uOttawa

L'Université canadienne
Canada's university

FACULTÉ DES ÉTUDES SUPÉRIEURES ET POSTOCTORALES

FACULTY OF GRADUATE AND POSDOCTORAL STUDIES

Madeleine Pichoir Drew
AUTEUR DE LA THÈSE / AUTHOR OF THESIS

M.H.A.
GRADE / DEGREE

School of Management
FACULTÉ, ÉCOLE, DÉPARTEMENT / FACULTY, SCHOOL, DEPARTMENT

CCHSA Accreditation : a Catalyst for Change and a Building Block for Social Capital

TITRE DE LA THÈSE / TITLE OF THESIS

Marie-Pascale Pomey
DIRECTEUR (DIRECTRICE) DE LA THÈSE / THESIS SUPERVISOR

CO-DIRECTEUR (CO-DIRECTRICE) DE LA THÈSE / THESIS CO-SUPERVISOR

EXAMINATEURS (EXAMINATRICES) DE LA THÈSE / THESIS EXAMINERS

Douglas Angus

Laurent Lapierre

Gary W. Slater
LE DOYEN DE LA FACULTÉ DES ÉTUDES SUPÉRIEURES ET POSTDOCTORALES /
DEAN OF THE FACULTY OF GRADUATE AND POSTDOCORAL STUDIES

CCHSA Accreditation:
a Catalyst for Change and
a Building Block for Social Capital

Case Study of a
Health Authority in New Brunswick

Madeleine Pichoir Drew

Thesis submitted to the Faculty of Graduate and Postdoctoral Studies
In partial fulfillment of the requirements
for the MHA program

Health Administration
School of Management
University of Ottawa

© Madeleine Drew, Ottawa, Canada, 2005

Library and Archives Canada

Published Heritage Branch

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque et Archives Canada

Direction du Patrimoine de l'édition

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence
ISBN: 0-494-11382-0
Our file Notre référence
ISBN: 0-494-11382-0

NOTICE:
The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

AVIS:
L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, publier, archiver, sauvegarder, conserver, transmettre au public par télécommunication ou par l'Internet, prêter, distribuer et vendre des thèses partout dans le monde, à des fins commerciales ou autres, sur support microforme, papier, électronique et/ou autres formats.

L'auteur conserve la propriété du droit d'auteur et des droits moraux qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

TABLE OF CONTENTS

LIST OF FIGURES viii

LIST OF ABREVIATIONS ix

EXECUTIVE SUMMARY x

ACKNOWLEDGEMENTS xi

FOREWARD xii

CHAPTER I - INTRODUCTION 1

CHAPTER II – BACKGROUND: THE ACCREDITATION PROCESS IN CANADA ... 2
1. What is accreditation? 2
2. Accreditation in Canada 2
3. The CCHSA accreditation program 3
4. CCHSA accreditation standards 5
5. The Impact of Accreditation – a Literature Review 6

CHAPTER III – ACCREDITATION AND SOCIAL CAPITAL – A LITERATURE REVIEW 8
1. Social Capital as a concept 8
2. Social Capital and Accreditation 10
3. Notes of caution 12

CHAPTER IV – DESCRIPTION OF THE MULTIPLE-CASE STUDY 13
1. Purpose and conceptual framework 13
   1.1 Conditions favoring the emergence and diffusion of change 13
   1.2 Characteristics of change 15
3. The intervention: CCHSA AIM accreditation program 18

CHAPTER V: THE CASE STUDY 21

1. CONCEPTUAL MODEL 21
1.1 Conceptual model for the overall case study 21
1.2 Conceptual model for Social Capital and Accreditation 22

2. RESEARCH QUESTIONS 23

3. CONTEXT FOR THIS CASE STUDY 24
3.1 General Environment 24
3.2 The accreditation process for the last accreditation 26

4. METHODOLOGY ... 29
4.1 Data Collection Tools ... 29
4.1.1 Qualitative data ... 29
4.1.2 Quantitative data ... 30
4.2 Data Collection ... 32
4.2.1 Qualitative data ... 32
4.2.2 Organizational culture survey ... 36
4.2.3 Management Perception of Quality Improvement Survey ... 37
4.3 Data Analysis ... 38
4.3.1 Qualitative data ... 38
4.3.2 Organizational culture survey ... 41
4.3.3 Quality improvement implementation survey ... 41
4.3.4 Comparison of the 'areas to improve' in the self-assessment team reports with the CCHSA final accreditation survey report ... 42
4.4 Data Quality ... 43
4.4.1 Construct Validity ... 43
4.4.2 Internal Validity ... 44
4.4.3 External Validity ... 44
4.4.4 Reliability ... 45

CHAPTER VI – RESULTS ... 46

1. RESPONDENTS' CHARACTERISTICS TO QUESTIONNAIRES ... 46
1.1 Organizational Culture Questionnaire ... 46
1.2 Management Perception of Quality Improvement Questionnaire ... 47

2. ORGANISATIONAL CULTURE ... 49
2.1 Overall findings ... 49
2.2 Reliability of findings ... 50
2.3 Findings in relation to the independent variables ... 51

3. MANAGEMENT PERCEPTION OF QUALITY IMPROVEMENT ... 52
3.1 Overall findings according to the seven scales – Section A ... 52
3.2 Findings in relation to the independent variables ... 54
3.3 Findings for the degree of participation ... 57

4. ACCREDITATION IMPACT ... 58
4.1 Overall findings ... 58
4.2 Findings in relation to the independent variables ... 59

5. CONDITIONS FAVORING THE EMERGENCE AND DISSEMINATION OF CHANGE ... 62
5.1 General environment ... 62
5.2 Basic conditions ... 64
5.3 Strategies for exchanging ideas, learning, participating and disseminating info.... 69

5.4 Leadership and Competencies 74
5.5 Conception and Comprehension 76

***6. GENERAL CHARACTERISTICS OF CHANGE* 81**
6.1 Nature and type of changes 81
6.2 Conception of change 83
6.3 Motivation for change 83

***7. CHANGES IN LINE WITH ACCREDITATION* 85**
7.1 Changes implemented during the self-assessment phase 85
7.2 Changes implemented during the accreditation survey 93
7.3 Changes implemented as a result of the accreditation survey report 95

***8. CHANGES THAT OCCURRED BECAUSE OF OTHER EVENTS OR INTERVENTIONS* 103**
8.1 Events and other interventions 103
8.2 Changes at the individual practice level 104
8.3 Changes at the group practice level 104
8.4 Changes at the organizational level 105
8.5 Changes at the external partnership level 105

***9. BUILDING SOCIAL CAPITAL* 106**
9.1 Structural dimension: network ties 106
9.2 Cognitive dimension: mutual understanding 108
9.3 Relational dimension: trust and shared identity. 109
9.4 Manifestation of Social Capital 111

***10. THE ACCREDITATION PROCESS* 112**
10.1 General opinion and expectations 112
10.2 Accreditation preparation 115
10.3 Accreditation visit 115
10.4 Accreditation survey report 116
10.5 Standard 118
10.6 Does accreditation help organizations improve their capacity to react when faced with change? 118

CHAPTER VII - DISCUSSION 121

***1. Organizational characteristics* 121**
1.1 Organizational culture 122
1.2 Organizational stability 123
1.3 Decision-making 123
1.4 Leadership 124
1.5 Quality program 124

2. Changes implemented in line with accreditation **125**
2.1 Type of changes 125
2.2 At which level? 126
2.3 The accreditation survey report: a catalyst for change 127

3. Accreditation as a capacity building tool **129**

4. Building social capital through the accreditation process **130**

5. Opinion and expectations of the accreditation process **133**

CHAPTER VIII – LIMITATIONS AND FUTURE RESEARCH **136**

1. Internal validity **136**
1.1 Social desirability bias 136
1.2 Sample bias for quantitative data 137

2. External validity **137**

3. Future research **138**

CHAPTER IX – RECOMMENDATIONS FOR THE ORGANIZATION **140**

CHAPTER X – CONCLUSION **141**

APPENDICES **142**
1. Initial Conceptual Framework for the Dimensions of Change 143
2. Definitions of CCHSA Dimensions and Quality Descriptors 144
3. List of Individuals and Institutions Involved in the Research Project 146
4. Interview Guide for the Focus Group 147
5. Interview Guide for the Individual Interviews 148
6. Questionnaires Used for the Surveys 152
7. Codes for Qualitative analysis 166
8. Coding Guide for Focus Group Questions 172
9. Coding Guide for the Interview Questions 173
10. List of codes searched by questions for the analysis 174
11. Definition for the Seven Scales for the Management Perception of Quality Improvement Questionnaire 177
12. Revised Conceptual Framework for the dimesions of change in an organisation with a long past with accreditation 178
13. Suggestions for collecting data at the other sites in the multiple-case study ... 179

BIBLIOGRAPHY **180**

LIST OF TABLES

Table 1: Description of CCHSA accreditation cycle 4

Table 2: Rating Scale for each criterion within the CCHSA standards 19

Table 3: Site description 25

Table 4: Summary table for the participation in the focus group 35

Table 5: Description of Participants to Focus Group #1 – Clinical teams 35

Table 6: Description of Participants to Focus Group #2 – Support teams 36

Table 7: Example of computation for three scales in Section A 38

Table 8: Culture Questionnaire - Respondents Characteristics 47

Table 9: Description of the sample for the Management Perception of Quality Improvement Questionnaire 48

Table 10: Organizational Culture Scores 49

Table 11: Means according to respondents independent variables–Culture questionnaire 51

Table 12: Results of the Management Perception of Quality Improvement – Section A. 53

Table 13: Means within each scales according to the respondents independent variables. Significant differences exist between the means in the shaded boxes 56

Table 14: Results for the degree of participation – Section B 57

Table 15: Section B Means according to the respondents' independent variables 57

Table 16: Results of the Impact of accreditation – Section C.. 58

Table 17: Frequency of the answers for each question of Section C 59

Table 18: Means within each group of questions according to the respondent's independent variables Significant differences exist between the means in the shaded boxes 61

Table 19: Strong points and weak points in relation to the conditions favoring the immergence and diffusion of change 79

Table 20: Characteristics of the changes recorded as a result of the three recommendations in the CCHSA report and four areas to improve 81

Table 21: Comparing the numbers of 'areas to improve' in the self-assessment reports to the CCHSA accreditation survey report.. 101

Table 22: Team composition for clinical accreditation self-assessment teams. 107

Table 23: A typology of readiness program: (French, 2005: 304) 128

LIST OF FIGURES

Figure 1: CCHSA accreditation cycle (used with permission of CCHSA) 3

Figure 2: Conceptual Model on the impact of Accreditation.. 21

Figure 3: Model of Social Capital, accreditation and quality of care outcome 22

Figure 4: Organizational Culture profile.. 50

Figure 5: Relational Diagram of the organizational Culture Dimensions 50

Figure 6: Results of the Management Perception of Quality Improvement 53

Figure 7: Perception of the accreditation program by the organization in preparation for the 2002 accreditation survey visit. 134

LIST OF ABREVIATIONS

AIM	Achieving Improved Measurement (CCHSA accreditation program)
ALPHA	Agenda for Leadership in Programs for Healthcare (ISQua)
CCHSA	Canadian Council on Health Services Accreditation
CQI	Continuous Quality Improvement
Dir. HR	Director Human Resources (Interviewed)
Dir. QI	Director Quality Improvement (Interviewed)
FG#1	Focus Group #1
FG#2	Focus Group #2
HCO	Health Care Organizations
ISQua	International Society for Quality in Health Care
PAC	Professional Advisory Committee (specific to the organization studied)
QI	Quality Improvement
RHA	Regional Health Authority
VP	VP of planning/Professional services (Interviewed)

EXECUTIVE SUMMARY

As part of a multiple-case study, the objective of this single-case study is to examine the impact of the accreditation process offered by the Canadian Council on Health Services Accreditation (CCHSA) on one health care organization. The main hospital of the organisation selected has been accredited for a little over 50 years. Quantitative and qualitative data was collected for methodological triangulation. Two questionnaires were distributed; interviews and focus groups were conducted on site. A previously developed conceptual framework on the dimensions of change was used for the analysis. Some changes within the organization were traced back to the accreditation process and they were mainly at the organizational level, affecting processes and organizational structures. In addition, the accreditation self-assessment phase offers an opportunity to increase social capital, but the quantity and type acquired depends on the composition of the self-assessment team and the follow-up done after the accreditation survey.

ACKNOWLEDGEMENTS

I would first like to thank the organization for accepting to participate in this study and for sharing their perceptions. Many thanks to all the participants in the study for their time and their insight, and more particularly to the person who coordinated the site visit as well as the distribution and collection of the questionnaires.

I would like to thank my thesis advisor, Professor Marie-Pascale Pomey for her guidance and her generous support, and the research team for their comments all along.

Appreciative thanks go to Michèle Paré, Statistician at the Group de Recherche Interdisciplinaire en Santé (GRIS) at the University of Montreal for the compilation of SPSS tables and some useful information regarding interpretation.

I would also like to thank Martin Beaumont from CCHSA for sharing his thesis with me and for the many conversations we've had around the benefits of accreditation and the usefulness of a conceptual model.

Many thanks go to my friends who supported me through the challenging moments and heartfelt thanks go to my family for the time and support they gave me to complete this journey.

FOREWARD

In 2004, students in the Health Administration Masters programs were invited to participate in a multiple-case study funded by the Canadian Institute for Health Research (CIHR) and lead by one of the professors on faculty. The results of this research will contribute to the multiple-case study as well as contribute to the fulfillment of the requirements for a Master's degree in Health Administration for the writer.

CHAPTER I - INTRODUCTION

The number of accreditation programs for health services has increased considerably around the world in the past decade (Shaw, 2003 and 2004). The Canadian Council on Health Services Accreditation (CCHSA) has been in expansion ever since its beginnings in 1953, testifying to some extent to the success of its evolving accreditation programs. But accreditation is useful to organizations only to the extent that it can affect change in the area of quality or in other ways. Anecdotal testimonies show that accreditation can be a valuable intervention for quality improvement, but little conclusive evidence shows the effectiveness of accreditation (Øvretveit, 2002; Shaw, 2001). The complexity of the intervention, the influence of changing context on the outcome and general methodological challenges, all have limited the number of possible studies on the topic (Øvretveit, 2002). In an attempt to evaluate the impact of CCHSA's latest accreditation process on Canadian health care organizations, a multiple-case study will record changes related to accreditation across a variety of organizational contexts. As part of the multiple-case study, this research will focus on an organization with a long history of accreditation, now structured as a regional health authority. The objective of this case-study is to contribute to the understanding of the impact of accreditation on a health care organization by linking changes that occurred within the organization in the last three years back to the accreditation cycle. Also of interest is the perception of the impact of accreditation on the organization, and the process of accreditation as a building block for increasing social capital within the organization.

Following a literature review on accreditation and social capital, the multiple-case research project will be presented. We will then focus more specifically on the single-case study. Presentation of the context, the methodology and the results of both quantitative and qualitative data will lead us into the discussion from where we will be able to draw some conclusions and recommendations for the organization studied and for further research.

CHAPTER II – BACKGROUND: THE ACCREDITATION PROCESS IN CANADA

1. What is accreditation?

Accreditation is an evaluation process to assess the quality in health care (CCHSA website). As defined by the International Society for Quality in Health Care (ISQua), accreditation is

> "A public recognition of the achievement of accreditation standards by a healthcare organization, demonstrated through an independent external peer assessment of that organization's level of performance in relation to the standards." (Shaw, 2004)

Accreditation can either stimulate Continuous Quality Improvement (CQI) with standards of excellence, or be a Quality Assurance program with a focus on minimal standards. Accreditation is different from licensing which involves an authority granting permission to a healthcare organization to operate, and is more than an audit which is a systematic independent examination "to determine whether actual activities and results comply with planned arrangements" (ISQua/Shaw, 2004).

2. Accreditation in Canada

Several organizations offer accreditation to health care organizations in Canada. A few are regional organizations such as the Ontario Council on Community Health Accreditation (OCCHA), the Association of Ontario Health Centres (AOHC), the Conseil Québécois d'Agrément (CQA). Others focus on one type of health care organization such as the Commission on the Accreditation of Rehabilitative Facilities (CARF), or are not exclusive to the health care field, such as the International Standards Organization (ISO) and the Council on Accreditation (COA).

The Canadian Council on Health Services Accreditation (CCHSA) is the only national, independent, health care specific accreditation body in Canada able to accredit a variety of health care organization, from small organizations to complex health systems. First incorporated in 1958, as a non-for profit organization, it is recognized internationally today, and has provided international services since 2000.

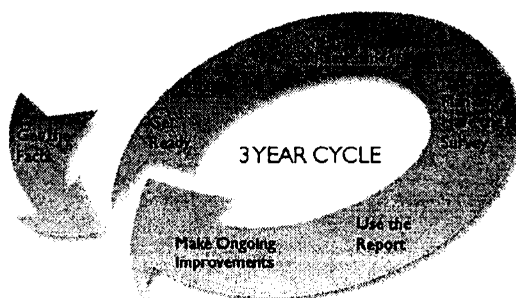
In 2003, over 3500 sites, programs and services were accredited. More than 100 people work at the head office in Ottawa, and over 350 surveyors from across Canada and with a variety of backgrounds participate in the peer review process of accreditation.

3. The CCHSA accreditation program

The Canadian Council on Health Services Accreditation (CCHSA) role is "to help health services organizations, across Canada and internationally, examine and improve the quality of care and service they provide to their clients."[1] The foundational concepts of the program are population health, client-centered approach, patient safety, risk assessment and quality improvement.

The CCHSA accreditation program is based on a three year accreditation cycle for all organizations regardless of the final accreditation decision. The CCHSA accreditation cycle is depicted in figure 1 and described in Table 1 below.

Figure 1: CCHSA accreditation cycle (used with permission of CCHSA)



[1] CCHSA website, www.cchsa.ca accessed June 7, 2005

Table 1: Description of CCHSA accreditation cycle

- An organization new to accreditation must gather information from CCHSA and submit a request form for participation.
- In the preparation phase, the organization organizes its accreditation teams, formulates a communication plan, and attends to deficient areas as required.
- For the self-assessment phase; the organization assesses its own activities against the accreditation standards.
- For the on-site survey, approximately six months in advance, CCHSA organizes a group of surveyors from similar types of organization. The size of the surveyor team depends on the size of the organization. Then the organization schedules interviews with all the teams. The survey occurs for a period varying generally between 3 and 5 days. A feedback session generally occurs at the end of the survey;
- The surveyors file a report with all their observations and recommend a type of accreditation decision. The accreditation survey report is then finalized by the accreditation specialist at CCHSA, reviewed by the Internal Review Committee (IRC) and if accreditation is granted, the report is sent to the organization with the accreditation certificate. The standard for the turn-around time is 45 days after the end of the visit;
- The organization can then incorporate the recommendations and the suggestions in their quality improvement program.

4. CCHSA accreditation standards

CCHSA accreditation standards are standards of excellence to stimulate quality improvement. In 2001, a new 'Achieving Improved Measurement' (AIM) accreditation program was launched and these standards were accredited by The International Society for Quality in Health Care (ISQua) in 2002. They are in accordance with the five following ALPHA principles established by ISQua:

1. Standards contribute to quality and performance improvement in the health organization and the wider health system;

2. The scope of standards is patient/client focused and encompasses the management and support infrastructure of that organization or service;

3. The content of the standards is comprehensive and reflects the following dimensions of quality: accessibility, appropriateness, capacity, continuity, effectiveness, efficiency, responsiveness, safety and sustainability;

4. Standards are planned, formulated and evaluated through a defined process;

5. Standards enable consistent measurement.

5. The Impact of Accreditation – a Literature Review

As mentioned in the introduction, the literature lacks substantive evidence of the effectiveness of accreditation but some studies have been able to demonstrate that an accreditation program can influence, educate and facilitate implementation of new practices.

A study on the impact of accreditation on 23 hospitals in Australia in 1983 revealed that accreditation had stimulated changes in six areas examined. Most changes had occurred in the area of 'Nursing organization' and 'Physical Facilities and Safety, while fewer changes had occurred in relation to with medical organization (Duckett, 1983).

In 1992-93, CCHSA (then known as The Canadian Council on Health Facilities Accreditation) surveyed its members to identify the level of implementation of continuous quality improvement (CQI) in Canadian health care facilities (Baker, 1995). It led to the development of standards (CCAP, 1995) that incorporated the philosophy of CQI. In 2002, a follow up study demonstrated the increase of CQI implementation from 49% in 1992 to 87% in 1997, to 93% in 2001 which had been demonstrated earlier to be linked to the introduction of the CQI philosophy in the accreditation process (Beaumont, 2002; Lozeau 1996 & 2002).

Another study looked at the use of mid-level indicators in determining organizational performance in 73 Canadian health care organizations, with a total of 319 accreditation teams responding. It documented 81% of the teams initiating some type of change as a result of tracking indicators and that "teams that had been accredited in the past 18 months in fact made many more changes (2.5 changes on average) compared with the prospective teams (1.5 changes). This was a statistically significant finding." (Lemieux-Charles, 2000: 51)

On a perception level, out of the 423 CCHSA accredited organizations surveyed in 2002, sixty four percent (64%) believed that recommendations are important change agents. In more concrete terms, eighty three percent (83%) implemented their report recommendations either fully or partially. In the same 2002 survey, sixty seven (67%) of organizations reported finding deficiencies while comparing themselves to standards during the self-assessment process (Beaumont, 2002:110; CCHSA, 2002:32).

Also looking at the self-assessment process was a study conducted in one hospital in France, following the implementation of a mandatory accreditation program. Sixty nine percent (69.6%) of the survey respondents believed that "irreversible changes occurred at the level of the hospital" as a result of the accreditation preparation (Pomey, 2004). Some of the changes documented were the introduction of a writing culture, an improved quality control and risk management program, the development of common values and the creation of an "organizational environment more conducive to fostering better treatment of patients."

In South-Africa, following the implementation of an accreditation program in 1998, a prospective, randomized control trial of 20 intervention and 20 control hospitals, was able to demonstrate that "the COHSASA-facilitated accreditation program was successful in increasing public hospitals' compliance with COHSASA standards" but failed to link the accreditation work to improved quality outcomes. Whether this is as a result of some characteristics of the accreditation program itself, or limitations of the research design, the later proposition is favored by the researchers (Salmon et al, 2003).

CHAPTER III – ACCREDITATION AND SOCIAL CAPITAL – A LITERATURE REVIEW

As part of the accreditation preparation, self-assessment teams are created, meeting regularly to complete and rate the set of standards assigned to them. This is quite obviously an opportunity to meet new people and develop new relationships which Pomey (2002) referred to as the development of "social capital" according to Bourdieu's definition. The notion of 'social capital' is broader than only network development, and we will explore further in this section how this concept can be useful to measure one aspect of the impact of accreditation.

