilitate working with other professionals and partner agencies. For example, they explained that understanding the CANS helped them to send and receive referrals from a partner agency that also used the CANS. Staff indicated that the GAIN-SS tool helped them assess whether it was necessary to make a referral to another professional (e.g., psychologist) within the school and, if so, to make a referral that better captured the needs of the client. One staff member stated that she used the GAIN-SS results to advocate for clients by highlighting the mental health needs that may have influenced their behaviour. She explained that the GAIN-SS lent credibility to her claims about clients' mental health.

"Having a standardized tool that we're all using gives us each an ability to see where a new client is at that's been seeing another counsellor. "

Problems With Use of the Measures. Staff also noted some problems they had encountered with the measures. One staff member found that the GAIN-Q was "daunting"

"I feel like it makes the young person think that I am formulating a negative opinion of them based on these kinds of deficit-based questions that are asked in the GAIN."

for clients because of its length, comprehensiveness, and focus on clients' difficulties. Staff also had concerns about the GAIN-SS. These concerns were mainly related

to the belief that the GAIN-SS interfered with rapport. Some found it overly deficit focused and felt that this interfered with building rapport. Other staff concerns about the GAIN-SS included: language of the tool not being clear to some youth, youth not answering the questions honestly and invalidating the results, clients finding the measure “a little bit invasive” since it was administered at the very beginning of the counseling relationship, and expressed concerns from parents or youth about who would have access to the data and how the data would be used. Additionally, two staff members commented that clients are frequently in crisis when seeking counseling services and this makes it difficult to administer assessment measures or set time aside for scoring or data entry. Regarding the CANS, some staff found it time consuming to complete, particularly if they were required to obtain different pieces of information from different professionals at the client’s school.

"A lot of times initially when a client comes to you it's a crisis situation and they have finally decided that they want to maybe pursue some sort of counselling because they are actively in crisis. So you can't pull out a tool, you don't pull out your CANS."

Consequences of Use. Staff indicated that using the GAIN-SS and the CANS had led to a number of beneficial consequences. For example, several noted that one of the

benefits of using structured assessment tools like the GAIN-SS was that it led them to complete a more comprehensive assessment and to inquire about areas that they may have previously avoided. Completing more comprehensive assessments had in turn led them to become aware of the prevalence of client issues such as eating disorders that they may have not been as aware of

"You can see the actual outcomes, and you can see that there is progression, and you can see that there is improvement, so now there's a sense of, oh, okay. So it's kind of like this little bit renewed sense of, okay, we're not just doing this for nothing, over the long-term there is change even though we can't see it on a day-to-day basis. I think that kind of renewed that motivation, maybe, to continue some of the work."

previously. Furthermore, one staff member indicated that becoming aware of these client needs had led her to actively work toward building her knowledge of these difficulties and how they can be treated. Several staff members also commented that using outcome monitoring tools helped them see that their work was making a difference for clients, which helped “renew their motivation”.

Appendix B: Protocol for Individual Interviews

Interview Protocol

Brief Project Description:

The purpose of this interview is to hear your perspective on what the process of implementing the CANS in your agency was like. I will ask about both the formal parts of the process (e.g., meetings, training workshops) and the informal ones (e.g., casual conversations you may have had with colleagues). I'm also interested in knowing whether being involved in the implementation process led to any changes in the way you do your work, in the program, or in your agency.

Objective 1: Contextual Factors, and Formal and Informal Processes

- To gather background information on the reasons behind implementing the measure and the procedure that was followed
- To identify the factors and conditions, as well as formal and informal processes, that may have been related to organizational change.

Let's start with some background information.

Background

About You

1. What is your role in this organization? Tell me what is it that you do here.
 - a. How long have you been in the current position?
 - b. Have you been in this position since the measure was first introduced?
 - c. Have you ever held any other positions in this organization?
2. How often do you use or come in contact with the measure in some way?
 - a. Has this always been the case?

Learning About the Measure

3. How did you first become aware of the measure? When did you get involved in implementing the measure in your organization?
 - a. How were you involved?
4. Can you recall some of the reasons behind the decision to implement the measure?

About the Organization/ Potential Reasons for Implementing the Measure

5. What were some of the big issues that were being discussed?
6. What were some of the organization's big priorities?
 - a. Did the organization's big issues or priorities make a difference for you in any way?
7. What was going on in the organization at the time that the idea of the measure was introduced?
8. What were some of the challenges the organization was facing at the time?
9. Were there any external pressures on the organization?

10. Before implementing this measure, how did the organization gather information about the services provided?
 - a. What kinds of information were being collected?
 - b. Did members of the organization feel that they were missing information about the program or services or clients that they needed in order to make decisions?
 - c. How was the gathered information used?

Formal and Informal Processes

First Impressions/ Novel Elements

11. What were some of your first impressions of the measure when the idea of it was introduced?
 - a. [If any beliefs or attitudes are discussed] Was that a commonly held view? Who shared that view with you?
12. How did others respond to the idea of the measure being implemented?
 - a. What were some of the positive views people had about the measure?
 - b. What did they hope to get out of implementing it?
 - c. What were some of the concerns that they had?
 - d. Was there any resistance toward the measure?
13. Did the organization ever try to implement something else or make another change? How was that initiative different or the same?
14. Was the way that the CANS was implemented different from the way things are usually done in the organization?