1. Social Capital as a concept

Many types of capital have been introduced over the years to explain the range of outcomes observed (Woolcock & Narayan, 2000) namely economic capital, physical capital, (tools or machines), human capital (through education and job training) cultural capital, (family background, social class) intellectual capital (knowledge and knowing capability) and "social capital". This concept is still being formulated and in the words of Schuller and colleagues (2000): it "has several adolescent characteristics: it is neither tidy nor mature, it can be abused, analytically and politically, its future is unpredictable, but it offers much promise" (Mignone, 2003:26).

Coleman and Bourdieu could be considered the two initial thinkers of social capital. Their purpose was to link two fields which separated in the early twentieth century, economy and sociology (Mignone, 2003:14 and 18). However, it was in 1995, with the publication of Bowling Alone by Robert Putman, that the concept of 'social capital' reached greater popularity. It is important to recognize that social capital as a concept has been used at a micro-level and at a macro-level. Putman was mainly concerned with the macro level, while Coleman and Bourdieu were primarily focused on social capital at the micro-level (Hawe 2000:2). Authors generally discuss the concept at one level or the

other, except for a few such as Woolcock (2000) who recognizes the possibility of applying the concept at both levels.

Social capital has migrated from sociology and economy theory to disciplines as diverse as political science (Hooghe, 2003), public health - as a potential determinant of health (Bolin, 2003), epidemiology, (Fassin, 2003) and business management (Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998; Prusak, 2001; Cross, 2002; Svendsen et al, 2003). This last field of research is the closest to our field of interest which addresses social capital within organizations. To take Nahapiet & Ghoshal's (1998:36) argument, the concept of social capital is applicable at the organizational level, because "institutions operate in contexts characterized by enduring relationships with relatively high levels of interdependence, interaction and closure" the same way as a geographic community, a family, a religion or a class.

There is still much debate over the definition of social capital as a concept (Mignone, 2003). For the purpose of this study we chose Adler and Kwon's definition (2002) for its applicability at the organizational level:

> *"Social capital is the goodwill available to individuals or groups. Its source lies in the structure and content of the actor's social relations. Its effects flow from the information, influence and solidarity it makes available to the actor."*

Social capital is said to "form out of repeated social interaction between individuals and groups which develops trust, reciprocity and norms of behavior" (Coleman, 1994 in Farmer 2003). It is important to remember that the value of social capital does not reside in individuals but in network-relationships (Hawe, 2000). Social capital can be built internally within an organization (horizontal linkages or bonding), and through external interactions (Vertical linkages or bridging) (Farmer 2003; Woolcock & Narayan, 2000). It is also important to distinguish the *sources* of social capital from its *consequences* (Portes in Hawe, 2000:2).

Three dimensions have been identified as the source of social capital (Nahapiet and Ghoshal, 1998) and used in a previous study at the organizational level (Svendsen, 2003). These are:

1. **Structural dimension** - the structure of the networks in which the relationship is embedded;
2. **Cognitive dimension** - mutual understanding, shared language and codes;
3. **Relational dimension** - trust and reciprocity.

The manifestation of Social Capital, inspired by Adler and Kwon (2002) can be described as (1) Information sharing; (2) Solidarity / Adhering to group norms; (3) Exerting influence on agents through social ties. (Svendsen, 2003:18; Lin, 2001) Also, theories and research have linked social capital to the development of new ideas (Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998) and to the creation of business value (Svendsen, 2003). More specifically, according to Nahapiet and Ghoshal's framework (1998) the three dimensions of social capital would facilitate (1) the access to parties for combining/exchanging intellectual capital (knowledge and knowing capabilities) (2) the anticipation of value through combining/exchanging intellectual capital, (3) the motivation to combine/exchange intellectual capital, and (4) the capability to combine current ideas to create new ones (i.e. creation of new intellectual capital)

2. Social Capital and Accreditation

Social capital provides a framework which helps explain observations such as this one from a study on accreditation:

> *"The very process of meeting other organization members in committees can lead to improvements in organizational functioning" (Duckett, 1983).*

From a social capital point of view, during the meetings, the network of relationships was enriched and an increased understanding and trust between the people working together was developed. As a result there is increased information sharing, an adhesion to the same group norms of quality of care, and a willingness to exert influence to facilitate decisions, hence the improvement in organizational functioning. Research has

demonstrated that "employees, who are motivated by a common vision and set of goals, trust their colleagues and are linked into diverse and information-rich external networks will tend to be more innovative. In other words, positive relationships are necessary to transform an intangible asset (knowledge) into a tangible one (new processes, products and services)" (Svendsen, 2003).

In the health care field, research demonstrated that much learning happens through work-based contact, which can be positively influenced by increased social capital (Gopee, 2002). The desired outcome in our context would be to facilitate the exchange of knowledge and learning in the organization to result in increased quality of care and services. Aside from Pomey (2002), and Duckett (1983), two other studies have shown that accreditation facilitates formal and informal communication by leveling out the communication channels within organizations (Beaumont, 2002; Francois, 2001).

In addition, theoretically, we can see that the accreditation self-assessment phase would facilitate three out of the five key behaviors outlined to build high quality relationships: (Svendsen et al, 2003:45)

- Proactive communication - through the discussion of quality of care outside of a crisis;
- Transparent communication - facilitated by discussion on specific standards, and;
- Face-to-face communication - occurring during the self-assessment meeting.

On this last point Prusak (2001) comments that companies have invested in technologies to enable telecommunication and virtual teamwork, but specifies that "Social capital grows when team members meet face to face and work side to side". The other two behaviors highlighted to build high quality relationships are 'consistency' and 'follow-through' which occurs outside of the accreditation process, and is linked to the context of the organization.

Accreditation may not be the only opportunity for building high quality relationships, (strategic planning may be another opportunity) but Social capital can be seen here as a

by-product of the accreditation process as well as a possible framework to explain the differences between the accreditation teams inducing change at the time of the accreditation and in the period following. Contrary to most notions of capital, the more you use your social capital, the bigger it grows: *"Stocks of social capital, such as trust, norms, and networks, tend to be self-reinforcing and cumulative. Successful collaboration in one endeavor builds connections and trust-social assets that facilitate future collaboration in other, unrelated tasks"* (Putman, 1993 in Prusak and Cohen, 2001).

3. Notes of caution

Prusak (2001) warns that "Volatility and virtuality erode relationships". In a world where mergers and integration of services are common and where communication technology investment is high, organizations need to pay closer attention to their social capital. It also requires an iterative process to maintain a healthy social capital (Woolcock & Narayan, 2000).

Building relationships and social capital can be costly in time hence money, and at times the cost can be greater than the value of the benefits from the relationships (Svendsen, 2003). The challenge rests in being able to measure the social capital gained in relation to specific interactions and the benefits of this additional social capital as well as the cost related to the interactions.

Finally, high *internal* social capital can lead to 'groupthink' when people no longer question the shared belief, or limit their openness to new information or alternatives (Prusak, 2001; Nahapiet & Ghoshal, 1998). High *external* social capital has the potential risk of decreasing the organization or group autonomy (Svendsen, 2003).

CHAPTER IV – DESCRIPTION OF THE MULTIPLE-CASE STUDY

1. Purpose and conceptual framework [2]

As mentioned earlier, this case study is part of a bigger multiple case study evaluating the impact of the CCHSA accreditation process on Canadian hospitals with respect to the dynamic change and the implementation of quality improvement processes. The overall purpose for the multiple-case research is to ascertain that the Canadian Health Care Organisations (HCO) accredited for more than ten years have learned to be more innovative in terms of organizational changes, and have implemented better quality and safety programs than those recently accredited.

To analyze these change dynamics, a theoretical framework developed as part of a thesis (Pomey. 2002) will be used. This framework was the result of a triangulation of different theoretical trends on change and the literature review on quality program implementation in health organisations. This framework includes the analysis of favourable conditions in the implementation of organizational change and the characteristics of the actual changes. The conceptual framework is depicted in the following page and also available in Appendix 1. Below, the conceptual framework is described in more detail as presented in the research grant submission.

1.1 Conditions favoring the emergence and diffusion of change

The conditions favouring the emergence and diffusion of change are: (1) pre-existing organisational conditions, (2) an appropriate ability to conceptualise, (3) presence of leadership, (4) specific strategies to actualise the changes, and finally (5) an environment that puts extreme pressure and allow the development of a project with utopian ambitions.

[2] from the research grant submission

1. **General environment**

Changes are facilitated by an extreme environment exerting strong pressures in foreseeable ways, (Shaw, 2000) allowing at the same time the development of an awareness that the situation can improve and solutions can be found.

2. **Organizational conditions**

One of the elements necessary to induce change is a discretionary area of autonomy where individuals can express themselves (Crozier, 1973) and engender new projects. If people judge their situation unsatisfactory, they will more readily seek ways of changing the situation.

3. **Conception/Comprehension**

Individuals need to understand upcoming changes within their own context, hence acquire new intellectual models (Kleiber, 1997), which requires an iterative understanding.

4. **Strategies**

Implementing changes requires specific planned strategies; and the dissemination of change requires time (Mintzberg, Ahlstrand and Lambel, 1999). To facilitate change, learning environments must be created to allow for debates, information exchange, and training (Crozier and Friedberg 1997; Mintzberg et al., 1999). The purpose of these strategies is to get buy-in and support from the professionals and particularly from physicians who have been identified as essential for the success of change in the realm of quality improvement, as well as potentially resistant to their implementation (Shortell, 1983; Giraux and Joly, 1992; Berwick and Nolan, 1998).

5. **Leadership and competences**

The importance of leadership in the process of change is stressed throughout the literature (Conger and Kanungo, 1998), as well as the quality improvement competencies (Weiner, Alexander and Shortell, 1996). The involvement of the highest level in the organisation,

more specifically the CEO, is essential (Juran, 1989 & 1994; Berwick, Blanton and Roessner, 1990) but not sufficient. Complementary players in a variety of fields acting together are also required to make change possible (Denis, Lamothe and Langley, 2001). For quality improvement programs, a few key leaders with competencies in quality management and abilities to promote quality improvement values are essential.

1.2 Characteristics of change

Each change occurring in the organisation can be described using four categories of characteristics: (1) the nature of change, (2) its conception, (3) the motivation, which led to the change and (4) the type of change involved.

1. Nature of change

Characteristics of change can be described according to their nature (Ford and Ford, 1995; Hinings and Greenwood, 1988, Vandangeon-Derumez, 1998; Mintzberg, Ahlstrand and Lambel, 1999), such as:

- the modality of change, intentional or non intentional;
- the target, whether the change is conceptual or concrete;
- the dispersion, whether the change is localised to a unit or group or generalised across the organisation;
- the pace, whether the change is occurring slowly or quickly;
- the rhythm, whether the change is in uniform constant manner, in fluctuation (variable) or in spurts;
- the duration, whether the change is spread over a long period of time or a short period of time;
- the trajectory, whether at the time of the study the change has been completed, blocked or regressing;
- the phase of the change: initiation, maturation, completion or decline.

2. Conception

Change conception can be done either in an inductive way, coming from staff to management, or in a deductive way from the top down (Rocher, 2000).

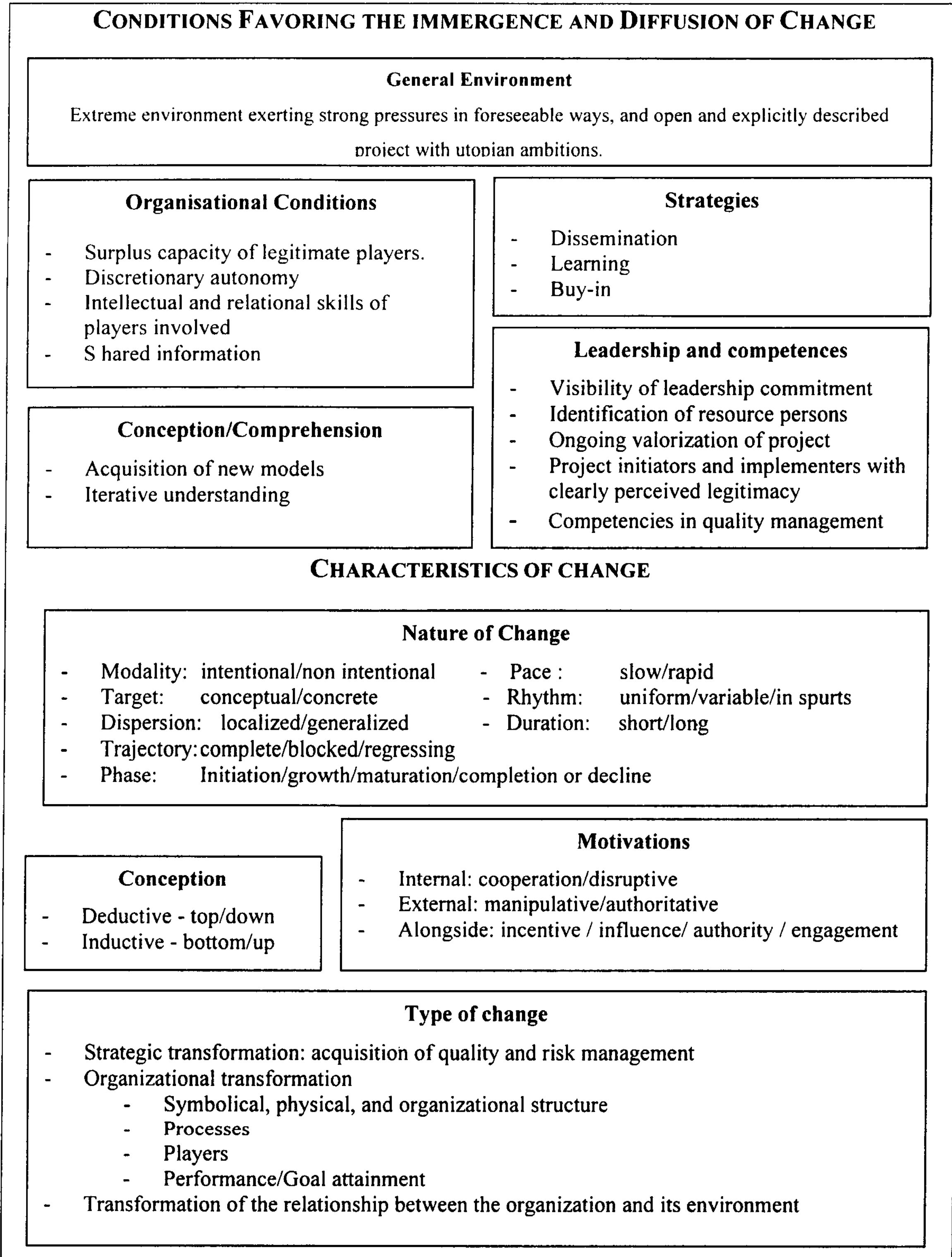
3. Motivation for change

Motivation for change can come either internally or externally (Benson, 1975). Internally, motivation can come from cooperation or from disruptiveness. Externally, motivation for change within the organization can come from the authority of an external body or through manipulation. Other strategies to motivate change include acquiring commitment from people involved, using influence internally or externally, using authority or setting up incentives (Mintzberg, 1983; Longest, Rakich and Darr, 2000; Firth-Cozens and Mowray, 2001)

4. Types of change

Change can affect organisations at the strategic level, the organisational level, and at the relational level with external players . The strategic changes considered in this context of meeting accreditation standards, is the creation or reinforcement of quality and risk management processes.

INITIAL CONCEPTUAL FRAMEWORK for THE DIMENSIONS OF CHANGE



From Pomey (2002), used in the multi-case study.

2. Research Design and Research Team[3]

The overall research project is designed as a comparative case study with four embedded units of analysis (clinical level, group level, organisational level and external partnership level). The strength of the results will be related to finding the same tendencies within different contexts (Yin, 2003). Therefore seven health care organizations with different accreditation pasts, and from across Canada will be selected to participate in the study:

- one organisation that has never been accredited;
- one that is newly accredited;
- one that has recently merged, both original organisations having an accreditation history;
- two with an accreditation history, now members of a health region, and;
- two that have a long history of accreditation.

This research project has been funded by the Canadian Institutes for Health Research (CIHR). The research team is comprised of professors and students from universities in Ontario and Québec, including the University of Toronto, l'Université de Montréal and University of Ottawa. As well, other stakeholders are represented such as the Canadian Council on Health Services Accreditation (CCHSA). Please see appendix 3 for a detailed list of the individuals involved. The budget associated with this project is approximately $160,000 over a 3-year period starting fall 2003, and the overall project passed the University of Ottawa ethics committee.

3. The intervention: CCHSA AIM accreditation program

The intervention considered here is the CCHSA 'Achieving Improved Measurement' (AIM) accreditation program, a continuous quality improvement program.
The AIM accreditation program is marked by three distinct periods: (1) the accreditation preparation/self-assessment; (2) the accreditation survey; and (3) following the

[3] from the research grant submission

accreditation survey report. These three critical periods will give the framework for the timing of the changes occurring as a result of accreditation.

The AIM standards are based on the CCHSA quality framework which includes four dimensions of quality which are 'System Competency', 'Responsiveness', 'Client/Community focus' and 'Worklife'. Each criterion is linked to a quality dimension and a descriptor. Compliance with a set of criteria indicates the level of compliance with its corresponding standard. A definition of the quality dimensions and their criterion is included in Appendix 2.

During the self-assessment, each accreditation team must assess its activities against each criterion and rate itself. The rating scale for each criterion is a seven point Likert-type scale with an option for 'not applicable'. Table 2 below summarises the rating scale.

Table 2: Rating Scale for each criterion within the CCHSA standards

Rating	Definition
1	**No compliance** - the team meets none of the requirements of the criterion
3	**Partial compliance** - The team meets some of the requirements of the criterion
5	**Good compliance** - the team meets most of the requirements of the criterion
7	**Excellent compliance** - the team exceeds the requirements of the criterion

During the accreditation survey, the surveyors rate each criterion as well. The rating of the criteria is based on the results of the self-assessment, indicator data, on-site and required information, tours, client interviews, focus groups, and accreditation team interviews. To date there are no specific indicators mandated, but they are used in accreditation to provide evidence of compliance to standards and criteria, and to help the organisation monitor and improve the quality of services. To improve reliability, surveyors always work at minimum in pairs when reviewing a set of standards with a team.

The Accreditation Survey Report is a confidential report given to the organisation. In turn, it can choose with whom it wants to share the information included in the report. The report includes an analysis of performance by quality dimension, an analysis of performance by quality descriptor globally and for each of the accreditation team, a report of the feedback from three different focus groups (client, staff and community partners), comparative team findings, and individual team findings identifying strengths, areas to improve and recommendations. Good practices and achievements are also highlighted in the report.

Accreditation decisions are based on the number of quality descriptors rated 4.5 and more, the number of high priority recommendations. Recommendations come with a risk assessment rating for:

- the likelihood of an adverse event occurring;
- the severity according the to the potential for serious consequences;
- the urgency for action.

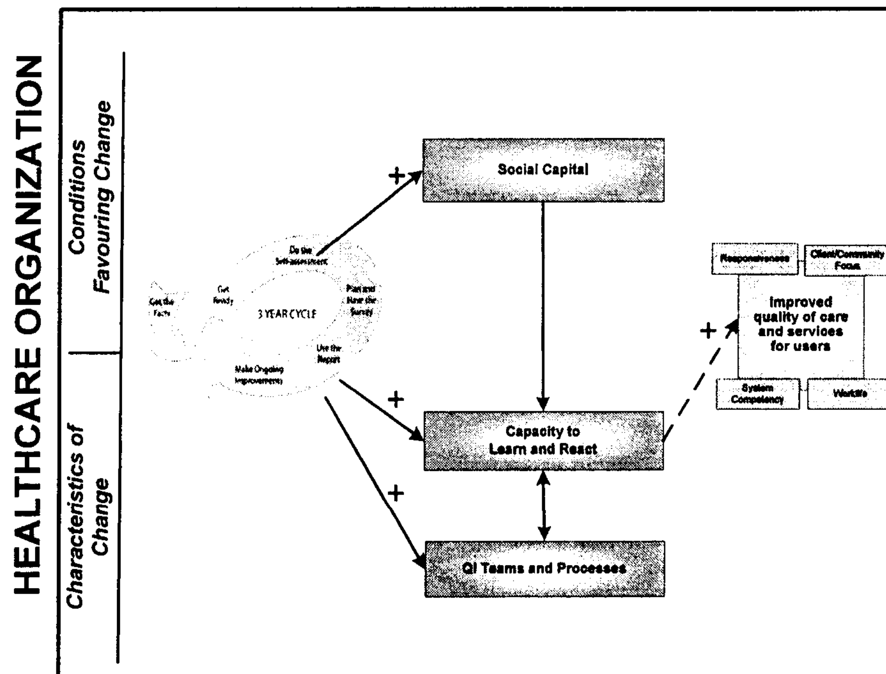
CHAPTER V: THE CASE STUDY

1. CONCEPTUAL MODEL

1.1 Conceptual model for the overall case study

A conceptual model was developed for the study to summarise visually the relationships between the different aspects of the study (Figure 2). The accreditation process depicted as the accreditation cycle is seen as an intervention affecting change in a healthcare organization. The conditions favoring change within the organisation will affect the outcome of this intervention. The anticipated changes include increased social capital, the formation of QI team and process, and an improved capacity to learn and react when faced with challenges. Each outcome should lead, directly or indirectly, to the improvement of quality of care and services for the users. The four quality dimensions as described by CCHSA are included in this conceptual model as a reminder of the purpose of accreditation, but are not part of the study.