Frequency and Modes of Communication

15. How often do you talk to others in your organization about the work that you do?
16. When or where do you have these discussions or conversations?
17. Do you ever have informal conversations about your work with other colleagues?

Conversations

18. What were the topics that staff kept bringing up in conversations and meetings at the time?
19. What did people say about the measure at the time when it was first introduced?
 - a. [Elicit example conversations] How did you find out that [insert a response from question 13]?
 - b. Who did you talk to about [a hope, an expectation, a concern]?
 - a. Where or when did you have this conversation? OR Were these things you talked about in meetings or in the hallways?
 - c. Did the tone or themes of the conversations change as time went on? For example, did staff talk about the measure differently while the measure was being developed or while it was being implemented?

20. What did managers say about the measure? Did you receive any memos or notices?
 - a. How did staff talk about the measure in meetings or in other more formal settings?

Procedure

21. Can you recall the steps involved in finalizing and implementing the measure?
 - a. For example, how was the decision made to select this measure?
 - b. Who was involved in the process?
 - i. Was anyone external (e.g., a consultant) to the organization involved?
 - c. Were any meetings held? How many?
22. How did decisions get made about CANS adaptation (what items to select, which versions of CANS to merge)?

Contextual Factors

Obstacles and Facilitators

23. Was there any part of the process that stood out for you?
 - a. If so, why?
24. Were there any factors that helped the process go more smoothly?
25. Was there anything that made the process difficult?
 - a. Were there any disruptions in the implementation process?

Participant Characteristics

26. Is there anything about you personally that may have influenced your participation in the CANS implementation process or what you got out of it?
27. How do you tend to respond to changes in your organization?

Leader(s)' Facilitation Skills

28. Did anybody take a leadership role in implementing the measure? Who typically facilitated the meetings?
 - a. Was there a consultant involved?
 - b. If so, what role did this leader play?
 - c. How did he/she run meetings? Manage the tool development process?
 - a. Did he/she treat you more like a consultant? Or a partner in the process?
 - d. Did he/she stimulate dialogue and reflection?

Organizational Characteristics

29. To what extent has your manager supported your participation? In what ways? To what extent are you rewarded or recognized for participating?

Objective 2: Consequences of participation

- To identify the kinds of changes that result from participation in a tool development or implementation process;
- At the level of the individual/ practitioner, team, program, and organization;
- And determine whether the changes are perceived to be 1st or 2nd order.

General Organizational Changes

30. If you had the option of using a standard measure, without making any changes to it, or going through a process to adapt the measure, which would you choose? Why?
31. Do you think that you or other staff got anything out of participating in the tool development or implementation process?
32. In what ways has your participation affected how you think about: your work, your clients, the program, the organization, or measuring outcomes and using data?
33. Can you think of any ways in which you do something differently because of your involvement in the tool development or implementation process?
34. Do you think you have gained any skills or learned anything new as a result of your participation in this process?
 - a. What aspects of the tool development or implementation process have contributed to what you've learned as a participant in the process?

Conversations about Changes

35. Have you shared what you've learned or the changes in your ways of thinking [any response to questions 25, 26, 27, 28] with anyone else? If yes, what have you shared and how? If no, why not?

Use and Usefulness of the Measure

36. Do you find the measure useful?
 - a. If so, in what ways do you use the measure or the data that it generates?
37. What has helped you make more meaningful use of the measure?
38. Has there been a change in how your organization uses data or information since the implementation of the measure?
 - a. If so, in what ways? If not, why not?

General Questions About Change

39. Were there any other changes in your practice, the program, or the organization that may have been linked to the tool development or implementation process?
40. Reflecting back on the changes that have occurred, how would you characterize the extent of the change? Would you say that these changes were small adjustments to the ways that things used to be done or larger scale changes in how the program or organization functions?
 - a. Did these changes appear to occur suddenly and all together, or gradually and incrementally?

41. If somebody wanted to replicate these changes in their organization, what instructions or advice would you give them? OR What do you think were the main factors that triggered or contributed to these changes?
42. Do you think these changes would have taken place if staff had been much less involved in developing or implementing the measure? If so, how? If not, why not?
43. How important do you think the conversations or discussions you had were in triggering these changes? How so?

Appendix C: Interview Summary Form

Interview Summary Form

Participant #:

Organization:

Date of Interview:

Interview completed by:

Recording: Yes / No

Other notes: Yes/No

Date Form Completed:

1. What were the main issues or themes that struck you during this interview?

2. Summarize the information you got (or failed to get) from the interview

3. What else struck you as salient, interesting, illuminating or important about this contact?

4. What are new issues or questions that could be pursued in other interviews?

5. What are elements of the interview that could be improved?

Appendix D: General Focus Group Protocol

Draft Focus Group Protocol

Note to facilitators: The objective of this focus group discussion is to gather feedback about the preliminary analysis conducted on the interview and document data.

Introduction

The objective of this focus group discussion is to gather your feedback about the preliminary analysis that I have conducted on the information some of you shared during the interviews and the information I obtained from the documents that some of you identified. I put all the information together and created a “thumbnail sketch” describing what the process of developing or implementing the _____ measure was like in this organization.

This study has three main questions: (1) What was the tool development or implementation process like from the perspective of staff? (2) What perceived consequences did staff participation in the process have? (3) What factors facilitated or interfered with the process?

I will first present some potential answers to these questions that I have identified based on the information I have gathered from this organization. While I am presenting, please make note of any information that I may have misunderstood or captured inaccurately, as well as any information that could be added. I look forward to hearing your feedback once I have completed the presentation.

Discussion Questions:

For each research question, the following two questions will be asked:

1. Did I capture the information relevant to the research question accurately?
2. Did I miss any significant information?

For example,

Did I capture the formal and informal aspects of the tool development or implementation process accurately? Did I miss any significant aspects of the process?

Appendix E: Org. 2 Focus Group Protocol

Org. 2 Focus Group Protocol

Background:

1. One of the pieces of feedback I received was that the CANS was initially implemented because a small group of supervisors were looking for a different assessment and treatment planning approach. Is this correct?
2. Where did the seed for this change originate from? Is this typical for how change happens here?
3. Were realizing the limitations of the Child Family Information Form, wanting to secure funding, and managing the wait list the main motivators for looking for a different assessment measure?
 - a. Were there any other factors that motivated you to look for a different measure?
 - b. Were there different motivators for different people?

Context:

External

4. Several staff members mentioned that being data driven and evidence based was very important to the agency and other agencies. Was this important for all staff?
 - a. Were there some for whom it was more important than for others?
 - b. Did some people have other concerns?
 - c. Were there some other issues that were also discussed at the time?
5. I heard that one of the things that was a problem was that some of the local agencies weren't aware of the CANS. Did others experience difficulty with this? Why was this a problem? Is that still a problem?
6. Did the restructuring of children's mental health services in Ontario impact the CANS implementation process?
7. Were there any other external influences that affected the CANS implementation process?

Internal

8. Do you think any of your past experiences in the agency (or your sense of what's typical in the agency) impacted how you responded to the CANS, either in a positive or negative way?
9. One idea that I have is that change happens more easily in dynamic organizations. In what ways would you say that Org. 2 was a dynamic organization? Were there some ways in which it was not a dynamic organization? How do you think that impacted the CANS implementation process?
10. Several staff mentioned that the CANS was a good fit for the agency. Do you agree? Are there some ways in which it is not a good fit?
11. Was upper management uniformly supportive of the CANS? Why was this the case? Could they have been more supportive?

12. I heard that leadership of the implementation process was one of the key facilitators. In what ways did the implementation leads help staff to make meaningful use of the measure?
13. In what ways was staff participation important? Why was the decision made to involve staff?

Participant Characteristics

14. Did certain groups or types of staff respond differently to the CANS? Why do you think that was the case?
15. In what ways do you think that the characteristics, role, or previous experiences of individual staff members influenced the implementation process?
16. In the research literature, characteristics of individual staff members is one of the factors that is said to influence how much the staff member gets out of participating in an evaluation process. Do you think staff characteristics is a relevant factor for how staff participate in the CANS implementation process? If so, how? What staff characteristics would you say were important for getting more out of the implementation process?
17. Are staff still uncomfortable assessing areas that fall outside the immediate range of their expertise? Or has that changed? If so, what helped create the shift?

Implementation Process:

18. Reflecting back on the formal steps in the implementation, what do you think was the most critical step to ensuring the success of the implementation? Is there anything you would do differently if you were to do it over again?
19. Do you agree with the implementation facilitators and obstacles listed? Are there other facilitators or obstacles that you think were important?
20. Did informal patterns or trends in the organization influence the implementation process in any way?
21. What was different about this implementation process compared to similar change efforts that didn't go so well?

Implementation Outcomes:

22. Research suggests that individuals benefit from participating in processes like this one. Was that the case for the CANS implementation process?
23. What has helped staff make more meaningful use of the measure?
24. My guess is that different staff within the agency have different understandings of why they need to complete the CANS. They may also have different understandings of why the data is being collected. Is that the case?
25. What are the different types of beliefs about why data collection is necessary?
 - a. If there are different understandings, do you think these beliefs influence how individuals use the measure?
 - b. Has anything helped with creating shared understandings among staff about why the CANS is being used?

**Appendix F: Study Overview Script and Screening Questions for the Selection of
Organizations**

Study Overview Script and Screening Questions for the Selection of Organizations

Hello,

As mentioned in my email, the purpose of this research project is to examine the process of developing, adapting, or implementing a program monitoring measure within child and youth mental health organizations. The project's three main objectives are to explore: (1) what the process was like from the perspective of staff, (2) whether staff participation in the process led to any perceived consequences, and (3) what contextual factors facilitated or interfered with the process.

I will be studying six child and youth mental health organizations in total. In each organization, I will invite staff members who were involved in the tool adaptation or implementation process to participate in face-to-face or phone interviews. These interviews will last between an hour to an hour and a half. During the interviews I will ask participants about the tool adaptation or implementation process, their impressions of the measure, formal and informal conversations or discussions they may have had during the process, whether they learned any new skills or information as a result of participating, and other similar questions. I hope to interview between five and ten staff members from different positions within the organization.