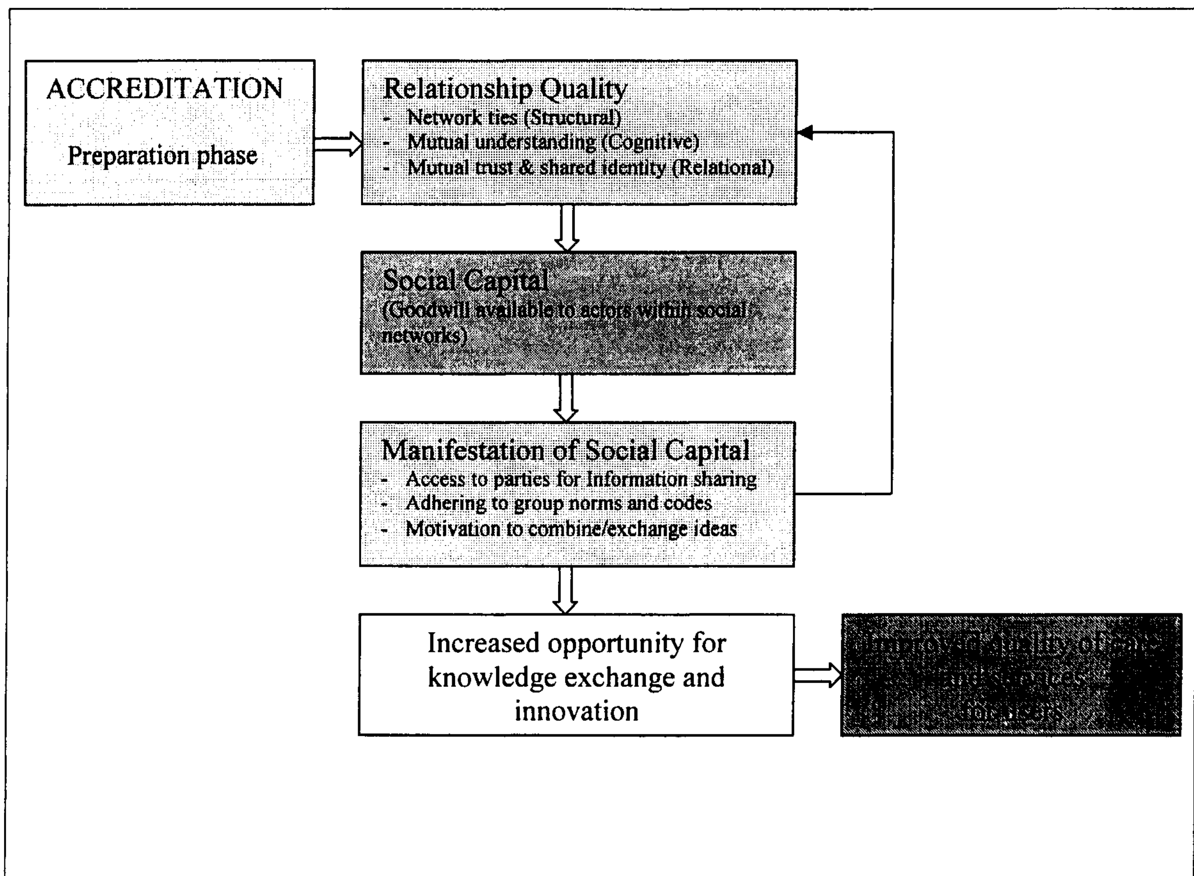
Figure 2: Conceptual Model on the impact of Accreditation



1.2 Conceptual model for Social Capital and Accreditation

More specifically for the aspect of the study on social capital, a separate conceptual model was developed. The model is inspired by two previously developed models (Svendsen et al, 2003:12; Nahapiet and Ghoshal, 1998). It shows the link between accreditation preparation, social capital, knowledge exchange and quality improvement but this study only addresses the effect of accreditation preparation on the building of social capital, i.e. the enhancement of relationship quality.

Figure 3: Model of Social Capital, accreditation and quality of care outcome
Adapted from Svendsen, 2003:12 and Nahapiet and Ghoshal, 1998)



2. RESEARCH QUESTIONS

Following the literature review, and in accordance with the multiple case study presented above, three research questions were developed. The first one is a broad question, looking at any change that can be related to accreditation. The two other questions are more specific. One inquires about the effect of the accreditation process on capacity building for the organisation and the other one looks at the contribution of accreditation preparation to the building of social capital within the HCO. This last question is more exploratory in nature, and the purpose of this study was not to measure social capital, which would be beyond the scope of this research.

QUESTION 1
Does accreditation as an intervention in quality improvement introduce changes within the organisation, measured by the characteristics of change in the conceptual framework on the dimensions of change?

QUESTION 2
Does accreditation introduce changes that make an organisation better able to respond to changing needs?

QUESTION 3
Does the self-assessment phase of accreditation enable the development of social capital through the creation of networks, trust and the development of mutual understanding?

3. CONTEXT FOR THIS CASE STUDY

In the following paragraphs, we introduce the organization at the centre of this case study which is one of the eight Regional Health Authorities in New Brunswick.

3.1 General Environment

The first important change in the last decade was in 1995, when service delivery adopted a Program Management structure. This required a big adaptation from staff. A year later, in 1996, the organization was incorporated.

On April 1, 2002 there was further change with the implementation of the Regional Health Authorities Act. (Regional Health Authorities Act, S.N.B. 2002, c. R-5.05) Eight new Regional Health Authorities (RHA) came into effect in New Brunswick. At the time of the research, RHAs were responsible for managing and delivering acute care hospital services, extra-mural services and addictions services. (New Brunswick Health Care Report Card, 2003:17)

Their Mission:
"...achieve excellence in providing and promoting health services that improve the quality of life for the people we serve."

The Authority employs over 2600 employees (2675 as of May 31, 2004) and was named one of Canada's Top 100 Employers for 2004 and 2005 (Organization's website). In 2002 (year of the accreditation), its budget was close to $150 million (Organization Annual Report 2000/01).

The Authority provides a comprehensive range of community-based services, acute care and selected tertiary services with most being offered in English and French. It includes eight facilities with a total of 425 beds in two hospitals. It serves both an urban and a

rural population for a total of 193,178 people[4]. However it shares some of the responsibility with another Regional Health Authority for an urban population of approximately 86,000 people. [5] Table 3 below summarizes the information regarding the organization.

Table 3: Site description

• Significant changes:	1995: Shift to program management 1996: Foundation of the corporation 2002: Regional Health Authorities Act came into effect
• Number of sites/facilities:	8 including, health centres, specialized centres and 2 hospitals
• Number of beds:	424 (primary, secondary and tertiary care, all sites included)
• Number of employees:	Over 2600 employees as counted on May 31, 2004 95% of them work at the main hospital
• Number of times accredited:	Once since the RHA formed, over 50 years history for main hospital
• Last two accreditations	1998, 2002 (Beta-site for AIM standards in 1998)
• Number of clinical teams last accreditation:	7
• Number of recommendations last accreditation:	3

As the Authority's flagship facility, the main hospital offers inpatient and outpatient services with specialty services in neurosurgery, neonatology, medical oncology, child and adolescent psychiatry, interventional radiology, infectious diseases, trauma, burn care and gastroenterology (Organization's website).

"Because of the tertiary and other specialized services offered, patients are regularly referred from other parts of New Brunswick, northern Nova Scotia, and Prince Edward Island. The Authority also boasts the Northumberland Family Medicine Teaching Unit, a unique, family medicine residency program in cooperation with Dalhousie University in Halifax, Nova Scotia" (Organization's website).

---

[4] Next NB project web site, http://www.nextnb.ca/documents/RegionslistEN0305.pdf accessed May 27, 2005

[5] Canadian Centre for Analysis of Regionalization and Health (CCARH) http://www.regionalization.org/rha_db.jsp?prov=NB# , accessed May 27, 2005

During the site visit for the study, everyone was impatiently waiting for the unveiling on June 9th, 2004, of New Brunswick's new four-year health reform plan which would reveal the number of bed closures (almost 13% of beds in operation) (Health Edition Online, 2004).

3.2 The accreditation process for the last accreditation

3.2.1 AIM standards and the clinical teams

The organization was a Beta site[6] for piloting the AIM standards in 1998, so in 2002, the teams were using the AIM standards for a second time.

In their last accreditation in 2002, they had the four standard core corporate teams:

- Leadership and Partnership (L&P)
- Environment
- Human Resources
- Information Management

and 8 service delivery teams using different set of standards (Specified in the brackets):

1. Ambulatory Care	(Ambulatory Care Standards)
2. Community Health	(Community Health Services Standards)
3. Extra Mural Services	(Home Care services Standards)
4. Maternal and Child Care	(Maternal and Child Care Standards)
5. Mental Health	(Mental Health Standards)
6. Primary Care	(Acute Care Services Standards)
7. Surgical Care	(Acute Care Services Standards)
8. Medical Care	(Acute Care Services Standards)

[6] A beta site is an organisation that is testing software (or hardware) in its final stage of development, before its commercial release, under normal operating conditions.

In 1998, Emergency had its own team, but for 2002 they were incorporated to other clinical teams to represent the continuum of care from a patient's perspective

3.2.2 Self-Assessment phase

Self-assessments were completed in a variety of ways depending on the teams, but each team had a 'team facilitator' which was most often a clinician, and a 'sponsor' who was part of the management team. It allowed for the development of leadership skills, and the emergence of potential leaders.

Some teams did the entire self-assessment in one day; others used several meetings spread over a few weeks. Regionalization came into effect April 2002, and the accreditation visit was September 2002, so the self-assessment were completed in a very short time span, over the summer period which rendered the process more challenging but perhaps also more efficient.

3.2.3 The accreditation survey and report

Four CCHSA accreditation surveyors came for five days and visited all sites within the organization, at the request of the organization.

As per CCHSA's normal accreditation survey process, in addition to meeting with all the clinical and support teams, the surveyors met with three focus groups. One was composed of patient representatives, another of staff, and a third of community partners. The organization received an 'accreditation with report' because of the high urgency of the recommendations and the high severity of the potential adverse events; but there were only three recommendations. They were as follows (CCHSA survey report, 2002:7 & 8):

1. "To address the number of incomplete files by physicians", major risk of safety/quality issue (Information management standards).

2. "The significant space and equipment issues (especially in ambulatory care) be addressed in a manner that allows the organization to respond to changing needs

and priorities , promote patient confidentiality/safety and support staff within their work environments" (Leadership &Partnership standards).

3. "Formalized reporting structure and process be established regarding safety, quality, and risk, with management overview. These reports must be made to the board on a regular basis" (Leadership & Partnership standards).

4. METHODOLOGY

This research is an explanatory single-case study with embedded units of analysis (Yin, 2003). "The case study approach allows analysis of the processes of organizational change" (Wilson S. in Duckett, 1983) Four levels of analysis relative to the study of the accreditation cycle were identified: (1) individual level, (2) group level (3) organizational level, and (4) external partnership level. As in other studies, accreditation is perceived here as a strategic intervention for quality improvement (Pomey, 2002; Duckett, 1983).
An intervention, as defined by Chris Argyris is "to enter into an ongoing system of relationship, to come between or among persons, groups or objects for the purpose of helping them. There is an important implicit assumption in the definition that should be made explicit: the system exists independently of the intervener" (in French, 2005).
Both qualitative and quantitative information was collected to enable triangulation. The triangulation was based on the theoretical framework on the dimensions of change described earlier (Pomey 2002). (Refer to appendix 2).

We describe below the methodology carried-out for this single-case study, which closely follows the multiple-site study research plan. We will present the tools for data collection, the actual data collection process, as well as the procedure followed for both qualitative and quantitative data analysis. To conclude, we will comment on the issue of data quality.

4.1 Data Collection Tools

4.1.1 Qualitative data

The qualitative information came from pertinent documents collected on site, semi-structured interviews and focus groups performed on site with employees who had participated in at least one accreditation process. Both the writer and the principle investigator for the multiple-case study conducted the focus groups and two interviews. The three other interviews were conducted by the writer only.

Two different interview guides were used; one for the individual interviews and a different one for the focus groups. They were both developed and validated in a previous research on the impact of accreditation on a Health Care Organisation in France (Pomey, 2002). They were written in French, translated in English and then retranslated in French to ensure accuracy. Both guides were tested at pilot site in Montreal, (Mc Gill Hospital) in English and in French. They were available in both languages at the time of the site visit; however for this case study, all participants chose to have the interviews and the focus groups conducted in English.

a. The interview guide for the interviews was build around the following six points:

1. Factors of change;
2. Accreditation enrollment and preparation;
3. Changes in line with the last accreditation survey;
4. External changes as a result of accreditation;
5. The accreditation process itself;
6. Acquisition of social capital through accreditation.

b. The focus group questionnaire was more centered on:

1. The accreditation process, as experienced at the organization;
2. The changes implemented in the organizations;
3. The link between accreditation and quality improvement;
4. The acquisition of social capital through accreditation;
5. The assessment of the survey tool.

A copy of both interview guides is available in Appendix 4 and 5.

4.1.2 Quantitative data

The quantitative data comes from two questionnaires which were previously tested for validity and copies are available in Appendix 6.

a. Organizational Culture questionnaire

The first questionnaire on *organizational culture* comes from work done by Quinn & Kimberly (1984) and has been previously used in studies on quality management by Shortell et al (1995, 2000, and 2001).

b. Management Perception of Quality Improvement Questionnaire

The second questionnaire on *Management Perception of Quality Improvement* has four sections (Section A, B, C and D). The sections A and B were developed and validated by Shortell (1995, 2000) and sections C and D by Pomey (2002). Section D was also discussed by the researchers to be sure that the independent variables have been well taken into account.

Section A is on quality of care, and consists of a 58 questions. This part of the questionnaire is based on the National Malcolm Baldridge Quality Award Criteria (www.baldridge.nist.gov/HealthCare_Criteria.htm) which assess seven major areas of quality management work (Shortell et al, 2000). These seven areas or *scales* are as follows.

1. *Leadership:* the extent to which senior executives and physician leaders were personally involved and committed to QI efforts.
2. *Information and analysis*: the extent to which accurate, reliable and timely data were used to improve the quality of care and services provided.
3. *Strategic quality planning:* the strength of efforts to involve all relevant staff in developing and implementing plans to improve quality.
4. *Human resource utilization:* the level of staff education and training to improve quality.
5. *Quality results:* assessment of the effectiveness of hospital efforts to improve quality.
6. *Quality management:* the extent to which all work units contribute to overall quality and operational performance requirements.
7. *Customer satisfaction:* the hospital's ability to determine and satisfy patient and provider needs.

Section B is on professional participation to organizational management to assess the extent of staff involvement in decision-making.

Section C is on the accreditation impact, and stems from work done on the impact of accreditation in France.
All the previous sections used a 5 point Likert scale (1= Strongly disagree to 5= Strongly agree, or 1= Never or None to 5= Always or Very high)

Section D collected information from the respondents to enable analysis according to eight independent variables: gender, age, duration of employment at the organization, clinical background, occupational category, involvement in a self-assessment team, involvement in quality assurance, and involvement with the accreditation process.

All questionnaires were used with prior approval of the initial researchers. The analysis of the quantitative data was done through the quantitative analysis software SPSS, version 12.

4.2 Data Collection

4.2.1 Qualitative data

a. Timeframe for data collection

The site visit, the focus groups and three of the interviews occurred on May 31st and June 1st 2004 and were conducted by the writer and the lead researcher. The writer then conducted two more interviews over the phone on June 23rd; 2004. One participant was not available at the time of the visit, and the other person was not initially included in the list of interviewee, but offered an interesting perspective which we wished to capture in a more formal way.

b. Documents collected

Documents collected were related either to accreditation, quality improvement, organizational structure, or the environmental context for the study.

The documents collected include:

- A copy of the self-assessment reports for the 2002 accreditation, for seven out of the eight clinical teams and the four support teams;
- The CCHSA report for the 2002 accreditation;
- Reports from eight different departments or units done for the Quality Improvement Committee, between November 2003 and May 2004. Many of them included a copy of their balanced scorecard;
- The conventional organizational chart as well as a 'committee structure' chart;
- A power point presentation on an organizational culture survey (2001) at the site;
- The results of a organization-wide patient satisfaction survey (2001);
- Annual report 2000-2001;
- "Beyond 2000 strategic plan" promotional pamphlet;
- A table reporting on the "Status of the strategic plan" dated September 2001;
- The New Brunswick Health Care Report card 2003 (released January 2003);
- A few local publications: *Hospital Watch* (May 2004), *Health Matters*, a quarterly publication of the New Brunswick health care Association, *Corporate Summary* (March 2004).

c. Semi-Structured interviews

Five people were interviewed. Out of the four identified in the multiple case study research plan, we interviewed two individually:

- the Director of quality improvement (Dir. QI);
- the VP of Planning/Professional Services (VP)

The CEO was not available to meet with the researchers, and the Chief Nursing Officer participated in a focus group. The three other individual interviews were done with:

- the accreditation coordinator for the 2002 survey (Accreditation Coord.);
- the director of human resources (Dir. HR);
- the manager of research services (Manager).

The later was chosen because of her extended experience in the organization, (over 18 years) mainly as a clinician, and in a management position for the last year. She

participated in three accreditations and as a team facilitator in the last one. She has also been involved as a quality improvement advisor in the past.

No physicians were interviewed. However, the clinical background for the five people interviewed was varied, i.e. one pharmacist, one physiotherapist, one dietitian and two nurses.

Each interview lasted between 35 minutes and two hours, and took on average one hour and 15 min.

d. Focus Groups

Two focus groups were convened, and each lasted the full two hours allotted. One group had more representation from clinical teams and the other group had mainly people from the support teams (i.e. Leadership and Partnership team, Environment team, Information management team, and Human Resources team). However, the second group included two people who participated only in a clinical team. It is noteworthy that out of sixteen people participating, six were on more than one accreditation self-assessment team in 2002 (37.5%). In addition, seven participants out of the 16 had participated in both the 1998 and 2002 accreditation survey, but not necessarily within the same self-assessment teams. The clinical team had a wide representation of health care professionals (OT, PT, SW, Pharmacy, Nursing, Health record officer).

Out of the eight clinical self-assessment teams for the 2002 accreditation, six of the clinical teams were represented over the two focus groups. All four support teams were represented. The support team focus group did include a board member. Also attending was one participant who had arrived after the organization's accreditation but who had been Chair of the Accreditation Committee for Leadership and Partnership in another maritime province. Two of the participants in the clinical team had been team leaders for the accreditation self-assessment in 2002.

In all, the two focus groups offered a good mix of the various accreditation teams, and a good multidisciplinary representation.

Below, Table 4 summarizes the participation in the focus groups. The number of clinical teams and support teams indicated are for the accreditation year 2002. The following Tables 5 and 6 offer more detailed information regarding the participants in each of the two focus groups.

Table 4: Summary table for the participation in the focus group

Focus Group	Type of group	Number of participants	Number of Clinical teams represented (2002)	Number of Support teams represented (2002)
#1	Clinical teams	9	4	3
#2	Support teams	7 (1 regret)	2	3
Total:			**6**	**4**

Table 5: Description of Participants to Focus Group #1 – Clinical teams (May 31, 2004)

Function	Years worked at SERHA	Participation in Accreditation
Addiction services	n/a	Community Health Services 2002 1998
Physiotherapist management	n/a	Community Services 2002 Team Facilitator
Occupational Therapist	n/a	Mental Health 2002 Team Facilitator
Nursing at Cancer Care	n/a	Community services 2002
Social Worker	n/a	Maternal and Child health 2002 Mental Health 2002
Health record officer	n/a	Information management 2002 Mental Health 2002 Family Practice 2002
Nursing	n/a	Medical Care (Acute Care) 2002 Family Practice and Geriatrics 2002 Internal Medicine 2002
Nursing	n/a	Environment 2002 Internal Medicine 2002 Surgery program 1998
Pharmacist Director	n/a	Human Resources 2002 Neuro program 1998

Table 6: Description of Participants to Focus Group #2 – Support teams (June 1. 2004)

Function	Years worked at SERHA	Participation in Accreditation
Clinical Coordinator Ambulatory care	29	Surgery program 2002 " " 1998
Manager Extra Mural Service	17 (15 as RN)	Extramural assessment 2002 " " 1998
Neuro Nurse Manager	3 ½	Not at SERHA In NS, Chair of the Accreditation Committee, Leadership and Partnership with AIM standards
Chief Information officer	6	Information Management 2002 " " 1998 (arrived a few months prior to 1998 accreditation)
Patient Programs and Chief of Nursing Officer (CNO)	23 + 3 years prior	Human Resource 2002 " " 1998 Leadership and Partnership 2002
Board of Trustees	2 years	Leadership and Partnership 2002
Supervisor Medical Imaging President Paramed (Union)	18	Human Resources 2002 Internal Medicine 2002

4.2.2 Organizational culture survey

The on-site contact went to all eight facilities within the health region for five consecutive days in June, spending four hours per day at lunch and shift change to encourage a variety of staff to complete the organizational culture survey. Staff who completed the survey ran the chance of winning a week of free lunch at the cafeteria, which is believed to be a sufficiently small incentive not to bias any results.

Valid values for each of the questions were from 0 to 100, with questions referencing organizations A through D for each subsection totaling 100. The rules for data entry were followed as per the directions (Quinn and Kimberly, 1984). A score is computed for each of the four culture types for each respondent. Then, organizational level scores are computed using the mean value of the individual scores for a specific culture type.

Six of the questionnaires returned were identified as having some deficiencies. Their scores were computed as per the survey guidelines (Quinn and Kimberly, 1984) and did not affect the overall results.

- If the questionnaires had percentages entered out of 100% for each statement (n=2), or the sections did not add up to 100% (n=2), the program calculated new values proportionally.
- If for one section of the questionnaire, percentages were not entered, (n=1) but there were at least 3 valid responses for a culture type, the scores were added for the completed questions for that type and divided by the number of valid answers for that type.
- If the value of 0 was entered for all four options in two of the sections (n=1), the scores were added for the two properly completed questions and divided by two.

4.2.3 Management Perception of Quality Improvement Survey

The questionnaires were sent out to the managers in May 2004 and were returned by June 8th, 2004.

Section A of the questionnaire was computed as per the Instrument developed by S.M. Shortell et al, 1995. Valid values for each of the items are integers from '1' to '5', where '1' is low (or lack of the trait) and '5' is high (or existence of the trait). Missing data are indicated with blanks, and '9' was entered if the respondent had circled it under the heading 'don't know'. The computed scales are continuous numbers that should range between 1.00 and 5.00 again with 1 being low and 5 high.

A score is computed for each respondent, for each of the seven scales in section A. The basic formula for each scale is: (1) Determine the valid number of responses for a scale; (2) if there are valid answers for at least one-half of the scale items, add the scores for the completed questions for that scale and divide by the number of valid answers for that scale. If there are valid answers for less than one-half of the questions for a scale, that individual should be scored "missing" for that scale.

Organization level scores are then computed using the mean value of the individual scores for each scale (Shortell et al, 1995). An example is provided below.

Table 7: Example of computation for three scales in Section A

SCALES	Person X Individual Mean	Person Y Individual Mean	Person Z Individual Mean	Organizational Mean Score
1. Leadership	3.9	4.2	4.1	4.06
2. Information and analysis	4.5	4.5	4.2	4.4
3. Strategic quality planning	3.6	3.7	4.0	3.76

Section B was computed with no sub-section, the same way as for one scale in section A.

Section C was computed grouping the questions that measured the same concept, and the same process as section A with the different scales was used.

Three questionnaires were identified to have some deficiencies but no problem resulted.

- Two questionnaires were missing ratings for certain questions. In one questionnaire two questions were not rated, in the other questions on page 3 (section A – Human resources) and page 7 (section C) were not rated. Following the rules presented above, calculations were performed accordingly. However data from only 19 questionnaires will be available for section C.
- In one questionnaire, for question D.8., the rating scale for the involvement into the accreditation process, the respondent wrote "8" close to the "10". Because the cut off between the two groups for this variable was a rating of 7, (determined based on having equivalent numbers on both sides) the respondent could be without doubt included in the "above 7 for involvement in accreditation" group.