Once the interviews have been completed and I have conducted a preliminary analysis of the information that was shared with me, I will put together a "thumbnail sketch" of what the process was like in your organization based on what participants told me. I will then invite all staff who are able to comment on the measure to attend a focus group in which I will share my preliminary analysis or the thumbnail sketch and ask the staff to provide feedback on whether I captured the information they shared with me accurately and whether there is any significant information that I missed. I hope to have about 10 to 20 staff members take part in this focus group. The focus group will be between an hour and an hour and a half in duration.

Once the study has been completed, I will send participants a draft of the final report and they will also be able to comment on this draft.

If you believe that members of your organization would be willing to participate, I would like to ask a few questions so that I can make sure that the organization is suitable for the study and better understand the context in which the implementation of the _____ measure took place within your organization.

Screening Questions:

1. Did your organization adapt the tool to make it more suitable for your organization's needs?
2. If so, why was this necessary? Or what was the context around this decision to adapt and implement the ____ measure?
3. When did this process start? When did it finish?
4. Which members of the organization were most involved in the tool adaptation or implementation process?
5. How were they involved?
6. Do you think the individuals who participated in the process still recall their experience?

Appendix G: Recruitment Letter to Organizations

Project Description

Examining the Process of Developing or Implementing a Needs Assessment Measure Within Child and Youth Mental Health Organizations

This PhD dissertation project explores the process of developing or implementing needs assessment and program monitoring measures, such as the Child and Adolescent Needs and Strengths (CANS), in child and youth mental health organizations. Your organization is being asked to participate in this project. In this project staff members will be asked to share their experiences and expertise related to the assessment measure that has been developed or implemented in the organization.

PURPOSE OF THE PROJECT

The specific objectives of the project are to examine what the process of developing or implementing the measure was like from the perspective of staff; whether participating in the process led to any changes in staff professional practices, in the program, and/or in the organization; and what factors facilitated or interfered with the process.

PARTICIPATION IN THIS PROJECT

Staff members who have been most involved in the development or implementation of the measure will be asked to participate in one interview and/or focus group. The total number of staff members who will be asked to participate in interviews or focus groups depends on the size of the organization and the number of people who were involved in the tool development or implementation process. We are anticipating between 5 to 10 interview participants and 10 to 20 focus group participants (some of whom will be the same as interview participants) at each organization. The interviews or focus groups will last about 1.5 hours each, can be conducted in person or over phone or Skype, and will be conducted in English only.

ANTICIPATED CONTRIBUTION OF RESEARCH STUDY

This study will be the first to systematically explore the process of developing or implementing measures like the CANS. Findings from this study will provide insights into how data collection and use in organizations can be enhanced. We hope that these findings will help increase the effectiveness of organizations by increasing their capacity for collaborative inquiry and use of information. Following the completion of the study, a summary of the study findings and relevant recommendations (e.g., how to enhance use of information) will be shared with your organization.

WHO TO CONTACT

If you are interested in participating in this study, or wish to learn more, please contact:

Research Supervisor:

John Sylvestre, PhD
Associate Professor
School of Psychology, University of
Ottawa
Phone: 613-562-5800, x4307
jsylvestre@uottawa.ca

PhD Student:

Parastoo Jamshidi, PhD Candidate
School of Psychology,
University of Ottawa
XXXXXXXX@uottawa.ca

Appendix H: Recruitment Letter to Agency Staff

Project Description

Examining the Process of Developing and/or Implementing a Needs Assessment Measure Within Child and Youth Mental Health Organizations (Agency Staff)

This PhD dissertation project explores the process of developing and/ or implementing needs assessment and program monitoring measures, such as the Child and Adolescent Needs and Strengths (CANS), within child and youth mental health organizations. You are being asked to participate in this project. In this project you will share your experiences and expertise related to the assessment measure that has been developed and/or implemented in your organization.

PURPOSE OF THE PROJECT

The specific objectives of the project are to examine what the process was like from your perspective; whether participating in the process led to any changes in your professional practice, in the program, and/or in the organization; and what factors facilitated or interfered with the process.

YOUR PARTICIPATION IN THIS PROJECT

You are being asked to participate in one interview and/or focus group. The interviews or focus groups will last about 1.5 hours and will be conducted in English only.

RISKS FROM PARTICIPATING IN THIS STUDY

There are no known serious risks associated with participation in this study.

BENEFITS FROM PARTICIPATING IN THIS STUDY

We hope that participants will gain satisfaction in the knowledge that they are helping service providers and policy makers to better understand how the process of developing and/or implementing a measure can affect organizations, and to make recommendations as to how this process can be improved.

ANONYMITY AND CONFIDENTIALITY

Full confidentiality cannot be assured in this study as you may be participating in focus group discussions. However, the researchers will never personally attribute any comments made during focus groups or interviews to participants. In addition, all participants are requested to maintain confidentiality regarding the statements made by other participants. You should note, however, that absolute confidentiality cannot be assured.

Furthermore, although every effort will be made to mask any information that can be used to identify participants in all reports, sometimes participants may be identifiable by the nature of their work within the organization (e.g., if it is indicated that a comment was shared by someone within a management capacity). To reduce the likelihood that individuals outside the organization will be able to identify participants, the name of your organization will not be disclosed in any reports.

CONSERVATION OF DATA

Data from this study will consist of notes taken by a researcher during the discussion as well as an audio-tape. These notes and audio-tapes will be stored in a locked file cabinet in a locked research office. Only the investigator and her supervisor will have access to them and they will be preserved for up to 5 years after the publication of findings from this study.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary and you can cease your participation at any time during the study without consequence. Participation in this project will in no way affect the employment of agency staff. There will be no consequences for you now or in the future if you choose not to participate.

WHO TO CONTACT

If you are interested in participating in this study, or wish to learn more, please contact:

Research Supervisor:

John Sylvestre, PhD
Associate Professor
School of Psychology, University of
Ottawa
Phone: 613-562-5800, x4307
jsylvestre@uottawa.ca

PhD Student:

Parastoo Jamshidi, PhD Candidate
School of Psychology,
University of Ottawa
xxxxxx@uottawa.ca

Appendix I: Interview Consent Form

Interview Consent Form

Examining the Process of Developing and/or Implementing a Needs Assessment Measure Within Child and Youth Mental Health Organizations

(Program Staff)

PROJECT CONTACTS

Research Supervisor: John Sylvestre, PhD
Associate Professor
School of Psychology, University of Ottawa
Phone: 613-562-5800, x4307
jsylvestre@uottawa.ca

PhD Student: Parastoo Jamshidi, PhD Candidate
School of Psychology, University of Ottawa
xxxxxxx@uottawa.ca

This PhD dissertation project explores the process of developing and/ or implementing needs assessment and program monitoring measures, such as the Child and Adolescent Needs and Strengths (CANS), within child and youth mental health organizations. You are being asked to participate in this project. In this project you will share your experiences and expertise related to the assessment measure that has been developed and/or implemented in your organization.

PURPOSE OF THE PROJECT

The specific objectives of the project are to examine what the process was like from your perspective; whether participating in the process led to any changes in your professional practice, in the program, and/or in the organization; and what factors facilitated or interfered with the process.

YOUR PARTICIPATION IN THIS PROJECT

You are being asked to participate in an interview that will last about 1.5 hours. Interviews will be conducted in English only and will be audio-recorded.

RISKS FROM PARTICIPATING IN THIS STUDY

There are no known serious risks associated with participation in this study.

BENEFITS FROM PARTICIPATING IN THIS STUDY

We hope that participants will gain satisfaction in the knowledge that they are helping service providers and policy makers to better understand how the process of developing and/or implementing a measure can affect organizations, and to make recommendations as to how this process can be improved.

ANONYMITY AND CONFIDENTIALITY

Information that you share during the interview will not be associated with your name in any reports or other forms of communication. Furthermore, every effort will be made to mask any information that can be used to identify participants. However, sometimes participants may be identifiable by the nature of their work within the organization (e.g., if it is indicated that a comment was shared by someone within a management capacity). To reduce the likelihood that individuals will be able to identify participants, the name of your organization will not be disclosed in any reports.

CONSERVATION OF DATA

Data from this study will consist of notes taken by a researcher during the discussion as well as an audio-tape. These notes and audio-tapes will be stored in a locked file cabinet in a locked research office. Only the investigator, her supervisor, and research assistants who have signed a confidentiality agreement will have access to the data. The data will be preserved for up to 5 years after the publication of findings from this study.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary and you can cease your participation at any time during the study without consequence. If you cease your participation partway through the interview, the information you provided will not be used. Participation in this project will in no way affect the employment of agency staff. There will be no consequences for you now or in the future if you choose not to participate.

QUESTIONS ABOUT YOUR RIGHTS AS A PARTICIPANT IN THIS STUDY

If you have any questions concerning the ethical conduct of this study, you may contact:

The Protocol Officer for Ethics in Research
 University of Ottawa
 Tabaret Hall, 550 Cumberland Street, Room 154
 613-562-5387
 ethics@uottawa.ca

ACCEPTANCE

I _____ agree to participate in the above research study conducted by Parastoo Jamshidi and supervised by Dr. John Sylvestre of the School of Psychology, Faculty of Social Sciences, University of Ottawa.

There are two copies of this consent form, one of which is mine to keep.

☐ _____ (Initial) I consent to have this interview audio-recorded.

☐ I am interested in participating in a focus group in which preliminary findings from interviews conducted at this organization are shared, and in which I will be invited to provide feedback about whether the researcher has accurately captured the information that was shared by me and other staff members.