4.3 Data Analysis

4.3.1 Qualitative data

Each interview and focus group were recorded, transcribed verbatim and verified by the interviewer/writer for accuracy prior to analysis. At the same time transcripts were checked against notes made during the interviews and focus groups.

Each transcript was attributed four attributes:

1) *Type of document* (focus group or interviews)
2) *Number of years in the organization* (less than 5 years, between 5 and 10 years, more than 10 years, n/a for focus groups)
3) *Number of accreditation visits* (1, 2 or 3 or n/a for focus groups)
4) *Background* (Physician, Nursing, Allied Health, Pharmacist, n/a for focus groups)
5) *Areas of responsibility* (Accreditation Coordinator, Quality Improvement, Management/admin, clinical management, Human Resources)
6) *Gender* (male or female)

This will be most useful for the multiple-case study analysis as the principal investigator for the multiple-case study may see trends across health care organization according to these variables.

The transcripts were then imported into the qualitative analysis software N-VIVO. The coding of the text followed pre-established codes based on the conceptual framework used in the multi-case study and previously used in another study on the impact of accreditation preparation (Pomey, 2002). A list of the codes with a brief description is available in Appendix 7. Codes were reviewed several times and discussed amongst the research team, to ensure understanding and consistency between the sites. The interview questions were associated to specific codes to facilitate consistency when coding as a reference tool, but there was no limitation to using only these codes. The list of the interview and focus group questions associated with the codes is available in Appendix 8 and 9. In addition to the list of pre-established list, a few codes were added by the writer as the transcripts were coded. They are the following:

- *AG in the past*, as the organization has a long history of accreditation and at times would provide detailed information about past experiences;
- *AP training*, as it is a specific type of learning during accreditation preparation;
- *Light bulb award* for convenience of distinguishing this recognition from others;
- *OC groups* to code question 4.18;

- *AP absence of change* as a child of "AP changes" to distinguish it from the other changes as it was a long explanation of why the organization did not change during the accreditation preparation phase;
- *RC Accreditation* as it became apparent that accreditation had the unexpected effect of providing positive reinforcement and recognition for work well done.

For the coding pertaining to '*Social Capital*', the study focused on accreditation as a source of social capital, therefore the transcripts were coded according to the three dimensions of social capital which are structural, cognitive and relational as presented in the conceptual model. A code was included to record 'manifestations' of social capital. A distinction was made between statements that came from specific questions on social capital, and statements that were encountered during other parts of the interviews or focus groups.

A full transcript of a focus group and half of an interview were coded independently by the writer and the lead researcher to increase the reliability of the coding. There were minor discrepancies which were discussed and consensus was reached. It then influenced the rest of the coding. The interpretation of the qualitative information was validated by the other person who visited the site.

Documents collected on site were also reviewed and entered in the NVIVO database as proxy documents.

To analyze the results, a list of the codes to be reviewed for each section was identified. A copy of this working document is available in Appendix 10.

For each change that was identified during the interviews or the focus groups, the writer first identified at which period of the accreditation the change occurred, (self-assessment phase, accreditation survey, as a result of the accreditation survey) and at what level the change occurred (individual level, group level, organizational level or at the external partnerships level). Then the writer checked the self-assessment report and the CCHSA report to see if any references were made to the topic. If not, the change recorded was

classified under 'other changes'. The inclusion criterion for that category was for the change to have occurred within the last accreditation cycle period (3 years). Administrative changes not related to accreditation were considered in the description of the general environment.

For each of the changes recorded a type of change was assigned (Strategic transformation, Organizational transformation, Structural changes, Processes, Information system, Risk management, or Financial).

The final draft of this report will be sent to the organization in New Brunswick and feedback will be requested on the validity of the report's conclusions prior to an article on this case study being submitted for publication.

4.3.2 Organizational culture survey

Using SPSS software, the means, range and standard deviations were calculated for each of the four cultures. Cross tabulations were also calculated between each culture group and each of the five variables selected. T-tests on the means allowed us to identify where significant differences existed between the means of different variables, at 90% confidence interval (CI). This lower CI had to be selected because of the relatively low number of respondents (N=133).

To examine the homogeneity of the data within a culture, a nonparametric test, the Spearman's rho with N>30, was performed to assess the correlation between the answers within each cultures and therefore determine the reliability of the data.

4.3.3 Quality improvement implementation survey

Section A: Quality of Care

Using SPSS software, the means, range and standard deviations were calculated for each of the seven scales in this section. Cross-tabulations between the seven scales and the eight selected variables (as identified in part D) for this questionnaire were also calculated. T-tests on these means were then performed to reveal significant differences

between them at 95%CI and to reveal tendencies, at 90%CI. For reliability, Cronbach's Alpha tests and correlation between questions of each scale were performed.

Section B: Professional participation to organizational management

The same process as explained above was applied for the single output in this section. More detailed analysis of question B1 with its four subsections was done in addition to the aggregate analysis of the four questions in this section.

Section C: Accreditation Impact

Still using SPSS software, the means, range and standard deviation were calculated for the different groups of questions and according to the eight independent variables. T-tests on the means were performed to reveal significant differences between the variables. Same as above, for reliability, Cronbach's Alpha tests and correlation between questions within a group of questions were performed.

4.3.4 Comparison of the 'areas to improve' in the self-assessment team reports with the CCHSA final accreditation survey report

To assess the link between the recommendations and the 'areas to improve' in the CCHSA final accreditation survey report with the self-assessment team reports, a systematic review of both documents was conducted. In each of the support team reports and in seven clinical team reports (one self-assessment team report was missing), the list of 'areas to improve' by section was compared to the list[7] in the CCHSA final report. The following classification was developed prior to the exercise:

CRITERIA	LABEL
If an 'area to improve' was clearly found in both documents	BOTH
If an 'area to improve' was partially found in the self-assessment, and was broader in the CCHSA final report	PARTIAL
For all the 'area to improve' found only in the CCSHA final report	NEW

[7] Including recommendations

At the end, all recommendations and 'areas of improvement' in the CCHSA final report had to be within one of the three categories. Because of the wording in two of the statements in the final report, and the absence of the information in the self-assessment report, an assumption was made that these two 'areas to improve' had been previously discussed during the meeting between the team and the surveyors, and therefore could not be classified as completely "NEW". They were hence labeled 'MEETING'.

For the 'areas to improve' found only in the self-assessment report, a compilation was made under the label "ADDITIONAL AREAS"

Basic statistics, i.e. mean, median, and range were then tabulated to determine a trend.

4.4 Data Quality

As for any other type of research, some tests apply to assess the quality of a case study. Four design tests most commonly used are considered here: construct validity, internal validity, external validity and reliability (Yin, 2002).

4.4.1 Construct Validity

Construct validity relies on "establishing correct operational measures for the concepts being studied" (Yin, 2002:34). The changes considered in this study were limited to changes occurring within the health care organization, influenced by either internal or external forces, including the accreditation program. To identify these changes comprehensively and establish the type of organization being studied, the case study included a variety of methods of data collection (Mays and Pope, 2000): quantitative data from two different surveys, qualitative data from a cross section of key informants, and a variety of documents relevant to the concepts studied. All these enabled methodological triangulation (qualitative and quantitative data) and information source triangulation (multiple key informants and relevant documents) (Pomey, 2002:144). Also important is to establish a chain of evidence which is represented here by the documents linking the questions and the codes, and then the research questions to the codes and quantitative data (refer to Appendices 7 to 10).

Reflexivity is another component of construct validity and needs to be discussed openly as it can influence the outcome of the research (Mays and Pope, 2000). The researcher had no previous link to the organization studied, but has experienced accreditation preparation herself as a manager (1995) and shadowed surveyors during a CCHSA accreditation survey (2004). Both occurred in health care organizations outside of New-Brunswick. The exposure to these experiences is believed to actually help the researcher better understand the accreditation process and better understand the references made by the respondents.

To compensate for any bias and for the for the purpose of increasing the construct validity, a draft of the final report will be submitted to key informants at the site. They will review the accuracy of the data presented and comment on the interpretations made prior to the publication of any article.

4.4.2 Internal Validity

Internal validity relates to "establishing a causal relationship, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationships." (Yin, 2002:34)

In this explanatory case study, a theoretical framework used in a previous study (Pomey, 2002), is the basis for establishing the list of questions, the data collection and the data analysis. To ensure that a causal link to accreditation can be established, questions addressed possible alternatives for sources of change. In addition, rival explanations such as other quality standards than CCHSA's, quality improvement initiatives within the organization, or external forces (e.g. legislation, integration of services) are considered and differentiated. The technique of triangulation also increases the study's internal validity (Pourtois and Desmet, 1989 in Pomey 2002).

4.4.3 External Validity

External validity relates to "establishing the domain to which a study's findings can be generalized." (Yin, 2002:34) In case studies, it is not the ability for statistical

generalization that is being considered, but analytical generalization, which is to say the generalization of results to a theory. (Yin, 2002: 37). The external validity will hence be proportional to the ability of this case study to reinforce the previously built theoretical framework (Pomey, 2002) for health care organizations with a long history of accreditation. This case study is also one of seven studying the same intervention in different contexts, and therefore will contribute to the replication logic for increased external validity.

4.4.4 Reliability

Reliability is the test to "demonstrate[e] that the operations of a study - such as the data collection procedures - can be repeated, with the same results." (Yin, 2002:34) Therefore, the goal is to minimize errors and bias introduced by the researcher. To that effect, a research protocol has been followed based on the multiple-case study, and the procedure for this specific case study has been documented in a project memo. The data base was organized according to answers from questionnaires, documentation collected, interviews and focus groups. Quantitative data was processed according to previously determined procedures. Codes for qualitative analysis were defined based on the theoretical framework, and then linked to the research questions. Double blind coding by two people for one and half transcripts was done to ensure the reliability of the coding.

CHAPTER VI – RESULTS

1. RESPONDENTS' CHARACTERISTICS TO QUESTIONNAIRES

1.1 Organizational Culture Questionnaire

In total, 133 questionnaires were returned and all were eligible for analysis. However, two culture questionnaires were missing some of the 'general information' in section B. They were excluded from analysis for the missing variables.

The description of the sample is summarized in Table 8 below and highlights are presented here:

- More females than males responded to the culture questionnaire (89%) which is close to the proportion of female employees in the organization (85% in 2004) (Yerema, 2005).
- There were an evenly distributed number of people under and over the age of 45, but close to two thirds of the respondents had more than ten years experience with the organization (63%).
- Twelve percent (12%) of the respondents identified themselves as being in a management position while eighty-eight percent (88%) didn't.
- No person identified as a physician or a volunteer answered the culture survey.
- The two main occupation categories representing respondents were allied health professionals (34%) and nurses (33%). The other third of respondents were divided between support staff, administration and others.

Table 8: Culture Questionnaire - Respondents Characteristics

CATEGORIES	*Variable*	*Number (n)*	*Total*	*Percentage (%)*	*Total*
Gender	*Female*	118	133	88.72	100
	Male	15		11.27	
Age	*<= 45*	68	133	51.12	100
	>45	65		48.87	
Years with organization	*<10 years*	48	131	36.64	100
	>= 10 years	83		63.36	
Manager	*Yes*	16	132	12.12	100
	No	116		87.88	

Occupation Variables	Number	Percentage (%)
Nurses	43	32.57
Allied Health Professional	46	34.85
Support	15	11.36
Administration	11	8.33
Others	17	12.78
TOTAL	**132**	**100**

1.2 Management Perception of Quality Improvement Questionnaire

A total of sixty questionnaires were sent out to managers in the organization, including all eight sites. Twenty questionnaires were returned, for a response rate of 33% which is relatively low for this type of survey. No questionnaires needed to be excluded; however one questionnaire had incomplete fields for section A and C. Even if the response rate is lower than desirable, in some respect the sample is fairly representative of the target group of the organization's managers.

- The higher proportion of women who responded to the survey (70%) represents the same percentage of women managers in the organisation (70%) (Yerema, 2005:314)
- The sample represents a good distribution across the occupational categories, including four physicians.
- Close to half of the people in the sample were members of a quality body (45%), hence there is an approximately equal representation of both perspectives.

Perhaps less representative of the management group was the higher percentage of respondents who were members of an accreditation self-assessment team (60%), but the sample does include 40% of managers who were not members of a self-assessment team.

The description of the sample is summarized in Table 9 below.

Table 9: Description of the sample for the Management Perception of Quality Improvement Questionnaire

CATEGORIES	*Variable*	*Number (n)*	*Total*	*Percentage (%)*	*Total*
Gender	*Female*	14	20	70	100
	Male	6		30	
Age	*<=55**	16	20	80	100
	>55	4		20	
Years with organization	*<= 10 years*	6	20	30	100
	>10 years	14		70	
Clinical background	*Yes*	17	20	85	100
	No	3		15	
Member of self-assessment team	*Yes*	12	20	60	100
	No	8		40	
Member of a quality body	*Yes*	9	20	45	100
	No	11		55	
Involved in last accreditation	*Scale<7*	9	20	45	100
	Scale 7-10	11		55	

* For this questionnaire, the age cut-off was chosen at 55 because of considerations at other sites evaluated, to maintain the same age cut-off in all sites. The age cut-off of 45 would have led to a similar situation of n=5 and n=15 respectively for less than 45 and more than 45.

Occupation Variables	Number	%
Nurses	4	20
Allied Health Professional	7	35
Medical Doctor/Physician	4	20
Others	5	25
TOTAL	20	100

2. ORGANISATIONAL CULTURE

2.1 Overall findings

"Culture is defined as the values, beliefs, and norms of an organization that shape its behavior" (Shortell et al. 1995:381). As previously mentioned this questionnaire is based on four basic culture types (Quinn and Kimberly, 1984) and an organization is likely to present a combination of dominant cultures. As predicted, based on the means of the percentage distribution in the culture questionnaire, the organization studied presents two dominant cultures: a ***'hierarchical'*** culture and a ***'group'*** culture. Hence, the perception of the respondents is that the organization has a certain level of bureaucracy (hierarchical culture) but also values affiliation, teamwork and participation (group culture). The organization would also have a tendency to be internally-focused. It appears to offer a balance between providing flexibility and stability to its employees (Figure 5 (Shortell et al, 2001).

There is a certain limitation for the generalization of these results because of the small sample obtained. (N=133). Table 10 below presents the mean score for each of the culture types as well as the range of responses and the standard deviation. Figure 4 and 5 provide a graphic picture of the same results.

Table 10: Organizational Culture Scores

Cultures	*Means*	*Range*	*Standard Deviation*
Group (A)	27.87	0-87	15.776
Developmental (B)	18.52	0-50	9.641
Hierarchical (C)	30.12	5-95	16.307
Rational (D)	23.49	0-65	11.392
TOTAL	100	-	-

Figure 4: Organizational Culture profile

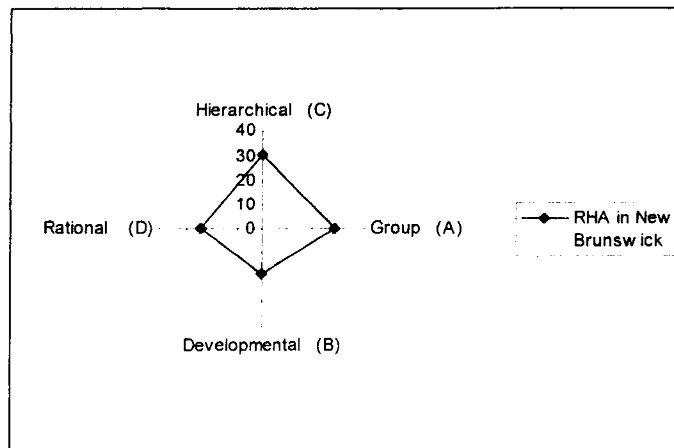


Figure 5: Relational Diagram of the organizational Culture Dimensions

	Stability		
Internal Focus	***Hierarchical* 30.12**	***Rational* 23.49**	***External Focus***
	***Group* 27.87**	***Developmental* 18.52**	
	Flexibility		

Adapted from Shortell et al (2001)

2.2 Reliability of findings

Looking at the Spearman's correlation coefficient, there is good correlation amongst the answers for the 'group' culture (Significant at 0.01 level) and the 'hierarchical' culture (Significant at 0.01 level except between the answers of Organization managers and Emphasis, only at 0.05 level)

There is weaker correlation within the two other culture categories. The developmental culture lacks correlation for two sets of questions, and the rational culture lacks

correlation for three sets of questions. This means that answers indicate different tendencies.

2.3 Findings in relation to the independent variables

To assess tendencies, further analysis showed that the means for the different cultures were not affected by age or by the number of years with the organization.

However female respondents generally perceived the culture to be more *hierarchical* than their male counterparts (mean female= 30.80 and male= 24.73), which presents a significant difference at 90% CI (p-value=0.61).

For the *developmental culture*, the mean given by the allied health professionals was significantly lower (mean=15.1) than the others, in particular the 'Support' and 'Other' category (mean = to 22 and 23 respectively) The ANOVA test is significantly different at 95%CI (p-value=0.017). This signals that the allied health professionals may perceive the organization as less risk-taking and innovative then other occupational categories (Quinn and Kimberly, 1984).

No meaningful conclusions could be drawn between managers and non-managers, because not enough 'managers' completed the questionnaire relative to 'non-managers' ($n_{managers}$= 16 vs. $n_{non\text{-}managers}$=116). Table 11 below summarizes the results for the means according to independent variables.

Table 11: Means according to respondents independent variables – Culture questionnaire Significant differences exist for means in shaded boxes (at 90% CI)

Variables / Culture	Gender		Age		Years in organization	
	Female	Male	<=45	>45	<10 years	>10 years
Group (A)	27.61	29.90	26.63	29.16	27.68	28.32
Developmental (B)	18.32	20.09	17.34	19.76	18.64	18.47
Hierarchical (C)	30.80	24.73	32.20	27.94	31.36	29.54
Rational (D)	23.26	25.29	23.83	23.14	22.32	23.67
Total # of variables with significantly different means	1		-		-	

Culture \ Profession	Allied	Administration	Nurse	Support	Other
Group (A)	27.20	26.44	28.95	25.37	30.97
Developmental (B)	15.10	18.41	19.36	22.05	22.98
Hierarchical (C)	32.63	29.36	29.94	27.66	24.54
Rational (D)	25.07	25.80	21.75	24.93	21.51

People who identified themselves as other included: clerks, receptionists, secretary, Supply technicians, Lab. assistant, Computer science, Clinical research, Social worker, Attendant, Treatment unit manager

3. MANAGEMENT PERCEPTION OF QUALITY IMPROVEMENT

3.1 Overall findings according to the seven scales – Section A

Section A of the Management Perception of Quality Improvement questionnaire provided the following results summarised in Table 12. The figure following (Figure 6) gives a pictorial representation of the total mean-scores for each of the seven scales. Definitions for each of the scales are available in Appendix 11. For interpreting the results, a mean close to '1' indicates a low score and a mean close to'5' indicates a high score. The results are meant to be interpreted relatively.

Because of the low response rate, the following results are more an indication of the tendencies, and should be validated through other means. They will however be of some use when grouped with others for the multiple-case study.

The total mean scores suggest that the strength of the organization is around *Information and Analysis* (4.36) and *Quality Management* (4.16) which concurs with the implementation of balanced scorecards throughout the organization and the strong presence of Quality Improvement teams as reported in the interviews and focus groups.
The more problematic areas in the organization identified by the survey are related to issues around *Customer Satisfaction* (3.83) as well as *Human Resources Utilization*

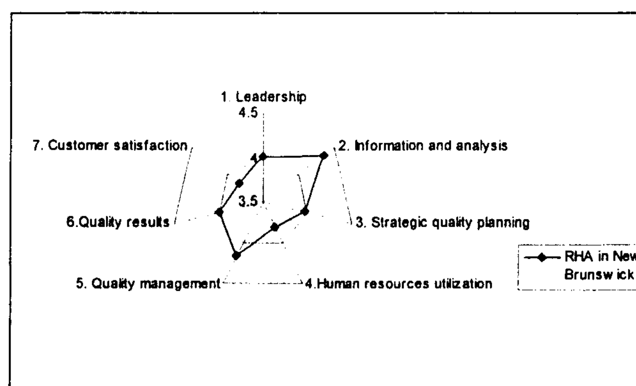
(3.80). The later is contradictory to the results of the culture questionnaire which indicates a tendency for a group culture which emphasizes the development of human resources (Quinn and Kimberley, 1984:299) It also contradicts comments in the CCHSA accreditation survey report which states that staff "feel the organization provides excellent support for educational programs" (p.11) and "the educational component is excellent and to be commended" (HR section, p.45), as well as the "exceptional" rating given by MacLean's review (2005) for the category on *Training and Skills development.* More detailed analysis revealed a lower mean for question 27 regarding the 'training in statistical and related quantitative methods to support quality improvement' (mean Question 27=3) which considerably brought down the score for this scale. We come back to this issue in the discussion of the quality program in chapter VII.

The results for this section can be considered reliable for all the scales since the Cronbach's alpha scores are superior to .6 for all of them.

Table 12: Results of the Management Perception of Quality Improvement – Section A

SCALES	Total Mean Score	Range	Standard Deviation	Cronbach's Alpha	N
1. Leadership	**4.02**	2.7 – 5.0	.656	.924	20
2. Information and analysis	**4.36**	3.0 – 5.0	.570	.907	20
3. Strategic quality planning	3.98	2.7 - 4.9	.505	.799	20
4. Human resources utilization	**3.80**	3.0 - 4.9	.593	.871	19
5. Quality management	**4.16**	3.4 – 5.0	.423	.887	20
6. Quality results	3.998	3.2 – 5.0	.546	.879	19
7. Customer satisfaction	**3.83**	2.4 – 5.0	.571	.903	20

Figure 6: Results of the Management Perception of Quality Improvement



3.2 Findings in relation to the independent variables

Aside for the variable 'clinical background', all the other variables collected revealed a significant difference at 95%CI for at least one of the scale measured:

- **Gender**: Female respondents perceive *quality results* better than male respondents (p-value= .044);
- **Age**: Older respondents perceive *leadership for QI* more favorably than respondents below the age of 55 (p-value= .042);
- **Years in organization:** Managers who have been employed longer than ten years perceive the *information and analysis* scale (p-value= .021) and the *quality management* scale (p-value= .035) more favorably than respondents employed for less than ten years;
- **Member of a self-assessment team:** Members of self-assessment teams have a more favorable view of *human resources utilization* than non-members (p-value= .014);
- **Member of a quality body**: Members of a quality body perceive more favorably the *information and analysis* done for QI (p-value= .028);
- **Degree of involvement in last accreditation:** The respondent who were more involved in the last accreditation perceived three scales more favorably:
    - *Information and analysis* (p-value= .004)
    - *Human resources utilization (p-value= .004)*
    - *Quality management (p-value= .014).*

For the variable 'Occupation', no analysis was done because there were four occupational categories identified and the sample was too small (N=20). It would have little validity. However, the answers to the questionnaires will be part of the multiple-case study and will contribute at that time to the analysis for the perception of quality improvement by occupation. The same is valid for all three sections A, B and C.

Looking at the results from a different angle, the scales of *quality management* and *quality results* are of particular interest to us.

- The *Quality Management* scale measures the extent to which all work units, contribute to overall quality and operational performance requirements. It is perceived differently depending on (95% CI):
  - the number of years of employment in the organization; (p-value= .035)
  - the degree of involvement in the last accreditation (p-value= .014);

  and concurrently there is also b a tendency for a difference depending on:
  - being a member or not in a self-assessment team (90%CI, p-value= .064).

- The *Quality Results* scale measures the extent to which hospital has shown measurable improvement in quality, hospital operational performance, and supplier quality. It is perceived differently depending on:
  - the gender of the manager (95% CI, p-value= .044);

  and there could be a tendency for a difference depending on:
  - being a member or not in a self-assessment team (90% CI, p-value= .068).

Table 13 below summarizes all the significantly different means for section A in the highlighted boxes. The darker grey highlight represents a significant difference at 95%CI. The lighter grey represents a significant difference at 90% CI, which shows a tendency to be confirmed with the other case-studies.

Table 13: Means within each scales according to the respondents independent variables. Significant differences exist between the means in the shaded boxes (darker shaded area represents a difference at 95% CI, lighter shaded area represents 90% CI)

SCALES	Gender		Age		Years in organization		Clinical background	
	Female	Male	<55	>55	<10 years	>10 years	Yes	No
1. Leadership	4.08	3.88	3.92	4.39	3.94	4.05	4.04	3.91
2. Information and analysis	4.31	4.29	4.25	4.82	3.93	4.55	4.27	4.90
3. Strategic quality planning	4.11	3.67	3.90	4.29	3.90	4.01	3.97	4.00
4. Human resources utilization	3.94	3.50	3.70	4.19	3.51	3.93	3.79	3.85
5. Quality management	4.22	4.02	4.10	4.39	3.91	4.26	4.15	4.22
6. Quality results	4.17	3.63	3.97	4.10	3.77	4.10	4.06	3.69
7. Customer satisfaction	3.98	3.47	3.75	4.17	3.73	3.88	3.79	4.04
Total # of variables with significantly different means	1		1		2		0	

SCALES	Member of self-Ax team		Member of quality body		Involvement in last Accreditation	
	Yes	No	Yes	No	Scale <7	Scale 7-10
1. Leadership	4.07	3.94	4.32	3.77	3.86	4.15
2. Information and analysis	4.60	4.02	4.67	4.12	3.98	4.67
3. Strategic quality planning	4.11	3.77	4.13	3.85	3.74	4.17
4. Human resources utilization	4.01	3.44	4.08	3.60	3.40	4.10
5. Quality management	4.30	3.94	4.31	4.03	3.91	4.36
6. Quality results	4.18	3.75	4.04	3.96	3.90	4.09
7. Customer satisfaction	3.93	3.68	3.76	3.89	3.67	3.96
Total # of variables with significantly different means (95%CI)	1		1		3	

3.3 Findings for the degree of participation

Section B of the questionnaire attempts to identify the degree of participation by the different actors in the organization's management and the decision making process. For this organization, the overall rating is quite high with the respondents saying on average that they 'often' participate to the decision making process or influence the decision-making process (refer to Table 14)

Table 14: Results for the degree of participation – Section B

SECTION B	Mean	Range	Standard Deviation	Cronbach's alpha
Participation to organizational management	3.95	2.63 – 4.88	.597	.780

The results to that section can be considered reliable (Cronbach's alpha = .780 >.6) however there is poor correlation between the question B.1 and the other three questions which can be interpreted to mean that respondents are less involved in administrative decisions yet feel that they are *consulted.*

None of the variables selected influences the perception of participation in the organizational management (90% CI), not even the participation to QI teams or the involvement in Accreditation. Table 15 summarizes the means according to the independent variables.

Table 15: Section B Means according to the respondents' independent variables (at 90% CI)

SCALES	Gender		Age		Years in organization		Clinical background	
	Female	Male	<55	>55	<10 years	>10 years	Yes	No
Participation in organizational management	3.85	4.19	3.85	4.36	4.13	3.87	3.86	4.46

SCALES	Member of self-Ax team		Member of quality body		Involvement in last Accreditation	
	Yes	No	Yes	No	Scale <7	Scale 7-10
Participation in organizational management	3.94	3.96	4.01	3.90	3.74	4.13

4. ACCREDITATION IMPACT

4.1 Overall findings

In **Section C** of the questionnaire to management, we see how respondents perceive the impact of accreditation within their organization. The scale used is a five point nominal scale from "strongly disagree" = 1 to "strongly agree" = 5

The means presented in the table below suggest that respondents 'agree' in general that accreditation has an impact internally and on the relationships with external partners. As an ideology, they agree that accreditation is a valuable tool which facilitates the implementation of change. On average respondents didn't see the preparation phase as a particularly rich time for the implementation of change (mean = 3.05). The phase following the recommendation appears richer in implemented changes, but the low reliability score (Cronbach's Alpha = .462) prevents us from drawing firm conclusions. Table 16 below summarizes the results by group of questions, giving the mean, range standard deviation and Cronbach's Alpha and Table 17 below presents the frequency of answers for each question.

Table 16: Results of the Impact of accreditation – Section C

Group of questions	Mean	Range	Standard Deviation	Cronbach's Alpha
Preparation phase Q. 1 & 2	3,05	1.50 - 4.00	.848	.718
Recommendations Q. 3 to 5	3.99	2.00 - 5.00	.742	.462
Internal changes Q. 6 to 8	3.96	1.33 - 5.00	.839	.898
Externally oriented changes - Q. 9 to 11	3.68	2.33 - 5.00	.781	.832
Valuable tool Q. 12 &13	4.10	2.50 - 5.00	.718	.861

Table 17: Frequency of the answers for each question of Section C – Impact of accreditation

Rating Question	Strongly Disagree 1	Disagree 2	Neither Disagree nor Agree 3	Agree 4	Strongly Agree 5	Don't know 9	Missing
C1	0	2 (10%)	8	6 (30%)	0	2 (10%)	2 (10%)
C2	2 (10%)	5 (25%)	4 (20%)	8 (40%)	0	0	1 (5%)
C3	0	1 (5%)	1 (5%)	5 (25%)	11 (55%)	1 (5%)	1 (5%)
C4	0	0	3 (15%)	9 (45%)	6 (30%)	1 (5%)	1 (5%)
C5	1 (5%)	3 (15%)	3 (15%)	9 (45%)	3 (15%)	0	1 (5%)
C6	0	1 (5%)	2 (10%)	9 (45%)	7 (35%)	0	1 (5%)
C7	1 (5%)	0	3 (15%)	11 (55%)	4 (20%)	0	1 (5%)
C8	1 (5%)	0	5 (25%)	7 (35%)	4 (20%)	2 (10%)	1 (5%)
C9	1 (5%)	1 (5%)	6 (30%)	5 (25%)	4 (20%)	2 (10%)	1 (5%)
C10	0	2 (10%)	6 (30%)	8 (40%)	3 (15%)	0	1 (5%)
C11	0	0	6 (30%)	10 (50%)	3 (15%)	0	1 (5%)
C12	0	0	2 (10%)	11 (55%)	6 (30%)	0	1 (5%)
C13	0	1 (5%)	4 (20%)	8 (40%)	6 (30%)	0	1 (5%)

The results for that section can be considered reliable for all the groups of questions with a Crombach Alpha superior to .6. However, as previously mentioned, the group of questions 3 to 5 on the implementation of changes following accreditation recommendations, is very low (.462). This could be explained by question 5 which asks "did you participate in these changes?" In addition to receiving few recommendations, the three received by the organization in 2002 did not call for everyone to get involved in the changes. On the other hand, respondents strongly agreed that dissemination of the recommendations was done (question 3 mean = 4.59) and they generally agreed that the recommendations were an opportunity to implement important changes at the organization (Question 4: mean = 4.24)

4.2 Findings in relation to the independent variables

The significant differences between members and non-members of a self-assessment team, and the degree of involvement in accreditation, for the answers to question 3 to 5 unfortunately cannot be ascertained with such a low reliability score for that group of questions.

Another significant difference was found according to gender regarding the impact of accreditation to enable an organization to better respond to partners and population needs, as well as to develop collaboration with partners in health care at 95% CI (p-value= .025). Women agree more strongly than men with the idea that accreditation affects change in that realm.

Interestingly, being a member of a self-assessment team or having a high degree of involvement in accreditation did not influence the perception of the changes during the preparation phase.

Table 18 below summarizes the results according the independent variables. Areas shaded represent significant differences between the means at 95% CI in the darker areas, and 90% CI in the lighter area.

Table 18: Means within each group of questions according to the respondent's independent variables Significant differences exist between the means in the shaded boxes (darker shaded areas represent a difference at 95% CI, lighter shaded areas represent 90% CI)

Group of questions	Gender		Age		Years in organization		Clinical background	
	Female	Male	<55	>55	<10 years	>10 years	Yes	No
Preparation phase	2.92	3.33	2.93	3.50	3.17	3.00	2.94	3.67
Recommendations	4.10	3.75	3.90	4.33	3.78	4.09	3.95	4.22
Internal changes	3.96	3.94	3.83	4.42	4.00	3.94	3.85	4.5
Externally oriented changes	3.95	3.11	3.62	3.92	3.61	3.72	3.79	3.11
Valuable tool	4.23	3.83	4.07	4.25	4.17	4.07	4.06	4.33
Total # of variables with significantly different means	1		-		-		-	

Group of Questions	Member of self-Ax team		Member of quality body		Involvement in last Accreditation	
	Yes	No	Yes	No	Scale <7	Scale 7-10
Preparation phase	3.00	3.14	3.19	2.95	2.81	3.22
Recommendations	4.21	3.62	4.23	3.82	3.58	4.29
Internal changes	3.96	3.95	4.25	3.74	3.79	4.08
External changes	3.75	3.57	3.58	3.76	3.71	3.67
Valuable tool	4.12	4.07	4.06	4.14	4.12	4.09
Total # of variables with significantly different means	1		0		1	

5. CONDITIONS FAVORING THE EMERGENCE AND DISSEMINATION OF CHANGE

Using the theoretical framework on the dimensions of change as our template, described earlier (Appendix 2), we present below the results of the analysis of the interviews, the focus groups and the documents collected on site. We will start with the top half of the framework which looks at the conditions favoring the emergence and dissemination of change. Table 19 at the end of this section provides a summary.

In the theoretical model, five parameters influence the emergence and dissemination of change. They are:

(1) the general environment external to the organization;

(2) the basic conditions within the organization;

(3) the strategies used for learning and for diffusing change;

(4) the leadership and competence within the organization;

(5) the ability for conception of new models and reflexive comprehension.

Each are elaborated below in regards to the organization studied

5.1 General environment

Three main pressures exist within the environment of the organization: integration and regionalization, financial constraints, and challenges regarding human resource recruitment and retention.

5.1.1 Integration and regionalization: an environment of constant change

The integration of services and the regionalization of the organization have created an environment where change is the norm. On April 1, 2002, the Corporation changed to a Regional Health Authority (RHA), only six months prior to the organization's

accreditation survey. The change also involved appointment of a new board. Mental health and some of the public health functions are now in the process of being transferred to the Authority.

"We've grown so much in such a short period of time" (VP)

"I think in this day and age, we're in an environment where changes and rapid change is a way of life. It's escalating, and we're also in an environment where resources are constrained and getting more constrained all the time" (Dir. HR)

5.1.2 Financial constraints

As alluded to in the previous quote, financial constraints in health care are a fact of life throughout New Brunswick. This has put pressure on the system and influenced the direction of change within the organization. Some employees have been able to put a positive twist to the situation, but most feel the pressure of such constraints which at times creates an atmosphere of competition.

"With some of the challenges that we have had with resources it kind of forces you to be innovative and we've certainly been really open to look at new ways of delivering services" (VP).

"When you do a business plan for a program decision, it's a very difficult decision. It's a huge decision, because there's no money. ...Just an example of this, speech and language pathologists identified that there's a very great need in patient safety, with stroke patient not being seen for 7 or 8 days. That was identified, and put into the committee, and we are told that 'you are a priority because it is patient safety, but you only can have 25'. So you work with that; but it's a difficult process."(FG#1)

5.1.3 Recruitment and retention challenges

The organization has been recognized for two years in a row (2004 and 2005) by MacLean's as one of Canada's 100 top employers which speaks highly of the human

resource management in the organization. However, retirement is becoming an increasing preoccupation, and general recruitment and retention has been an issue for the organization for the past few years.

> *"I would say turnover is significantly higher now than it would have been six years ago. Part of that's retirement; there's more people retiring. Part of that's opportunities that weren't there in the mid to late 90's. Turnover is less today than it was two years ago, but over the last five years we're running 10 to 12 percent turnover annually. High average." (Dir. HR)*

One blessing for the organization might be the economic growth of the city within the Authority, which has decreased the difficulty in recruiting staff in comparison to the rest of the province. But the absence of an affiliation with a university and a teaching faculty increases the challenges of recruiting and retaining advanced trained practitioners.

> *"I think it is across the country but in the Atlantic Canada we have some unique challenges in terms of keeping people back in the Maritimes and it being not affiliated with a teaching site, not a university, we do have students but we don't have a health profession faculty in New Brunswick. So a lot of people who have advanced degrees that want to teach plus have a clinical practice has been quite challenging for us to bring advancement trained practitioners and they need a certain level of competence." (VP)*

5.2 Basic conditions

5.2.1 No excess capacity

The organization uses cost budgeting which leaves very little opportunity for excess capacity. However the organization responds to needs partly by reorganizing the structure.

> *"The organizational structure changing more so than people moving around." (Dir. HR)*

5.2.2 Autonomy

All people interviewed agreed that there is a certain margin of autonomy in the organization. One specified that professionals may feel they have more "leeway" than nurses who often follow orders. Someone else mentioned that in a program management matrix structure, one always has to consider the effect of a decision on other programs limiting at times the freedom, and the last caveat was if it involved important financial decisions, than the decision would have "to go to another level". Otherwise if the issues were around policy, procedure, or work environment, staff is free to express and act upon it.

These findings correspond to the results of the Culture Assessment Report 2001, which identified one of the cultural organizational strength to be the "encouragement to work on own initiatives". As one respondent put it:

> *"The nice thing about this organization is that there is a lot of empowerment at the lower management level with the directors and chiefs and supervisors. They carry it forward and involve their staff that is probably the best way of affecting change and making change." (VP)*
>
> *"Most importantly we have set up structures were the staff are involved in making the decisions and involved in the pioneering." (VP)*

Examples of entrepreneurship from the staff level were also given such as the Infection Control QI program, the training in the community regarding drug resistant organisms, the development of a wound care protocol in Home Care involving two RHA and five extra-mural units.

5.2.3 Relational and cognitive capacity of players

With the program structure and the multidisciplinary teams as well as the Quality Improvement teams, there is a lot of communication across disciplines, focusing on patient care as a priority. The lack of a comprehensive data base, in particular regarding health determinants may hinder the ability to make optimum informed decisions, but the

issue has been identified and is being addressed (NR, GE information, L&P report, p.27). The Authority participated in the CIHI benchmarking study in 2002-2004 which provided some useful information (NR GE comparison)

> *"We don't have a database in our hospital. Period end of statement. There is not a database. Every one of my figures I got from the CIHI reports, manually" (FG#2)*

> *"We are struggling with it in homecare too and I think it is because the fact that we haven't got the proper data to back up what we want to measure, so we have to go around and say we can't do this, we don't have the information, so we are still struggling with it." (FG#2)*

> *Leadership and Partnership report: "The team does not have good information regarding determinants of health so they can better plan to meet the needs of the various areas they serve... They are aware of this problem and hope the provincial health planning process will assist with linking this information" (Accreditation survey report, p.27).*

The organization presents a certain lack of self-worth mentioned by several respondents which was partially attributed to the isolation of the Authority, being in a maritime province.

> *"We are really good at recognizing our limitations and our short comings, but the stuff we are doing, we don't always recognize..." (FG#2)*

Regarding relational capacity with external stakeholders, the board of the Authority was appointed in 2002 and half of it will be elected shortly, providing an opportunity for accountability to the people in the community. However it does not seem to influence at this point the functioning of the Authority, nor their quality program or commitment to the accreditation process. The Authority has developed partnerships and is taking a collaborative approach with the other services in the region and provincially, to meet patient needs.

The organization is unionized at 83% which has an impact on the way business is conducted.

> *"You have to understand the environment in which New Brunswick is in. We're 83 percent unionized here. Our professionals provide nothing that is not compensated for either in equivalent time back or pay at the overtime rate." (Dir. HR)*

5.2.4 Quality Improvement Program

There is a strong vibrant quality improvement program present across the authority.

> *"We're recognized as a national leader in Quality Management [...] we work in an environment of continuous improvement." (Dir. HR)*

It was reported that the present quality improvement program may have been initiated by the former CEO who was a CCHSA surveyor. She hired a consultant from Ontario as a result of one of her survey visits in that province. Strong leadership at the quality and risk management program has been able to maintain the momentum.

The quality improvement structure is well defined and involves program management and department QI teams who report to an organization wide QI committee (*The RHA quality Improvement and Safety Committee)* with representation from all the smaller QI teams.

> *"RHA Quality Improvement Education and Safety Committee, we meet every second Monday of the month and every department and service has to give a report to this committee and give an update." (VP)*

This committee reports to the Professional Advisory Committee (PAC). In fall 2003, the quality improvement portfolio expanded to include utilization, risk management and research

The QI program appears to be very active in improving clinical practice, and very inclusive of all professionals. There is a strong awareness that front line people are essential to the process. As a participant said, for quality improvement you involve:

> *"Not the administration, but the people here right here at the bedside that see it all, including physicians, including nurses." (FG#1)*
>
> *"If the clinical resource nurse on the family services unit are not involved in Quality improvement structure; there's something wrong." (FG#1)*

The involvement of patients and community groups is more targeted. Patients are involved in QI…

> *…for "processes that have to do with patient care. When we were looking at the new Ambulatory Care Centre, having patients say to me, "Parking sucked, then I got inside the building, couldn't find my way to the clinic, was late for my appointment, was scolded because I wasn't on time." Those are things that then you can go back and make changes, and involve those patients and then get them to reevaluate if you've made an improvement. As opposed to putting them on these teams where they sit there and feel like fish out of water." (Accreditation Coord.)*
>
> *"We work with the other hospitals; we certainly get the community groups involved with focus groups with our QI and different organizations." (Dir. QI)*

The Light Bulb Award instigated in 2001, could also contribute to the stimulation of QI initiatives. Satisfaction surveys are done for patients at the program level, and for staff, it is done at the organizational level. The "cultural assessment" survey as it was called, performed in fall 2000, was followed up with meetings which led to positive changes that likely influenced the favorable ranking for MacLean's 100 top employers in Canada.

The introduction of balanced scorecards in 2003 has created a great opportunity for all to learn about this new tool, find useful indicators and benchmark nationally.

Benchmarking appears to be used extensively across the organization through several venues.

- CIHI benchmarking study
- ISM3 standards in pharmacy (Voluntary process)
- Food and Nutrition services participation in the National Benchmarking Collaborative for Food Services which uses the Balanced Scorecard. – 6th year participating
- American standards for critical care
- Professional standards or other institutions in the region for infection control

Aside from the QI reports, and reports for specific issues, no master piece document to track changes throughout the organization was located. An organizational balanced scorecard is being developed to track outcomes at the organizational level.

5.3 Strategies for exchanging ideas, learning, participating and disseminating information.

A variety of strategies are employed in the organization to promote participation, exchange and learning. There is a sense from the comments that the organization involves as much as possible participative management.

> *"So there are various opportunities to provide input into change and depending on what the issue is, working groups would be set up, with key individuals. We would try to be as inclusive as possible so that we are not leaving somebody out. We try to do our best" (VP)*

> *".... Most importantly we have set up structures were the staff are involved in making the decisions and involved in the pioneering." (VP)*

We examine learning and exchange strategies for each level, and then look at the strategies for dissemination of information and participation.

5.3.1 Exchanging and learning at the individual level

At the individual level, opportunities to learn exist by attending training course including leadership training, by shadowing people when taking over a position, and by 360 degree feedback for management staff.

5.3.2 Exchanging at the group level

The most often cited method of exchange is at the working group level, whether it is through quality improvement team meetings or monthly program meetings, which are more or less formal. Information or requests then follow the proper channels to higher levels

> *"There is definitely the formal meetings which I think are the program management meetings and the informal discussions, it depends, sometimes they have smaller groups for quality improvement and QI could also be the formal group so there is another chance to exchange ideas. But also for most of the hospital sections, they have a lot of team meetings that are very informal and ideas come up from those and get moved up into the formal processes anyway." (Manager)*

Cases and workload measurements, as well as discussions between teams (e.g. OR team and ambulatory team) also help identify more efficient ways. In Laboratory services, QI priorities/projects are identified either through complaints, incident reporting, audits, patient survey or new lab safety policy (following SARS and CJD).

5.3.3 Exchanging at the organizational level

At the organizational level, the Professional Advisory Committee (PAC) has a mandate for the entire organization and is_playing an increasingly important role. The committee is made up of one member from every health professionals group, executive management and medical staff.

> *"At the health professions committee is where we have the opportunity to identify issues and talk about policies, practices, procedures as they relate to delivery of care and effect multiple professions in terms of planning and what not". (VP).*
>
> *"There are quite a few formal groups that exist. We've all brought in several new committees. There's the Healthcare Professional Committee, and that's always existed, but it's kind of grown in its role." (Accreditation Coord.)*

The board has also been getting *"information from out there as to what other places are doing and what is going on"* through formal presentations by the RHA services out in the community (example extra-mural, addictions services). They have also received updates on a regular basis following accreditation, for the main recommendations and they become acquainted with QI initiatives through the Light Bulb Award submissions as well as the Patient Safety report.

> *"Certainly as it relates to the major recommendations, we certainly have on a regular basis, like the charts for example, reported on a regular basis. And all the various improvements. The other recommendations like the reporting, and risk management, that process has been established for reports and it's monitored by reports. That is started." (FG# 2, Board member)*
>
> *"Then there is a patient safety report for our organization this past year. It summarizes all the areas and initiatives and activities that are ongoing to address patient safety within our organization, so health planning and delivery committee and Professional Advisory Committee received that. Our CEO also will share any liability type of cases, just highlight because of confidentiality it is challenging,*

but, so the board is kept aware of that type of level but related to risk at that perspective." (VP)

The development of the balanced scorecard is seen as a new opportunity to communicate information within the organization.