Participant's Signature:

Researcher's Signature:

Date: _____

Date: _____

Appendix J: Focus Group Consent Form

Focus Group Consent Form
Examining the Process of Developing and/or
Implementing a Needs Assessment Measure Within
Child and Youth Mental Health Organizations

PROJECT CONTACTS

Research Supervisor: John Sylvestre, PhD
Associate Professor
School of Psychology, University of Ottawa
Phone: 613-562-5800, x4307
jsylvestre@uottawa.ca

PhD Student: Parastoo Jamshidi, PhD Candidate
School of Psychology, University of Ottawa
xxxxxx@uottawa.ca

This PhD dissertation project explores the process of developing and/ or implementing needs assessment and program monitoring measures, such as the Child and Adolescent Needs and Strengths (CANS), within child and youth mental health organizations. You are being asked to participate in this project. In this project you will share your experiences and expertise related to the assessment measure that has been developed and/or implemented in your organization.

PURPOSE OF THE PROJECT AND FOCUS GROUP

The specific objectives of the project are to examine what the process was like from your perspective; whether participating in the process led to any changes in your professional practice, in the program, and/or in the organization; and what factors facilitated or interfered with the process.

The purpose of the focus group is to share preliminary findings from the interviews conducted in your organization, ask interview participants for their feedback on these preliminary results, and ask if any other information needs to be added.

YOUR PARTICIPATION IN THIS PROJECT

You are being asked to participate in a focus group that will last about 1.5 hours. The focus group will be conducted in English only and will be audio-recorded.

RISKS FROM PARTICIPATING IN THIS STUDY

There are no known serious risks associated with participation in this study.

BENEFITS FROM PARTICIPATING IN THIS STUDY

We hope that participants will gain satisfaction in the knowledge that they are helping service providers and policy makers to better understand how the process of developing and/or implementing a measure can affect organizations, and to make recommendations as to how this process can be improved.

ANONYMITY AND CONFIDENTIALITY

Full confidentiality cannot be assured in this study as you will be participating in a focus group discussion. However, the researchers will never associate any information shared by participants in focus groups with their names in any reports or other forms of communication. In addition, all participants are requested to maintain confidentiality regarding the statements made by other participants.

In all reports associated with this project, every effort will be made to mask any information that can be used to identify participants. However, sometimes participants may be identifiable by the nature of their work within the organization (e.g., if it is indicated that a comment was shared by someone within a management capacity). To reduce the likelihood that individuals will be able to identify participants, the name of your organization will not be disclosed in any reports. You should note, however, that absolute confidentiality cannot be assured.

CONSERVATION OF DATA

Data from this study will consist of notes taken by a researcher during the discussion as well as an audio-tape. These notes and audio-tapes will be stored in a locked file cabinet in a locked research office. Only the investigator, her supervisor, and research assistants who have signed a confidentiality agreement will have access to the data. The data will be preserved for up to 5 years after the publication of findings from this study.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary and you can cease your participation at any time during the study without consequence. If you cease your participation partway through the focus group, the information you provided before ceasing participation will be used given the nature of focus group transcripts. Participation in this project will in no way affect the employment of agency staff. There will be no consequences for you now or in the future if you choose not to participate.

QUESTIONS ABOUT YOUR RIGHTS AS A PARTICIPANT IN THIS STUDY

If you have any questions concerning the ethical conduct of this study, you may contact:

The Protocol Officer for Ethics in Research
University of Ottawa
Tabaret Hall, 550 Cumberland Street, Room 154
613-562-5387
ethics@uottawa.ca

ACCEPTANCE

I _____ agree to participate in the above research study conducted by Parastoo Jamshidi and supervised by Dr. John Sylvestre of the School of Psychology, Faculty of Social Sciences, University of Ottawa.

There are two copies of this consent form, one of which is mine to keep.

Participant's Signature:

Researcher's Signature:

Date: _____

Date: _____

Appendix K: Template of Data Display Matrix for Org. 3

Template of Summary Matrix for Org. 3

	P1	P2	P3	P4	P5
Participant Characteristics					
<i>Role</i>					
<i>Length of Time at the Centre</i>					
<i>Professional Background</i>					
<i>Personal Strengths/ Weaknesses</i>					
<i>Personal Beliefs</i>					
<i>Relationships</i>					
Attitudes Toward Data Collection					
<i>Value Data Informed Decision Making</i>					
<i>Tension Between Meeting Urgent Needs vs. Preparing for the Future</i>					
Background					
Reasons for Implementing CANS					
Positive Impressions of CANS					
<i>Strengths Section</i>					
<i>Prioritizing Needs</i>	Four point rating system easily allows for the identification of needs that require immediate action (or priority areas)				Given that clients often have multiple and complex needs, CANS helps to prioritize the needs
<i>Helps with Treatment Planning</i>		Forces staff to focus on one client and identify their goals (as opposed to being preoccupied by daily	Gives staff time to focus on each student for some	Time to focus on the girl and what she	

		tasks)	time and create a plan for them	might need	
<i>Free</i>					
<i>Easy to Learn (several said the opposite due to subjectivity)</i>					
<i>Online Training</i>					
<i>Availability of CANS Developer</i>					
<i>Flexible/ Adaptable</i>					
<i>Fit- Worked Well with CPS</i>					
<i>Fit- Reflected Clients' Needs</i>					
<i>Shared Language/ Common Tool with Other Agencies</i>					
<i>Format/ User Friendliness</i>					
Negative Impressions of CANS					
<i>Time to Complete and Relevance of Questions</i>					
<i>Manual Confusing</i>					
<i>Pilot Results not Reflective</i>					
<i>Inter-rater Reliability</i>					
<i>Subjectivity of Tool</i>					
Organizational Characteristics					
<i>[type of organization]</i>					
<i>Dedication to Agency- "Helping Perspective"</i>					
<i>Value-Trauma Informed Care</i>					
<i>Value- Mental Health</i>					
<i>Value-Strengths-based</i>					
<i>Value- Data-based</i>					
<i>Value- Client Progress</i>					
<i>Organizational Changes</i>					
<i>Org Changes- Turnover</i>					
<i>Population Served/ Measure Fit</i>					
<i>Multiple Departments</i>					