> *"So, through our balanced scorecard that he's now been reading through its computers... So he came up to me one day and said: "You guys are doing much more than these averages", just by reading from what's on the balanced scorecard." (FG#1)*

> *"I think just having the balanced scorecard; we have so much more accessibility to all the different areas of the hospital." (FG#1)*

5.3.4 Exchanging with external sources

To exchange information with outside sources, the RHA gets involved in networking within the region – through meetings with local partners (FB#2), quarterly meetings with the local MLA (Status of strategic Plan-Sept 01, p.6); as well as networking outside the region:

> *"There's some that people have been away or networked with someone else and said boy that was a neat thing they implemented somewhere else and then they bring back the information. There's a lot of sharing that way and then it's brought up" (Accreditation Coord.)*

The RHA also participates in provincial task force and initiates quality improvement exercises benchmarking itself against external standards (e.g. Institute for Safe Medication and Practices (ISM3) voluntary self-assessment for safe medication practices)

5.3.5 Strategies for disseminating the information:

Information from higher level management is shared with staff, through a quarterly "President's forum".

> "The CEO *will talk about new changes and things that are taking place" (Dir. QI)*

Quarterly leadership team meetings are another vehicle to share information. The use of the intranet system was not mentioned at all for diffusing information, and the RHA newsletter was mentioned only once in relation to potential use for it.

> *"we were discussing it, using Vital Signs (RHA newsletter) to put some of the graphs and specifics, you know little section saying, "Look how we boom", and how a little public community relations to do something like that, because it's the easiest communication, and it will actually demystify a lot of myths that we've actually created within ourselves, because we actually, do so much better." (FG#1)*

There was some difficulty for respondents to remember whether they had received or not a copy of the accreditation survey report, and then if they had met to discuss the results or integrate them in quality improvement plans. The process was at the discretion of the team.

5.3.6 Strategies for participation

Interesting strategies to encourage participation are found in the organization. First of all, as part of the program management model, to encourage physician participation in decision making, one full time physician working as the medical director of a program spends one day a week with the administrative program director.

> *"...so that you have the physicians involved in the day to day business, and looking at utilization efficiencies, policies, procedures, quality improvement opportunities, indicators. ...They said one of the key things in order to effect change you need to have physicians involved and even if independent, they need to understand the costs and utilization, consistency in care and quality. So we have moved great strides since we implemented program management that would have been in 94/95, in terms of bringing the physicians on board, they're involved, they're champions, they participate in the decision making so that we have the outcomes and efficiencies that we are looking for." (VP)*

To increase participation in finding efficiencies and increase quality of care, innovative ideas are encouraged to be put forward by anyone in the organization in the form of business cases.

> *"We have business cases every year that go in and then the top few are chosen for implementation. They usually look at either quality of care or efficiency, effectiveness, provision of service. So there's a lot that come up that way as well." (Accreditation Coord.)*

Regarding staff participation in the accreditation process, the organization has involved all types of personnel at the hospital for the self-assessment with reported positive results.

> *"Oh very involved, every professional. And non- professionals too, I want you to know, housekeeping, materials management; there are a lot of people sitting on these teams that are not all professionals. The housekeeping people go back and they have such a positive, or somebody says "Yeah, that's really neat and what you've done to change things has been really positive." " (Accreditation Coord.)*

The only resistance to staff getting involved that was mentioned was that *"we'd like to involve staff more than they feel that they have time to be involved." (Dir. HR)*

5.4 Leadership and Competencies

In the organization studied, a strong leadership for quality exists. The Director of Quality Improvement and the Risk Manager were both mentioned by several people as leaders in their field and as being very visible.

> *The director of quality improvement "is recognized provincially and nationally and our risk manager, very well recognized by their peers. Very involved in the provincial associations for quality and risk management for the work on quality assurance and risk management and stayed well informed so we have good leadership there." (VP)*

The current CEO joined the organization in September 2000. He was described more as a supportive figure, providing significant resources to QI which he perceives as a priority, but delegating the rallying job to the Director of the Quality Improvement.

> *"Our CEO feels that QI within the southeast is one of our main focuses, it is a top priority with him. Is he out walking, you know about talking about QI? No he is not. That is expected of me. But I think they have put a tremendous amount of money into place in order for our program to be the success that it is. We have resources dedicated to Quality Improvement; we have recognition events for QI. I think that's it. So there is some commitment in order to give those financial resources." (Dir. QI)*

The scope of the director of quality improvement has recently expanded to include, in addition to quality improvement, the areas of utilization, risk, and research. Quality improvement "goes on in every single area" and many initiatives have taken place such as the development of balanced scorecards, benchmarking on a national scale, and the development of meaningful indicators.

> *"We collect indicators that mean something to people, not just because someone told us that they were good and to collect." (Accreditation Coord.)*

There was however no mention of a strong coordinated link between the director of quality improvement and the accreditation coordinator.

There appears to be meaningful recognition within the organization to motivate quality improvement initiatives. The Light Bulb Award program was initiated in 2001 to meet the need for "proper rewards and recognition for work efforts," identified as a weakness in the Culture Survey (fall 2000). The winner of the award internally, has its project submitted to the 3M award nationally, an interesting incentive. On a smaller scale, coffee is provided ad hoc for QI teams meeting regularly, and personalized letters from the Director of Quality Improvement are sent to recognize important contributions to quality of care. External recognition also occurs through a variety of means and in 2004 two employees from the organization were recognized nationally for their effort in quality

improvement initiatives by winning awards given by the Canadian Healthcare Association (Canadian Healthcare Association website).

Aside from the mention of management training, and learning with experience through the development of the indicators and the balanced scorecard, no specific quality training for staff in general or credentialing is mentioned in the interviews, except for a quick reference to the quality improvement model taught at the Canadian Healthcare Association, which is used in the organization. .

Lastly, it is important to mention the agreement amongst the respondents that leadership occurs at all levels of the organization: at the senior level as well as the middle management level and at the clinical level. Leadership for quality is "pushed down to the frontline", and done in a spirit of empowerment.

> *"So we have had really great leadership and it has been done in a really positive and inclusive way where it involves different staff at the front line... " (VP)*

5.5 Conception and Comprehension

The acquisition of a new model can be attributed to benchmarking, the shift from in-patient care to more ambulatory and home care, as well as the lack of resources which has forced innovation.

> *"With some of the challenges that we have had with resources, it kind of forces you to be innovative, and we've certainly been really open to look at new ways of delivering services. " (VP)*

The concept of quality improvement is very strong throughout the organization, and benefits from a high commitment from all. Principles of interdisciplinary teams (NR Section 2.6) and involving the person closest to the client (FG#1) are carried through in all QI teams. They were also identified as another path to improve quality if support isn't found within the program team.

Even though not fully explored, the idea of meeting as an accreditation team between accreditation visits sparked some interest in the focus groups.

> *"The committees that work as a team for accreditation preparation maybe they should get together a little more often to look at those recommendations, even just meeting as a group and talking through things, maybe we could see where we could do things, because often we work in isolation, and don't realize that somebody else is doing something maybe that's helping us, or maybe that's hindering us. If you don't have those good relationships, you know, you can't get things solved, and even just working as a group," (FG#1)*

The main hospital has gone through accreditation with CCHSA since the inception of the accreditation body in Canada, over 50 years ago, which led many not to question the idea of participating. "*It's part of the culture*", "*We certainly believe in the process*", *"We wanted to be the best that we could be. We want to benchmark with others and we want to make sure we are meeting national standards" (Dir. QI)*. For the ones who questioned participating to accreditation, it was often worded in the negative:

> *"When I ask myself: what if we didn't? I really feel that we would be missing the mark. Why wouldn't we? We really don't have a choice when it comes down to it. [...]There has to be a measure. The one we look at is a national program. We want the people that we provide our service to, to get the best service. (FG#2)*

One person mentioned some hesitation at a high management level regarding entering another cycle: *"its time, its money, accreditation is not a cheap process [...] Is it a good use of our money in times of financial restraint?" (Accreditation Coord.)*. At the same time, she acknowledged the benefits of participating in the accreditation process.

The accreditation process was actually deliberately used as a tool to identify issues and challenges around ambulatory care. One of the three accreditation objectives identified by the organization was to "review our effectiveness in providing ambulatory care services" (CCHSA accreditation survey report to the organization, 2002:3); and as someone mentioned in a focus group:

"We recognized at the time some of the limitations in our ambulatory care program in terms of space and equipment and the difficulty in accommodating the needs or enhancing our ambulatory care programs and we looked to the accreditation process to help us identify some of those issues and help us pinpoint some of the challenges." (FG#2)

In the following pages, Table 19 summarizes the strong and weak points in relation to the conditions favoring the immergence and diffusion of change in the organization studied.

Table 19. : Strong points and weak points in relation to the conditions favoring the immergence and diffusion of change

(Adapted from Pomey 2002)

Domains	Strong points	Weak points
General environment	- Recognized as on of Canada's 100 top employer (MacLean's) - Change from a corporation to a Regional Health Authority on April 1, 2002	- Constant change with mandates coming from the provincial government, e.g. implementation of RHA in 2002, integration of Mental Health and Public health functions within RHA in 2004. - Lack of financial resources - Challenges for recruitment. - No faculty of medicine in NB which affects access to grants for research, and recruitment for physician and highly specialized staff. This also decreases the opportunity for external recognition.
Conditions favoring change	- Decentralized decision making/empowerment to lower levels - Dedication to high standards, QI philosophy - Variety of forums to discuss issues: program meetings, monthly QI meeting, Professional Advisory Committee - Using benchmarking, balanced scorecard - Core of long term dedicated employee with some turnover	- System working to its maximum capacity - Lack of a comprehensive data base in the organization – already identified as a need - Lack of self-worth due to isolation - Fairly 'hospital centric' despite efforts to integrate community, perhaps from concentration of services at the hospital (95%), - Perception of a hierarchical culture within the organization
Leadership	- Commitment and support by CEO for quality improvement initiatives - Leadership for QI occurs at all levels (higher, middle and clinical levels)	- Stronger QI leadership from proceeding CEO. Since 2000, transfer of QI leadership from CEO to Director of Quality Improvement - Lack of formal training for quantitative methods to support quality improvement

Domains	Strong points	Weak points
Leadership (Continued)	- Meaningful and well known process to recognize and reward for quality and efficiency improvement projects (Light Bulb Award) - People working in quality improvement and risk management are very visible and recognized as leaders in their field (provincially and nationally)	- Weak formal link between accreditation process and quality improvement work
Strategies	- Matrix structure of program management and clinical professionals, superimposed with strong QI teams, meeting regularly - Involvement of physicians in the program management model - Consultation with all levels of organization. - Involvement of all personnel including non-professional staff in accreditation process - Many opportunities to exchange information within hierarchical levels and between levels - Interdisciplinary QI teams	- The use of the written form to diffuse the information may not be optimized (e.g. recognition of quality improvement work within authority)
Conception / understanding	- Acquisition of new models through consultation of front line staff, benchmarking, literature review. - Challenges of insufficient resources (financial and human) and the transfer to more community base and ambulatory care also stimulating acquisition of new models. - Recognition of the value of accreditation as a moral buster within the organization, and an opportunity to exchange ideas.	- The accreditation process is taken for granted by staff in general, lacking some of the reflexive thinking that could be beneficial. (Asking the question 'why go through with Accreditation?') - Potential for each accreditation team to meet between accreditation visits is perceived but not fully explored

6 GENERAL CHARACTERISTICS OF CHANGE

6.1 Nature and type of changes

The bottom half of the theoretical framework on the dimensions of change (refer to Appendix 2) can be use as a tool to characterize the changes that occur. Because of the number and variety of changes recorded for the study, we summarized the characteristics of a few changes in Table 20 below. We focused on:

- four changes as a result of the three recommendations (R) in the 2002 accreditation survey;
- two repeat areas for improvement; and
- one area to improve recorded in the staff focus group section of the report.

Table 20: Characteristics of the changes recorded as a result of the three recommendations in the CCHSA report and four areas to improve

Changes recorded / Nature of Change	Charts completion by physicians (R)	Approval for plans for Ambulatory care (R)	Creation of an Ambulatory Care management position (R)	Formalized reporting structure for safety, quality, and risk to board (R)
Intent	Intentional	Intentional	Intentional	Intentional
Target	Concrete	Concrete	Concrete	Concrete
Pace	Rapid	Slow	Rapid	Rapid
Rhythm	Uniform	By increments	Uniform	Uniform
Dispersion	Localized	Localized	Localized	Localized
Trajectory	Completed	Completed	Completed	Completed
Phase	Completion	Completion	Completion	Completion
Duration	Short	Long	Short	Short
Conception	Deductive	Deductive	Deductive	Deductive
Motivation for change	Authority of accreditation	Influence of accreditation	Influence of accreditation	Authority of accreditation
Type of change	Players	Physical structures	Organizational Structure	Process

Changes recorded / Nature of Change	**Identifying and using determinants of Health**	**Rejuvenation of the ethics committee**	**Realignment of responsibility for VP Professional services**	**Centralization of rehabilitation services**
Intent	Intentional	Intentional	Intentional	Intentional
Target	Conceptual	Concrete	Conceptual	Concrete
Pace	Slow	Slow	Rapid	Rapid
Rhythm	Variable	By increments	Unknown	unknown
Dispersion	Generalized	Generalized	Localized	Generalized
Trajectory	In progress	In progress	Completed	Completed
Phase	Growth	Growth	Completion	Completion
Duration	Long	Long	Short	Short
Conception	Deductive	Deductive	Deductive	Inductive
Motivation for change	Commitment to accreditation principles	Influence of accreditation	Influence of accreditation	Influence of accreditation
Type of change	Strategic transformation	Process	Organizational Structure	Organizational Structure

We notice that all changes were intentional and deductive, or top-down, except for one which was brought up by the staff focus group. All the other characteristics are highly variable relative to the nature of the change. We can note that two of the changes related to risk management were related to an external motivation coming from the authority of an organization such as CCHSA. We also notice that the duration of the change may be influenced by the level of organizational control over the change, (reassignment of duties vs. financial approval involving an external institution), or by the scope of the change, (group specific vs. generalized across the organization). If the change is under the organization's control and is relatively localized, the capacity to mobilize is likely to be faster.

As a board member described, the pace for change was very rapid for the recommendations (referred to in the passage as weaknesses).

"I would just like to comment that, not being from the medical profession, being a board member, that when the weaknesses were brought forward to the board, how professional

our staff is and how quickly they'd reacted to the weaknesses. As a board, we were very impressed. Being new members, Accreditation was new to us. Here you go; you guys have these problems, how quickly they were rectified." (FG#2 Board member)

6.2 Conception of change

As an ideology, the organization favors inductive, or bottom-up, change initiatives which are facilitated through the interdisciplinary program committees, the program quality improvement committees and the "Light Bulb Award". However there is recognition that in a big organization some of the changes will come from senior management. This will also occur when the change involves a risk management issue, such as the incomplete charts issue.

"Some are unfortunately top-down still. I mean, if there's a need, you know like if things have to be done, then they have to be done, and it's a top-down implementation. There are others that come from working groups, quality improvement teams that go up the ladder, get accepted and they blossom." (Accreditation Coord.)

"The program level was great when it was day to day stuff but if there had to be a major change or an overhaul, it seemed that management would just kind of tell the lower level this is what we are doing, and basically had to leave with the decision that was made." (Manager)

6.3 Motivation for change

Incentives to implement changes, aside of the accreditation process, include a general desire to improve quality of care and services as well as the aim of decreasing the length of stay

This internal motivation is illustrated by the strong interdisciplinary cooperation through the program/department quality improvement committees, mentioned by all respondents, which

leads to concrete quality improvement actions. The more cohesive the group, the more changes are approved.

> *"I think, on the most part, very little (resistance) just because of how we have been organized and how we have staff involved in QI and the philosophy in terms of involving staff in the change and designing how it is going to be implemented and a lot of the change they come up with themselves, so they have an ownership to it." (VP)*

> *"It depends on how the cohesive the program group is and the physician that is there, then the decisions are made quite quickly and actually those decisions are supported." (Manager)*

7 CHANGES IN LINE WITH ACCREDITATION

To establish the impact of accreditation on the health care organization, we present here the changes that occurred as a result of the accreditation process for the organization studied. We present them according to the three main phases of accreditation (self-assessment, accreditation survey and following the report) and within each phase, according to the level at which the change occurred, (i.e. individual level, group level, organization level, at the external partnership level.) Comments on participation are also included for each phase.

A table in the following pages (Table 21) summarizes all the changes identified in this section and provides additional details.

7.1 Changes implemented during the self-assessment phase

7.1.1 Few changes implemented

Few changes were attributed to the preparation phase. For most respondents, going through the self-assessment process didn't highlight new issues. On the other hand it did provide a forum to re-identify them and to attempt to address them. Some people mentioned the self- assessment as an opportunity for some changes on a relational level, developing new relationships between individuals on the teams.

> *"Homecare - first time being involved in the process - I would say that we didn't identify any problems through this process that we didn't know that we already had." (FG#2)*
>
> *"For us, some of the things we already knew, Sometime there things that we can't do anything about it but it did bring the awareness, and sometimes what it did for us was it pushed us to act"(FG#1)*

Table 21: Changes recorded in the organisation which occurred during the last accreditation cycle (ending May 2004)

Change	Linked to a recommendation	Comments	Level (IND = individual practices level; GROUP = group practices level; ORG = organizational level; EXT = external partnerships level)	Type of change	Area to improve' identified in Self-Assessment	Area to improve' identified in the 2002 CCHSA accreditation report	Transcript reference
CHANGES DURING ACCREDITATION PREPARATION							
Taking a population health approach		Mentioned in 1998 accreditation survey - ongoing	ORG	Strategic direction			SD
Review of the waitlist in Internal medicine		Initiated in AP and highlighted in Self-Ax. Highlighted as a area to improve in CCHSA report	GROUP	Process	**Medical Care:** " Some services within internal medicine cannot be easily accessed due to high volumes of patients and limited resources"	Medical Care: "the waitlist for GI patients to have access to internal medicine is very long" p. 106	FG#2 Q 4
Change to the confidentiality policy		The organization's confidentiality policy is requested in the Information Management standards and therefore was reviewed at the time of self-Ax	ORG	Process	**Information Management** Policy on confidentiality of information is included under criterion 7.2	No reference to the confidentiality policy in the report	FG#2 p 10 and p 13
CHANGES DURING ACCREDITATION VISIT							
Completion of patient files by physicians	R	AV: risk for improper care secondary to improper information was identified as High likelihood high severity and high urgency (HHH)	IND and GROUP	Risk management	**Information Management,** Criterion 8.2 "Discharge summaries are sometimes not completed in a timely fashion" p. 38	The problem was addressed within hours of the end of the visit and corrected by the time the report arrived. Physicians were given one month to sign all there charts with the threat of loosing their privileges at the hospital. NOTE: Physicians were in the process of negotiating with government at the time of AP	all
CHANGES AFTER 2002 ACCREDITATION REPORT							
Incorporating Medical QI and risk indicators and activities right in the program		As a result of suggestion in the CCHSA report	GROUP	Risk management	Nothing found	**L&P:** Integration of medical QI into program management and risk management is necessary. There is definite lack of medical QI" p. 38	VP Q 4 7
Development and implementation of a pain management tool		Identified during the self-assessment. CCHSA report mentions development of the tool but implementation was after the completion of the visit. Accreditation stimulated completion of project	GROUP and ORG	Clinical Guidelines	**Medical Care** for meeting the needs of dying clients "lack of a formalized pain assessment tool"	**Extra-Mural** "Processes for pain management and control are not standardized organizationally at this point. The organisation needs to standardize and educate all appropriate staff to ensure that pain is appropriately controlled for the patients" p. 82. Maternal and Child: "The team si encouraged to proactively move forward with the pain scale for Pediatrics and Gynecology. This should link with the other pain scale processes for the region" p. 94	FG #2 p 7
Increased reporting of risk management to the board but limited by regulation around confidentiality	R	Recommendation: Rated Medium likelihood, high severity, high urgency (MHH)	ORG	Process	**L&P:** "Reporting of results to Governing Body" regarding the evaluation of the effectiveness of its quality improvement system" p 50 Criterion 12.4	**L&P**: "A formalize reporting structure and process be established regarding safety, quality, and risk with management overview. These reports must be made to the board on a regular basis" p 26 Criterion 9.3 and 12.4	Accred. Coord Q 4 6
Creation of an Ambulatory Care Management position	R	Recommendation: rated high likelihood high severity high urgency (HHH)	ORG	Organizational Structure	**Objectives of the survey** " To review the effectiveness in providing ambulatory care services" p 3 and in **Ambulatory Care:** "Require additional physical space to meet the community needs and increased volumes accessing ambulatory services" p 4 Criterion 1.4	**L&P:** "Significant Space and equipment issues (especially in Ambulatory Care) be addressed in a manner that allows the organizations to respond to changing needs and priorities, promote patient confidentiality/safety, and support staff within their work environments " p. 26 Criterion 8.1	Accred. Coord 150 Q 4 6
Rejuvenation of the ethics committee with expert hired from Dalhousie university		AR - Mentioned needing to be addressed in LP report , 2nd reminder, also in many clinical self-ax and in	ORG	Structure	**Home Care** identified needing more guidance and education for staff dealing with ethical issues. **Medical care** identified general lack of awareness by staff regarding implementation of process. **Ambulatory care** identified awareness and access	**L&P:** "During the last survey there were a number of suggestions regarding ethics [...] the team is strongly encouraged to proactively follow-up in this regard " p 29. **Medical Care**: "Staff are unclear on how to implement the process to address ethical concerns" p. 106 **Ambulatory Care:** no reference found	Manager Q 4 6
Realignment of responsibility under the VP Professional Services		Shared responsibility for Ethics and QI to better meet the recommendation from CCHSA report	ORG	Organizational Structure	See above for Quality Improvement and ethics committee	See Above CCHSA recommendation for reporting structure and suggestion for ethics committee	VP Q 4 8
Centralization of rehabilitation services		to help for staff to coordinate services	ORG	Organizational Structure	N/A	**Staff Focus Group**: "Centralization of Rehabilitation services would be helpful for staff to coordinate services for the clients" p 11	FG#2 Q 7
Integration of population health and determinants in the organizational Balanced Scorecard:		Recommendation RE use of determinants is in many sections of the CCHSA accreditation report	ORG	Process	**L&P:** "Collecting information on risk factors and determinant of health" - p. 4 Criterion 1.2	**L&P:** "Continue such initiatives on improving consistency in identifying and using determinants" p. 27. **Medical Care**: "Data related to determinants of health is lacking" p. 105	VP Q 2 2 and Q 4 5

Table 21: Changes recorded in the organisation which occurred during the last accreditation cycle (ending May 2004)

Change	Linked to a recom-menda-tion	Comments	Level IND = individual practices level GROUP = group practices level ORG = organizational level EXT = external partnerships level	Type of change	Area to improve' identified in Self-Assessment	Area to improve' identified in the 2002 CCHSA accreditation report	Transcript reference
CHANGES AFTER 2002 ACCREDITATION REPORT (continued)							
Slow integration of a population needs approach and the use of determinants of health across the organisation		Challenging with no specialized resources in population health	ORG	Strategic direction	See Box above	See Box above	Accred Coord Q 5 1
Reorganization and focus on Health services planning		To have more comprehensive look at the information to make decisions	ORG	Structure	See Box above	See Box above	VP Q 5 1
Additional IT reports made to monitor progress with incomplete charts	R	To enable management and governing body to follow-up on the issue	ORG	Information Management	N/A	See Box in section Change during accreditation visit	FG#2 Q 7
Approval secured to build a whole new Ambulatory Care and emergency.	R	In the works prior to accreditation visit Recommendation used as an argument	EXT	Financing	See Box above on ambulatory care	See recommendation on Space and Equipment issue especially for ambulatory care in box above	VP Q 4 5
Increased communication to the public		Awareness prior to survey and accreditation report reinforced	EXT	External partnerships	**L&P**: Look at questionnaire to the public to see if our message is getting out into the community" p 11 "The authority needs to develop an effective communication Strategy" p 12 Criterion 2 1 and 2 3	**L&P** The team needs to expand partnerships with communities of interest and with community agencies p 28	VP Q 5 2
CHANGES WITH A MENTION IN THE ACCREDITATION REPORT BUT NOT NECESSARILY AS A RESULT OF THE ACCREDITATION PROCESS							
Implementation of shuttles for off site parking for staff (started Feb 2002)		Issue of parking mentioned in Report, solution was already identified in self-ax	ORG	Services	**Environment: "Parking at the Moncton Hospital facility continues to be an issue. Staff shuttle parking initiative started in Fe. 2002 is attempting to address the problem" Criterion 8.3, p.32**	**Environment**: Continue to look at innovative ways to address space issues and parking (p 37)	FG#2 p 14 H23
Incomplete professional charts being resolved through the standards committee		health records audit	GROUP and ORG	Risk management	**Medical**: "There is lack of a formalized written plan which is not always formally shared with the patient" p 38 "Documentation is lacking" regarding clients achieving set goals p 52	**Medical**: "The team needs to work on improving documentation" regarding clients achieving set goals p 106	FG#1 Q 1
Implementation of Balance Scorecard throughout the organisation		Balanced Scorecard development and implementation for quality monitoring	ORG	Process	**L&P** "a balanced scorecard presented to the board on a regular basis" regarding the governing body regularly receiving useful information so that it can identify issues anticipate community issues make informed decisions p 20 Criterion 5 4	**HR**: "it is suggested that a balanced scorecard be developed" p 44	all
Increased number of procedures done in ambulatory care freeing up some OR time		Identified in Self-Ax Increased waiting lists	GROUP	Clinical guidelines	**Surgical**: "Lack of available OR time" p 32	**Surgical**: Address staffing limitation and the allocation of OR time" p 138	FG#2 Q 3
Upgrading of skills for RNs doing minor surgery in ambulatory care (needing some operating background)		As a results of the changes above transfer of care from OR to Ambulatory care	IND and GROUP	Players	Secondary+119 to change identified above	Secondary to change identified above	FG #2 p 6
Reinstatement of Chief of discipline in a program management structure (becomes a matrix structure)		as a result of complaint of professionals under program management (MB) To create a voice for professionals Will facilitate the creation of strong links with the professions in the community and other organizations within the region (NR)	ORG	Structure	**Community** "Health Centre is working on the development of a broader team to provide care to the community" p 12	**Community section**: "More work needs to be done in defining the future role of the community health centres There is a way to offer a multidisciplinary approach to primary care in a more comprehensive way" p 73	Accred Coord p 4 and VP q 2 3
Implementation of an IS System/HER		Strategic direction	ORG	Information System		**Progress since last survey** The organisation followed up on the two recommendations of the last survey regarding [ ] They have done some work with the move to electronic charting although progress has been slow p 3	Manager Q 4 15
Changes for IT risk management		KPMG did an audit for risk management in Information Technology services	ORG	Risk management		**Information management** Continue working to address the issues identified in the 2001 KPMG audit p 53	Risk Management IT proxy + KPMG letters
Increased communication with public health and mental health		Integration of some public health functions and mental health for fall 2004	EXT	Communication			.F

Table 21: Changes recorded in the organisation which occurred during the last accreditation cycle (ending May 2004)

Change	Linked to a recom-menda-tion	Comments	Level IND = individual practices level GROUP = group practices level ORG = organizational level EXT = external partnerships level	Type of change	Area to improve' identified in Self-Assessment	Area to improve' identified in the 2002 CCHSA accreditation report	Transcript reference
OTHER CHANGES AFFECTING QUALITY NOT DIRECTLY LINKED TO ACCREDITATION							
Staff signs a confidentiality agreement every time he/she goes through a performance appraisal		initiated by Quality improvement in HR but could have been influenced by Accreditation	IND. GROUP and ORG	Process			FG#2 p 13
Addition of .5 FTE Social Work hours in ICU		Was identified as a need by the ICU program and they fought for it•D17	GROUP and ORG	Service		A social worker is needed in ER Surgical Care p 137 but no SW hours had been added in Emergency at the time of the interviews. A discharge planner works in the emergency department	Manager Q 4 6
Additional Physiotherapy on week-ends		to decrease length of stay on orthopedics	GROUP	Services			Manager Q 4 6
Introduction of an intensivist type program (ICU and Neuro)		Given as an example of a dynamic, ever-changing hospital	GROUP	Structure			Manager Q 2 2
Transfer of tasks/responsibility from RN to LPN and LPN to others		Lack of human resources	GROUP	Process			Accred Coord
Implementation of a QI process for infection control		Self directed by Infection Control	ORG	Strategic direction			FG#1 p 8 end of Q 2 just before Q 3
Implementation of a new QI committee for geriatrics		Delayed implementation of geriatrics QI because of other changes taking place	GROUP and ORG	Strategic direction			FG#1 Q 2
Development and Implementation of new MRSA guidelines		QI initiative of infection control Project won the light bulb award	ORG	Clinical guidelines			VP Q 4 7
Staff Satisfaction Surveys are being implemented at the unit level in all units		as part of the need to develop score card and benchmarking	ORG	Process			Dir HR Q 4 6
Reallocation of work between units to decrease waiting time		NA - CHECK QI	ORG	Service			FG#2 p 6
Institution of the Health and Planning committee		Mandated by the RHA legislation	ORG	Structure			Accred Coord p 4
Introduction of the Professional Advisory Committee (PAC)		Mandated by RHA act	ORG	Structure			VP Q 4 4
Increasing number of services provided under the RHA		Mandated by provincial government	ORG	Services			Document/ history
Implementation of a screening process to access SLP for stroke patient		QI process and Lack of resources	ORG	Clinical Guidelines			FG #1 Q 3
Presentation to the board about community services within the RHA		For the new board to get to know the organisation better	ORG	Communication			Manager
Implementation of a Balance Scorecard for infection control		Self directed by Infection Control	ORG	Process			FG#1 p 8, Q 3
Earlier involvement of IS in projects		Experience knowledge transfer	ORG	Process			FG#2 Q 7
Implementation of clinical imaging		Strategic planning for increased access to diagnostic results	ORG	Information System			FG#2 Q 7
Implementation of "Computerized medication"		To better interface with our systems (decrease turn around time for delivery period)	ORG	Information System			VP Q 2 2 p 3
Decreased waitlist for smoking cessation		as a result of getting a good team leader	ORG	Process			FG#2
Change in policy in relation to clients found smoking		Quality improvement initiative	ORG	Clinical guidelines			FG#2
Building bonds with influential individuals and organizations within the community		Quarterly meetings with local MLA Senior management team participating in public engagement working with foundation	EXT	External partnerships			Status of strategic plan-Sept 2001

"It probably less processes and more partnerships I find some of them that change as a result." (FG#2)

A possible explanation for the lack of change in this phase may be the strong philosophy of continuous quality improvement in the organization which should minimize the implementation of changes during accreditation preparation. As a respondent said:

"Not really, because I felt that the changes that had occurred on the level that I was talking to, question by question, most of those changes had occurred based on quality improvement projects that had already been implemented." (Manager)

Change overload could be another explanation. The organization changed from a corporation to a regional health authority, on April 1, 2002, six month prior to accreditation, and resignations in administration and retirements took effect in that same period. Another factor could be the decision to present the organization 'au naturel' which then really evaluates the ongoing quality of the organization. There is also the acknowledgement that there may not always be the resources necessary at the time for improvement.

"I think you want to keep that balance, you want to keep it real life and realize that there are always things you just don't have the resources to address things at a particular time." (VP)

"We didn't do any of those things this time or the additional cleaning. In the old days, we would have spent the last week before accreditation polishing all the floors, dusting everything, just making sure that everybody in every part of the building looked their very best. But it was never an accurate or real assessment. It was one of the things that always bothered me in terms of if we don't do it 364 days a year and we do it on day 365; because that's the day the accreditors are coming. We re-copied all the cardexes and made them look beautiful. People all knew, but if you're not doing it continuously, then it's not fair or real." (Accreditation Coord.)

In contrast to the experience at this site, the person who experienced accreditation preparation in another maritime province did comment on how accreditation preparation helped mobilize people within a new regional health authority.

"It was our first opportunity to be accredited as a region and it certainly identified that we all had different processes to accomplish the same end. You know, each one of us had our own way of doing things that was not regionally based and was not collective at a regional level. So it certainly quickly identified what you had to work on, what you had an opportunity to put in place prior to the survey. A lot of working groups were formed as a result of that; to start working on what would be considered as priorities in the region." (FG#2)

7.1.2 At the individual and group practice level

The issue of incomplete files by physicians probably could have been resolved during the accreditation preparation, because there was an awareness of this problem, but the external environment made it more difficult: "provincially, the government and the physicians were negotiating." At the same time, the organization had made a conscience decision they didn't want to find a patch solution for the charts to look good only for accreditation, and had decided to take the risk for the purpose of finding a long term correction.

At a program level, accreditation preparation was seen as an opportune time to review policies and procedures and make changes in accordance. The accreditation standards also triggered the review of waitlist management in one program.

"[Accreditation] is the time when we take a good, hard look at all of our policies and procedures and we clean it up. Even though you try to do that on an ongoing regular basis, it is the time when we really sit down and I really have to be honest and say that." (FG#2)

"We remembered to look at our waitlist. It is another thing that when we were going through that process, we realized that our system was not necessarily up to par and we have to do something about this before accreditation." (FG#2)

7.1.3 At the organizational level

At an organizational level, any structural changes would have been difficult to distinguish from the transition to a regional health authority.

> *"When we had our accreditation those changes were happening at the same time so it would be hard to say. I would say it is probably related more to our regional health authority act and how that made us look at how we were organized." (VP)*

No changes were required for the collection of data during the preparation or for communication. Much of the self-assessment was completed by hand by the teams and a typist entered the data in the CCHSA forms.

> *"We didn't really use the information system for the accreditation. I didn't find anyway, nothing in terms of collecting data or anything special to what they had already done before. I didn't find that there was anything new or anything to adapt." (Manager)*

7.1.4 At the external partnership level

No concrete changes were reported in regards to the increased external partnerships. It is noted in the accreditation survey report that schools, police, public health and social services were missing from the Community Partners Focus Group (CCHSA Accreditation Survey Report, 2002:13). On the other hand Special care homes, mental health, auxiliary, foundation, UNB School of Nursing, mayors and MLA were present.

> *"We keep looking for innovative partnerships with our people. I think accreditation forces you to sort of recognize those and work with it." (Accreditation Coord.)*

7.1.5 Overall participation

Participation was described as "strong", with a broad representation of professionals involved on the teams. Patients sat on some of the teams, as well as volunteers and people from the community, (nursing home, Red Cross) on certain teams.

> *"It was interesting because we had volunteers and patient advocates in our group and it was very interesting to hear their perspectives. You know, there is always room; these*

things always bring out ideas about how you can better serve; your knowledge about who you are serving." (FG#2)

Clinical teams were often based around the already formed QI teams with some additional resource; but for the support teams and certain bigger and more diverse clinical teams, like the 'community team', a new group of people was pulled together. The emergency team was integrated into the 'primary care' team. This was initially met with resistance because of the loss of power and the cohesiveness of the emergency team. The Surgical team which was also a new grouping and represented a continuum of care saw the benefit more readily.

"Well the teams were formed based on their program or departmental QI teams and we have additional expertise, as identified, to help answer the questions." (VP)

"The only resistance there was, was when we took natural program teams, i.e. emerge, family medicine and geriatrics, and started doing things that were called primary care teams. Emerge no longer felt that they were the most important people at the table. [...] they were very resistant to change and fought it for about two weeks or three weeks into the process." (Accreditation Coord.)

The new approach taken for the 2002 accreditation, for leading the accreditation teams, enabled the development of leadership skills and the emergence of potential leaders.

"The last time around, we took staff people to be the team leaders, and then they each had a champion. So the champion was either a Director, (...) We said okay we're going to pick someone from each quality improvement team as a leader that put together the meetings and did everything. We brought them to the table, and we also brought their champion and they were there to support those people, to show the team that there was a commitment to this whole process. Yet it brought it down to the staff person's level which was wonderful. A lot of positives came out of that and new leaders and natural leaders just sort of surfaced. It was great." (Accreditation Coord.)

The groups are described as non-hierarchical, and no change in authority between groups or people was reported

"It really highlights a partnership in that facility. I certainly sit around that table and see all the partners that you work with, including our customers." (FG#2)

7.1.6 Physician's participation

Physicians were reported to have participated in several teams, not only clinical, but support teams as well. If they could not attend in person, they forwarded comments and they reviewed the final document. However there was a wish for more physician participation.

"We have our medical director involved I'd say, but we really need more physicians involved and I don't think it suffices to just have the medical director" (FG#1)

Physicians on salaries would be remunerated for their involvement, but not the ones on fee for service. However it wasn't felt that this was the main determinant. The specificity of the team was suggested as one possible determinant for their participation, the less specific to their field, the less they are interest in participating. It was noted that some physicians followed through with some changes but it was the impression that many left it for others to follow-up afterwards.

"Least involved, probably the physicians in terms of making the changes occur. They'll sit at the team, they'll offer their input. Now I'm not saying that's for all physicians, because there are some that have stuck by anything they have kind of identified in terms of "awe yes"; other things, they've stayed with it. But a lot of them, its really easy to put it away because, there's hope of other people taking care of that, and they'll tell me when it's time to talk about it again." (Accreditation Coord.)

7.2 Changes implemented during the accreditation survey

One change was attributed to this phase of the accreditation, because the process to correct the situation began before the end of the survey.

"We have one recommendation last time around that we started on while the accreditors were still here putting into place a process." (Accreditation Coord.)

7.2.1 At the individual and group practice level

The change mentioned by all respondents was the way the organization responded to the recommendation for the organization to "develop mechanisms to address the number of incomplete files by physicians" (recommendation in the Information Management standards). The department of health records was aware of the situation, but the accreditation visit triggered the action.

> *"I think it would have risen to a level that health records would have put a lot more pressure for leadership to do something about this, as a red flag. But... it sends quite a strong message, if everyone else has to follow policy and procedures why not you?" (VP)*
>
> *"After trying ourselves, having the authority to say if you guys are doing this..." (FG#1)*
>
> *"I think the accreditation took the resistance out, quite frankly." (Dir. HR)*

The physicians had a month to correct the problem with the threat of having their privileges revoked. So by the time the accreditation survey report was received, the problem was corrected. This situation illustrates the authority that the accreditation survey holds as an external body, by the shift of position of the CEO and the Chief of staff willing to take a stand to confront the previously dissenting physicians.

The Professional Advisory Committee (PAC) monitors the chart completion and additional reports prepared by information systems were created to monitor progress with the incomplete charts.

> *"I want you to know it's been a sustained process improvement, as opposed to doing it the old way where people just expected all that. Right now for a variety of reasons, we may only have six OR charts greater than 30 days, but there may be all sorts of different reasons for that. It's not like when they showed up and there were 126 charts in arrears, greater than 30 days. All of a sudden, the physicians know now, "I must do this, this and this and if I don't, I'm in trouble." (Accreditation Coord.)*

7.2.2 Participation in the survey

Many people participate to the survey through the accreditation teams and many respondents mentioned the importance and the value of that final feedback session given by the surveyors, which is well attended.

> *"We have the wrap-up immediately following accreditation. When the accreditors are still here, we invite everybody that's participating in all of our locations to either join us by video, teleconference, whatever, and all the staff. Anybody that wants to go, we fill the theatre. There's 250 seats, and their filled plus extra. They come and they give us a very preliminary report which is videotaped for posterity. ." (Accreditation Coord.)*

7.3 Changes implemented as a result of the accreditation survey report

7.3.1 Participation in the changes as a result of the accreditation survey report

The accreditation coordinator sent a copy of the report to each accreditation team, but no consistent methods were reported on the review of the accreditation survey report. Accreditation teams in line with programs, such as 'Mental Health' and 'Extra-Mural' clearly reported meeting within their program and reviewing the suggestions in the report.

> *"I know in homecare, we met with our VP and managers, and went through it all. I don't recall having a specific post-team meeting but we went through all that was identified, threats and strengths and areas to improve. We are looking at some of that through QI, and we are going through that process." (FG# 2)*

Accreditation teams that grouped a variety of programs such as the 'Community care' and 'Surgical care' teams did not report meeting as a team again post-accreditation. It was left up to QI committees in each program to follow-up with the suggestions in the accreditation survey report and "Different people were pulled in to work on some of the recommendations"/ areas to improve.

7.3.3 At the individual and group practice level

Two changes affecting individual practice or group practice were recorded and linked to the accreditation survey report. They were:

1) the incorporation of medical QI and risk indicators and activities right in the program;
2) the development and implementation of pain management tool.

For the development of the Pain management tool, the accreditation survey report reinforced the need to complete the project.

> *"So a form was developed to document pain management. Probably, we recognized that we knew that we needed to do that, but with accreditation it was a recommendation for improved programming so that has been done, and we've been using it." (FG#2)*

One person made reference to a needed change following the survey that has been blocked since then, but with the next accreditation survey upcoming, it seems to have been resurrected. It was to the disappointment of the speaker that it takes accreditation to have action. (The reference to a recommendation should be taken as "a strong suggestion".)

> *"In terms of social work, there have been issues related to one area of the hospital and this has been identified by our discipline, and discussed with that program many, many times, many meetings and research and data collection, and it was brought up by the accreditors at accreditation with a very strong recommendation. And there was nothing after that, and we scheduled a few meetings with them, and again nothing, and now that accreditation is coming up, there's a lot of talking, they are wanting to implement some things" (FG#1)*

7.3.4 At the organizational level

Most changes as a result of the accreditation survey report are at the organizational level; eight were recorded in that category including the ones related to two of the recommendations.

Reporting of safety, quality and risk

The recommendations related to the formalized reporting structure and processes regarding safety, quality and risk, including reporting to the board on a regular basis have been addressed.

> *"The other recommendations like the reporting, and risk management that process has been established for reports and it's monitored by reports. That is started." (FG#2)*

> *"So risk, quality of care and safety issues all get reported to the PAC who then reports to the board, it has a health planning and delivery committee and to that committee we would report on reports, for example reports that would come from QI projects, and not everyone single one but certainly key ones." (VP)*

Space and equipment issues in Ambulatory care

The recommendation regarding significant space and equipment issues especially in Ambulatory Care was addressed in two ways. The position of Ambulatory Care management was created to facilitate the coordination and address the changing needs and priorities. Having an ambulatory self-assessment team may also have highlighted some of the issues.

> *"Ambulatory Care got recognized as an area that needed more than just nurturing. It needed a spokesperson, someone that could talk about ambulatory services as a whole because one of the new categories was Ambulatory Services last time around" (Accreditation Coord.)*

Ethics committee

Ethics was highlighted as an area to improve in three clinical self-assessments, and mentioned in the accreditation survey report under the leadership and partnership section as a repeat area for improvement. To facilitate actual change in that area, the VP Professional Services had a realignment of her responsibilities to share the responsibility of the ethics committee with the medical chief of staff.

> *"In terms of improvements, ethics falls under myself as well because we had our medical chief of staff, who is so busy recruiting physicians; he had other things but not the time to dedicate towards this. I think there has been a better realignment to address the recommendations in the report" (VP)*

More concretely, the committee has taken form and an expert in ethics has been hired.

> *"One of the things that came out of the accreditation was the ethics committee, and the interesting reaction was that we didn't hear of any action about it. A group of clinical instructors got together, and reviewed some of the things that were going on in the building, issues that we might identify and brought it to the powers that be." (FG#1)*

> *"The ethics committee has been rejuvenated, we've got an expert from Dalhousie University and she has done education with the committee, and we've started reviewing some policies. We are going to have a strategic plan just for the ethics committee and so have that set up priorities for the next three years." (VP)*

Centralization of rehabilitation services

The need was identified through the staff focus group, which is probably a sign that it must have been discussed prior to accreditation. The accreditation survey report did indicate under the staff focus group that "Centralization of Rehabilitation services would be helpful for staff to coordinate services for the clients" (p.11). From the comment in the focus group it is unclear how much the accreditation survey report was a factor in the decision to change the structure, but it probably played a role.

> *"In the documentation of the accreditation report they talk about centralization of rehabilitation services to help for the staff to coordinate services. That move has been made within the organization" (FG#2)*

Population health and determinants

This area is also a repeat suggestion for improvement from the 1998 accreditation survey report. There was recognition that the accreditation standards and the report reinforced strongly the need to have a broader population health approach, and a concrete change is represented in the integration of status of population health and determinants in the balance scorecard.

> *"I think now that we are looking more at population health and the determinants of health and integrating our internal data with that. I think we are more cognizant of that now." (Dir. QI)*

"we are looking at a very high level corporate balanced scorecard. [..] As part of that we are looking at a status of population health and determinants; it is something that came out in our last accreditation process." (VP)

Some limitation mentioned in making progress have been the lack of a "population health specialist", "a really good data base" or "access to a provincial epidemiologist" CIHI and Stats Canada have been of some help but not always specific enough in addressing "population needs as such."