<i>Assessment Fatigue</i>					
<i>Resources for Evaluation</i>					
<i>Organizational Resources</i>					
<i>Org. Res.-Burnout</i>					
<i>Organizational Priorities- Accreditation and Funding</i>					
<i>Organizational Priorities- Becoming Known in the Community</i>					
<i>Important to be Accountable</i>					
<i>Organizational Priorities- Strengthening Treatment Plans</i>					
<i>Crisis-Driven</i>					
<i>Interpersonal Relationships</i>					
Leadership					
<i>Put My Money Where My Mouth Is</i>					
<i>Reflection/ Problem Solving Around Negative Results</i>					
<i>Considerate of Staff Reactions</i>					
<i>Interpersonal Style</i>					
<i>Encouraging Participation</i>					
<i>Communication</i>					
<i>Open to Concerns</i>					
<i>Bringing Own Values/ Approach</i>					
<i>Wanting to Improve the Agency</i>					
Implementation Leadership					
<i>Discussed Usefulness of Measures</i>					
<i>Value Participation</i>					
<i>Flexible and Persistent</i>					
<i>Believe in the CANS</i>					
<i>Well-respected</i>					
<i>Problem-Solved</i>					
External Influences					
<i>Ministry Mandates</i>					
<i>Broader Social Context/ Culture</i>					

<i>Meeting Ministry Expectations</i>					
<i>Maintaining Funding</i>					
<i>Becoming Accredited as a Treatment Centre</i>					
<i>Other Agencies' Use of CANS/ Info. Shared About CANS (See also Shared Language under Positive Impressions)</i>					
Partnerships					
<i>[...] Committee</i>					
<i>Data Analysis Support</i>					
<i>General Collaboration</i>					
Formal Process					
<i>Decision Making</i>					
<i>[Committee] Study</i>					
<i>Adaptation</i>					
<i>Training</i>					
<i>Assessor Moderations</i>					
<i>Coaching</i>					
<i>Ongoing Activities</i>					
Creating A Version					
Informal Process					
<i>Clashes Between Values</i>					
<i>Didn't Want an Additional Tool</i>					
<i>Taking Evaluation Results Personally</i>					
<i>Failing Certification Test</i>					
Obstacles					
<i>Not a Good Fit</i>					
<i>CANS Wasn't Used</i>					
<i>Training Difficult-Subjectivity</i>					
<i>Not Discussing How Staff were Completing CANS</i>					
<i>Competing Demands</i>					
<i>Gap Between Training and Administration</i>					
Facilitators					
<i>Ministry Flexibility- Focus on Use</i>					

<i>Endorsement of CANS</i>					
<i>Leadership Support</i>					
<i>Articulating Rationale Behind Choice</i>					
<i>Staff Positive Attitude</i>					
<i>Support with Learning Administration</i>					
<i>Dedicating Time to CANS Completion</i>					
Participation					
<i>Participation in [committee]</i>					
<i>Participation of Staff from Different Disciplines</i>					
<i>Organizational Norms/ Beliefs around Participation</i>					
<i>Participation in Adapting/Troubleshooting</i>					
<i>Choice Over Which Measure</i>					
<i>Choice- Trust In Leaders</i>					
<i>Consequences of Participation</i>					
<i>How Staff were Asked to Participate</i>					
<i>Extent of Participation</i>					
Conversation					
<i>About Why They were Outliers/ Problem Solving</i>					
<i>About How to Improve CANS Use</i>					
<i>About Importance of CANS</i>					
<i>About Concerns</i>					
<i>About Concerns- Difficulty of Certification Process</i>					
<i>About Concerns- Subjectivity of CANS</i>					
<i>About Concerns- Overwhelmed by Assessments</i>					
<i>About Concerns- Time to Administer, Items Don't Apply</i>					
<i>Consequences of Conversation</i>					
<i>Venues for Conversation</i>					
<i>Venues- External to the Agency</i>					
<i>Extent of Conversation</i>					
<i>About How to Best Meet Client Needs</i>					

<i>Communication about Organizational Goals and Values</i>					
<i>Memo Re Conversation</i>					
Consequences					
<i>Learning from Failure/ Creating a Better Suited Tool</i>					
<i>Learning from Failure- Improved Inter-rater Reliability</i>					
<i>Increased Thinking about Data</i>					
<i>Increased Staff Engagement Around Improving CANS Use</i>					
<i>Buy-in</i>					
<i>Improved Partnerships</i>					
<i>Increased Visibility of agency in the Community</i>					
<i>Shared Vision of the Program</i>					
<i>Affective/ Staff Morale</i>					
<i>Learning Re Facilitating Change</i>					
<i>Improved Working Relationships</i>					
<i>Skills</i>					
<i>Learning About CANS</i>					
<i>Changes In Attitudes Toward Program Monitoring</i>					
<i>Learning About the System</i>					
<i>Negative Consequences</i>					
<i>Changes in Procedures</i>					
Use					
<i>Data Use Leading to Data Valuing</i>					
<i>Perceptions of Usefulness</i>					
<i>Use Procedures</i>					
<i>Program Level Uses</i>					
<i>Treatment Planning</i>					
<i>Administration Procedure</i>					
<i>Used Collaboratively with Other Teams</i>					
<i>Use Changing Over Time</i>					
<i>Problems with Use</i>					

Appendix L: Section of Cross-Case Matrix for Org. 1 and Org. 2

Section of Cross-Case Matrix for Org. 1 and Org. 2

Org. 1	Org. 2	Similarities Between Org. 1 and Org. 2	Differences Between Org. 1 and Org. 2
Consequences			
<u>Changes in Attitudes and Affect</u>	<u>Changes in Attitudes and Affect</u>		
Greater buy-in and sense of ownership over CANS	Greater buy-in and sense of ownership over CANS	Greater buy-in and sense of ownership	
Greater awareness of the value of the CANS (learned different uses of the measure, saw some of the "wins" with implementation and use)	Increased investment in the CANS		
	Increased confidence in the CANS (as they obtained more info about it)		
	Through use, staff gradually see the benefits of the CANS		
Staff morale	Staff morale	Staff morale	
Sense of being valued as employees and improvement in staff morale	Feeling included which led to "feeling better about themselves, the job, and the organization"		

	Camaraderie: supporting each other with the challenges of the implementation process	At Org. 2 staff also spoke about how being part of the process together with their colleagues allowed them to support each other with the implementation challenges, and reduced anxiety about learning the measure. Similar sense of feeling supported with the challenges of implementation was discussed at Org. 1 (e.g. coach supported staff who were upset about the reliability certification)	
	Less anxious about learning a new measure because others were "on the same boat"		
	Feeling frustrated and dismissed if concerns were not addressed		I don't recall Org. 1 staff mentioning negative feelings arising from the implementation process. One Org. 2 member mentioned feeling dismissed and frustrated when concerns were not addressed.
Evaluation Capacity	Evaluation Capacity		
Shift in attitudes toward data	Shift in attitudes toward outcome monitoring (e.g.,	At both sites, staff began to value evaluation more after	

collection	seeing parents' response to concrete identification of change)	they saw the different functions it could serve.	
Learning about the different purposes that evaluation can serve (Also fits under Learning)			
Increased evaluative thinking (brought measurement and "checking things out" into the language and culture of the agency)	Increased evaluative thinking: clarification about information needs of the agency and limitations of existing data collection system		At Org. 2 there was more of an involved discussion about the agency's existing data collection system and what types of information was not being collected
	Curiosity about the aggregate CANS data	Evaluation became more salient in the minds of staff. They were curious about the aggregate CANS data.	
Reinforcement of Participation			
Motivation to participate further in the implementation process			
<u>Learning and Reflection</u>	<u>Learning and Reflection</u>		
Facilitated learning about the CANS (ongoing as opposed to one-time learning, CANS more	Increased reflection on how the CANS was being used; Opportunity for "healthy	Participation led to more reflection about the CANS	

salient, increased motivation to learn, more opportunities to ask questions)	questioning” of the CANS and for staff to make up their own minds on whether the CANS is “meaningful for them”		
	Buy-in, “remoralization” and greater understanding of the tenants of the CANS resulted from being part of the training with CANS developer		
Also learned: adult teaching and presentation skills, diverse treatment approaches and intervention techniques, and how to communicate with other professionals			Org. 1 had a frontline staff member who was assigned the role of "CANS Coach" . This individual provided education to external agencies about the CANS. As a result, she learned skills in the process of providing these educational workshops to external agencies.
Opportunity to step back (think about program practices and clients)			
	Learning about how decisions and changes are made in the organization		
	<u>Changes in Practice</u>		
	Focus on the needs and strengths rather than the		

	potential causes of problems, not make assumptions about clients; staff stepping outside their “comfort zones” when conducting assessments		
<u>Organization Level Consequences</u>	<u>Organization Level Consequences</u>		
An adapted measure and administration process that is a better fit for day-to-day work	Negative consequence: losing details that would have been captured by the narrative intake form	At both sites, the concrete product of staff participation was that the resulting adapted CANS was a better fit for the agency	At Org. 2, one staff member believed their previous assessment form was a better fit than the CANS
	Changes in program procedures like having a transfer meeting before client is transferred from intake to treatment, treatment plan includes CANS		
<u>System Level Consequences</u>			
Networking			Org. 1 staff were given more opportunities to interact with other partner agencies about the CANS. Thus, this led to consequences like networking and strengthening partnerships

Culture of partnership with community organizations			
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