7.3.5 At the external partnership level

External partners can be other health care institutions, community groups, different organizations, and government. Securing capital funds for a new ambulatory care and for emergency is considered as change as a result of accreditation at the external partnership level, because it involved getting funding from the provincial government. However it is difficult to weigh how much the accreditation recommendation on ambulatory space actually worked in favor of a positive decision.

"Perhaps that helped us get the support we needed to get the money for our ambulatory care. It had been identified and the money fell through and some times it is because of the change in government, I mean so many things are happening at the same time it is hard to say which one. [...] you can't say that it was just accreditation. [...] It certainly was supportive to have that external peer review come in and say "you know what we have been talking to you about for the last four years and you know the money got pulled out, it's here and we have to address it'." (VP)

Regarding communication to the community, accreditation *reinforced* the importance of maintaining good communication, especially in times of change and uncertainty.

"I think it was highlighted that we could do more but it had been identified before. It was on our strategic plan; partnerships with the community and I don't know that we have really developed any of those so it came out in the report that we needed to do more." (VP)

7.3.6 Unsure if changes linked to accreditation

There isn't always a clear awareness of the forces behind an initiative or the knowledge of the role of accreditation in triggering a change.

> *"There is an embryonic team... Again I'm not sure it was the result of a recommendation but because this team got formed, there is now a team that audits the chronic medical records for inappropriate uses." (FG#2)*
>
> *"Every time we have a performance appraisal, the employee signs a confidentiality agreement. So that may not necessarily have been part of a recommendation out of the accreditation, but I think you see the by product of that."*

In the table summarizing the changes recorded, a section was created to group the eight changes identified that were not necessarily as a result of the accreditation process, but the changes were referenced to in the accreditation survey report. They were all at the organizational level.

7.3.7 Link between the self-assessment reports and the CCHSA accreditation survey report

Because many people stressed that no new issues were identified through accreditation, it was of interest to compare the self-assessment and the accreditation survey report to see if all issues had been identified in the accreditation self-assessment.

On average, the accreditation survey report had 11 suggestions - including recommendations - per section (clinical and support teams together), ranging from 7 to 19 suggestions. The accreditation survey report had on average 4.5 new suggestions which represent 40%. On average 6.1 suggestions or 53% were the same as the areas to improve in the self-assessments. The rest were suggestions that were broader in the accreditation survey than that which was identified in the self-assessment report (identified as 'partial'). In addition, the self-assessment reports identified on average 18.6 other areas to improve, often referring to very specific actions. Table 22 below summarizes the results for each section in the accreditation survey report.

Table 22: Comparing the numbers of 'areas to improve' in the self-assessment reports to the CCHSA accreditation survey report

Accreditation Teams	NEW	PARTIAL	BOTH	TOTAL	Additional areas identified in the self-assessment
Leadership/Partnership	4	1	10	15	46
Environment	1		8	9	2
Human Resources	6	2	1	9	14
Information Management	4		3	7	14
Ambulatory Care	1		7	8	13
Community Health	9	1	3	13	18
Extra-Mural Services	7		9	16	23
Medical Care	3		8	11	15
Mental Health Program	9	2	2	13	21
Primary Care	4	2	2	8	14
Surgical Care	1	1	14	16	25
Maternal and Child				N/A	
MEAN	**4.5**	**1.5**	**6.1**	**11.4**	**18.6**
RANGE	**1 to 9**	**1 to 2**	**1 to 14**	**7 to 16**	**2 to 46**
MEDIAN	**4**	**1.5**	**4**	**11**	**14**

7.3.8 From the previous accreditation in 1998

From the accreditation survey report there is indication that both recommendations given to the organization in the 1998 survey were followed-up on. But out of the issues identified during the last survey, other than the recommendations, some had not been actively followed-up on, such as:

1. *Physicians challenge in Albert County;*
2. *Increased linkages with public health;*
3. *Increased linkages with Sackville staff and physicians;*
4. *Coordinated education for Sackville;*
5. *Reactivation and mobilization of an ethics committee along with associated formalized processes.* (CCHSA Accreditation survey report, 2002:24)

We know from the analysis of the changes for the 2002 accreditation, that the ethics committee was reactivated on the second prompting of the accreditation process, and that there are

increased linkages with public health however more likely secondary to the approaching integration in the Authority of some functions offered by that service.

8 CHANGES THAT OCCURRED BECAUSE OF OTHER EVENTS OR INTERVENTIONS

8.1 Events and other interventions

The main event which created much administrative change was of course the regionalization of the Corporation in April 2002. With the centralization of services, financial constraint, and the community hospital being transformed in community health centres, delivery of care has been modified. The transfer of some public health services and mental health to the authority is also having an impact on the Authority.

As mentioned in one of the focus groups, "*There are many, many things that are driving us to do a better job, that have nothing to do with accreditation*" *(FG#2).*

As alluded to previously, the main groups that propose and implement changes are the quality improvement teams at the program level or the department level, e.g. laboratory, pharmacy. One representative of each of the programs sits on the Quality Improvement and Safety Committee which reports to the Professional Advisory Committee (PAC). All respondents mentioned the QI teams which are very active. Working groups looking at specific issues also propose changes.

> *"We have our ongoing QI teams that are looking at data and making improvements on a regular basis. The QI teams drive the business within the organization." (Dir. QI)*

Periodic assessments of different diagnosis for length of stay and number of admissions may lead to changes and the introduction of new clinical guidelines and may include a review by the pathway committee.

> *"It was the length of stay and the admission that kind of drove it, but also, once you got into it, it was the quality of care that really continued to drive it. Our length of stays for stroke patients were okay, but it was the quality of care that we were giving that really needed focus on." (FG#1)*

8.2 Changes at the individual practice level

No examples of changes at the individual practice level as a result of other events or interventions were recorded.

8.3 Changes at the group practice level

Changes took place at the organizational level, as a result of:

- the ***Hospital Standards Project*** which resulted in the completion of standards revision for (in 2003) Laboratory Medicine Services, Anesthesia services, Family centered Maternity, Respiratory Therapy service, Critical Care services;
- ***governmental standards*** e.g. Breast Cancer standards dictating how care must be provided;
- ***other standards on a voluntary basis*** e.g. ISM3 for pharmacy using a self-assessment tool for safe medication practices;
- ***organizational own initiative, quality improvement processes***, e.g. additional physiotherapy on week-end, Part-time social worker in ICU, definition of clinical guidelines.

> *"So it's not because of accreditation. It's because we are looking at our process of looking at what we're doing and saying, "Is this a good method to use or should we be doing something else?" So we look at the literature. We look at other standards. We look at practices within the area that we're working in with somebody that we know... If a hospital in Toronto has an excellent infection control program for doing something, then we would say, "Okay, we need to call Toronto" and say, "How are you doing this? And is it something that we can bring here to be able to help us in our hospital?"" (FG#1)*

8.4 Changes at the organizational level

Several changes took place at the organizational level, as a result of:

- ***legislation,*** e.g. implementation of the Professional Advisory Committee (PAC) as a result of the Health Authority Act;
- ***governmental standard,*** e.g. the Hiroc Review for insurance purposes, looking at "risk assessment through the whole organization";
- ***reorganization and the focus on health service planning***, e.g. integration of research, utilization and risk management all together under the same direction;
- ***the quality improvement philosophy***, e.g. implementation of QI committee in geriatrics which was missing, the implementation of a quality improvement process for infection control;
- ***the introduction of a balanced scorecard*** as a quality monitoring tool, which has brought about some changes in collecting data and monitoring, and this tool may in turn be useful to meet accreditation standards.

  "So do we have a balanced score card that was a by product of the accreditation, probably not, but do we have a balanced score card that will help us in our next accreditation probably yes." (FG#2 – IT manager)

8.5 Changes at the external partnership level

The increased communication with Pubic Health and Mental Health services was more likely the result of the eminent integration of some public health functions and mental health services within the Authority, than as a result of the accreditation process.

For more details on the changes recorded, refer to Table 21– available in the preceding pages.

9 BUILDING SOCIAL CAPITAL

The organization already holds a certain amount of social capital thanks to numerous long time employees and the many program committees as well as cross-program committees. In this next section, we see how accreditation can contribute in building more social capital for the organization first by developing network ties (structural dimension), secondly by improving mutual understanding (cognitive dimension), and thirdly by increasing mutual trust (relational dimension). We finish by reporting a couple of testimonies on the manifestation of social capital following the accreditation self-assessment process.

9.1 Structural dimension: network ties

A number of new teams were formed for the 2002 accreditation using a cross representation of different programs. It enabled participants on the teams to expand their network ties and meet new people.

> *"I think accreditation is good because sometime it brings a group of people together that might not necessarily get together. You know, we certainly do communicate but this is a different grouping of people." (FG#2)*
>
> *"You were able to network, and to meet people, to know who we should go to." (FG#1)*
>
> *"I'm going to say it was an asset. It happened during my first appointment to the board. I did get to meet a lot of people." (FG#2)*

According to the description of the accreditation teams in their self-assessment reports, out of the eight clinical accreditation self-assessment teams, four were clearly made of mixed program teams, and three teams were based around their program QI committee.

Table 23 below presents the team composition for all the clinical teams. The support teams were not itemized here because they inherently are composed of a mix of people.

Table 23: Team composition for clinical accreditation self-assessment teams.

Clinical Teams	Team Composition
Ambulatory	**Mixed team**: representation from all the different programs offering clinics in the ambulatory care area
Community Health Services	**Mixed team**: Three Health Centres, Addiction Services, one breast screening centre, and Out-Patient Rehabilitation Services
Extra Mural Services	Around program QI team
Maternal & Child Care	Around program QI team
Medical Care	Corresponds to Internal Medicine which includes Oncology/Haematology, Cardiology, Infection Diseases, Gastroenterology, Rhumatology, Respiratory, Endocrinology and Dermatology
Mental Health Program	Around program QI team
Primary Care	**Mixed team**: Family Practice Unites, Geriatric Rehab Unit, Palliative Care, Breast Screening centre, two community hospitals, two health centres, Seniors Day hospital, Nursing home.
Surgical Care	**Mixed team**: Emergency services program, Perioperative Services, General Surgery and Surgical Specialties Program, Orthopaedic Program, Neuro/Rehab team.

9.2 Cognitive dimension: mutual understanding

The cognitive dimension covers things such as understanding each other's language and vocabulary using the same paradigmatic assumptions, holding shared beliefs, values, goals and plans (Nahapiet and Ghoshal, 1998; Svendsen et al, 2003).

There are already common values throughout the organization, mostly linked to the four corporate values of *"honesty, respectfulness, integrity and compassion" (VP).* The organizational values mentioned by at least three people interviewed or participating in the focus groups included:

- caring
- efficiency and effectiveness
- quality health care
- honesty
- trust
- respectfulness
- integrity
- compassion
- patient centeredness

But there is an acknowledgement that people come to an accreditation self-assessment team with different backgrounds, particularly in mixed teams.

> *"When you bring that group together, you are very different. And... You know people are at different places as far as what they bring to the table, especially in ambulatory care, you have your physicians, family representatives that are on those teams, you have to develop that common culture" (FG#2).*

Comments also highlight how the process enables people to exchange to get a better understanding of the organization as a whole, a better understanding of the programs and how the different ones affect each other.

> *"I did get a **better understanding** our organization because I got to see who was doing what." (FG#2 - Board member)*

> *"I think that the accreditation does certainly facilitate knowing the organization as a whole, and **where that program fits in that organization**."(FG#1)*

*"I think that you **really learn** more about the different components, and **how what one person does in one place, impact on another**" (FG#2)*

*"There was a **better understanding of each other's group**; and one of the issues has been that there is still difficulty with communication across programs, and [because] the self assessment team for acute care services was actually across care program, it was actually a communication day where everybody was able to see and understand what the others were doing and what was going on in the other programs." (Manager)*

In addition to the acquisition of understanding, someone mentioned how the process facilitates exchange on perceptions.

*"Sometimes too, I found, what I learned from the different teams was the facts about **how other people perceived the same issue**, or service or whatever that goes in the way sometimes.. Someone thinks they are doing the absolute very best that they can do but that is not how it is perceived by the recipient, so we can both learn from that." (FG#2)*

Lastly, one person alluded to having a common goal within the accreditation teams, which lead more readily to action.

"When you have ten or twelve people that come together and we are all there for the same reason... things tend to get done" FG#2

9.3 Relational dimension: trust and shared identity.

We will assess the relational dimension of social capital through the development of trust and shared identity within the organization. On that last topic, some individuals report feeling more integrated into the bigger organization as a result of the accreditation self-assessment process especially in the mixed teams, and for the programs out of the main hospital.

"There is a lot of value to listen to others in that forum. I think that probably people felt the most integrated in our situation and some of the communities that are out there. It

helps maybe to formalize things a little bit, and we talk to them on an ongoing basis and are partners with them for various services they provide or we provide to them. But this type of forum helps to formalize that and help them feel more integrated into our organization." (FG#2)

The intensity of the process as well as the discussions during the meetings may be factors in developing a shared identity.

"In the end I think it really helps everybody to get that team feeling back again, because often times you lose it. It was only a once a month meeting where this tends to be more intense. And it's not a round table kind of a thing; it's everybody sitting there providing their input into what should be, how to mark themselves, how do you rate yourself." (Accreditation Coord.)

The process enables people to realize that they have a lot in common and live similar challenges. It also increases trust through recognition of competence (Svendsen et al, 2003) and through increased respect for one another.

*"So for me, being part of accreditation has certainly enhanced the visibility of my role I think to others, and understand that **my challenges are very similar** to maybe somebody else's who is working very much in the community, and not being in the hospital setting." (FG#1)*

*"I thought that the reporting exercise the last time was really helpful. We saw that other departments we were partnered with, that we have **a lot in common.** So what came out of that was that it's really important that we have communication and networking and also that **there is expertise here** that sometimes we don't realize."(FG#2)*

"I think even from respecting one another became better because there was a better understanding of each other's groups" (Manager)

9.4 Manifestation of Social Capital

A couple of comments spoke to the manifestation of social capital, and how accreditation had led to the motivation for further exchange of ideas and facilitated people's access to others as sources of information

> *"Although we weren't what we identified as a team, we worked very well together as a group. And that process seems to be continuing and we built on that" FG#1*

When asked if the self assessment was an opportunity to acquire new views and facilitating communication afterwards, the interviewee responded:

> *"Absolutely! Going back, saying 'you mentioned this, how does it really work?' " (Manager)*

10 THE ACCREDITATION PROCESS

10.1 General opinion and expectations

The process of accreditation is seen as valuable by some; others only see the value in the status of being accredited. Some describe it as "a wonderful experience" while others dread it because of the amount of work involved. Some were more ambivalent. Cost and time were most frequently mentioned as the biggest disadvantages of accreditation, while external recognition, benchmarking, meeting national standards, exchanging information, getting a third party opinion and support for additional resources, were some of the benefits mentioned by more than one person. After looking at the main disadvantages and benefits of accreditation in general, we will examine more closely the opinions for each of the accreditation phases and the standards.

10.1.1 Disadvantages: cost and time commitment

Cost and time were the two most frequently mentioned disadvantages. More specifically, it is the administrative, time-consuming tasks which appear to be most frustrating, for example organizing the self-assessment team meetings when they involve a great number of people.

> *"I think that's the most frustrating part of the entire process is actually trying to get 20 people together at around the table at a time that's going be okay for everybody (FG#1*)

Other frustrations mentioned were the mailing of the booklets and answering questions in preparation for the meeting, the typing and revising of documents, and the scheduling of the accreditation visit with the many constraints which "*becomes a logistical nightmare*" (Accreditation Coord.). For team members participating on the self-assessment teams it is not perceived as an extreme time commitment but there is currently no excess capacity in the system for these activities, especially at the clinical level.

> *"I might only take a team 5 or 6 or 7 hours but it's time that the health care system has difficulty finding" (Dir. QI).*

Four people interviewed mentioned cost as a disadvantage. Tracking the cost of accreditation was attempted by the organization studied but abandoned as the complexity of the task grew. Two options to decrease cost were offered for consideration. The first one is to increase the accreditation cycle to every four or five years instead of three; the second is to exchange surveyors to decrease the cost of a survey visit. This last suggestion, however interesting to contain cost, would create issues of objectivity, transparency and conflict of interest. As for the optimum length of the accreditation cycle, considering cost and all other factors, it is the source of many debates in the accreditation field.

Another frustration mentioned in a focus group, and probably more relevant to big organizations that choose to group many diverse programs in one self-assessment team, was that the clinical team was "*a little bit too diverse*" and specific program strengths were not well reflected.

10.1.2 Recognition

Praise and recognition came up often as side effects of the accreditation process. The accreditation preparation phase, the accreditation visit feed-back session, and the accreditation survey report were all mentioned as opportunities for staff to realize what good work they are doing, which impacts positively on the staff moral noted to be low in the 2001 staff satisfaction survey.

> *"It was kind of an interesting discussion around the table. (...)When one group would think they were not doing so good the other group would come back and say, 'well that isn't true, we are doing this and we are doing that, and we are doing this', and in the end 'it is true, we are doing a lot.' So I think that part of the exercise is useful." (FG#2-IT manager)*

> *"I think it's not so much any more the piece of paper that says you have been accredited that's lovely. I think it's almost like it's another recognition of a job well done" (Accreditation Coord.)*

"It forces us to take a look at it and say, "You know we're not doing badly, we're doing quite well. We're quite proud of what it is that we do." And I think that's the appreciation for the people that are part of those teams that come out of the accreditation process. But that's a very small percentage of hospital staff." (Dir. HR),

Also, the praise received by the surveyors in 2002 felt that much more meaningful because the organization had decided purposefully not to do any special preparation for the days of the accreditation visit.

Praise on one program can also inspire others to imitate. As someone mentioned:

"Hearing those good points about others gave you ideas about how systems can improve" (FG#1)

10.1.3 Quality improvement, Accountability and benchmarking

Not surprisingly, accreditation is seen as a tool to reinforce quality improvement and ensure the provision of quality care. It is also an opportunity for anyone to express a concern regarding quality and have a higher chance of getting heard.

"Giving the staff and everyone [...] the ability to express a frustration or something that stands out to them as something we should be doing better" (Accreditation Coord.)

The organization's strong quality improvement program is believed to ease the accreditation process and decrease the time spent on preparation.

"You are working on a quality improvement model anyway, that maintains the patient focus, it's really more of the paper exercises that you are doing anyway to prepare for accreditation." (FG#2)

Interestingly, the structure of the quality improvement teams is distinct from the accreditation self-assessment teams. However, the accreditation clinical teams are often composed of the members from the relevant program QI teams and other resources as needed. If quality improvement tasks are identified, they are most often taken back to the smaller QI committee at the program level.

"Hopefully it's always a learning process. A lot of that stuff [like the development of balanced scorecard], just kind of happens. It's not like "Oh what was on accreditation? Or what was our weakness?" It's just like something that you do and then when you look back, you realize that you met that goal or that you did it." (FG#1)

The cyclical aspect of accreditation is also perceived as an accountability mechanism to ensure follow-up on recommendations from one survey to another. In addition, it is often mentioned as a useful tool for benchmarking against *national* standards.

10.2 Accreditation preparation

There were no doubts as to the value of the accreditation self-assessment phase. The main benefits associated to it were the opportunity to reflect on the quality of care provided and the progress made, to look at best-practices and to get a more global view of the organization. Bringing together a variety of professionals that do not normally meet allowed them to realize they were faced with similar challenges, to learn from each other, and to generally improve communication between team members across programs.
As one person commented:

"Communication issues may not have come out in the accreditation report because we had to talk to each other during the self assessment." (Manager)

It also allowed one professional from the community to become more visible and share with the accreditation team members her challenges, likely similar to other staff in the community. Certain teams encompassed a variety of programs in 2002, and it was mentioned that the larger your team is, the more specificity and ownership you loose. In exchange you may get more knowledge transfer and social capital.

10.3 Accreditation visit

The accreditation visit is perceived as an integral part of the accreditation process. The external validation by peers is greatly valued because it brings a more objective view on the level of

compliance with the standards. However it was noted by one person that it is still somewhat subjective without the wider use of strong indicators and objective measures.
Surveyors were well appreciated in 2002 and were described as "*open, honest, and non-threatening*". This was in contrast to the unpleasant experience in 1998 with some surveyors that may not have fully appreciated the New Brunswick context.

> *"He came with an expectation that we would have a system comparable to his and that we would have... he was an Albertan. So there you go. No problem funding-it! It was a terrible experience for us. It was... the regional accreditation was much, much better." (FG#2)*

Some of the highlights of the visit mentioned were the discussion sessions with the surveyors for each of the self-assessment teams, and the feedback session at the end of the visit which has left a lasting positive memory for the staff.

10.4 Accreditation survey report

A few respondents stressed the fact that there were no surprises in the final report. They felt that all the weaknesses had already been identified by the self-assessment teams.

The report however holds a certain authority and can be used as a powerful argument with the Board, physicians, executive management as well as evidence to support a request for additional resources.

> *"I think it helps and enforces, if a recommendation comes and validates a concern that people have, it usually puts a little more action behind the concern because it is in a report, it's a public report that people look at." (FG#2)*

> *"Meeting accreditation is a very powerful justification; I think that's the value of it. And it works with Boards when you're having to make decisions on allocations of scarce resources. It works for CEOs; it works for Executive Management teams; and that's a powerful argument with the physicians." (Dir. HR)*

On a more developmental level, it can help identify efficiencies and opportunities, and areas to improve can be integrated in the balance scorecard. However, no systematic formal process seems to exist to transfer the accreditation recommendations or 'areas to improve' to the QI teams. A few people felt that QI program teams continue "to build on what has been done before", spontaneously integrating the accreditation recommendations which were pre-identified. Nevertheless, the potential benefits of such a formal transfer from accreditation teams to QI teams, was perceived. Transfer to the balanced scorecard would be another way to integrate recommendations from the accreditation survey report, which was reportedly done for one of the programs.

> *"I think that's an excellent point. It should go directly to QI, and it doesn't happen, but boy that process would be a great idea" (FG#1)*

> *"I would think that if the recommendations that come out of the accreditation they would be on the next balanced score card." (FG#2)*

> *"She put a lot of work changing for the balanced scorecard, to make sure we used the recommendations from the report and transfer them to the balanced scorecards to help us to track it." (FG#1, addiction services worker)*

The accreditation coordinator did mention using the accreditation survey report on an ongoing basis.

> *"It's one of those few documents that we do that actually doesn't collect an awful lot of dust" (Accreditation Coord.)*

However she wished for an easier way to search the CCHSA report to identify the common weaknesses across clinical teams, and to facilitate the exchange of information between organizations

10.5 Standard

The AIM standards were acknowledged to be much more interactive, to allow for more meaningful interdisciplinary self-assessment, and to increase participation of the clinical staff which increases there awareness for quality of care. The 2002 AIM standards were noted to have improved from the 1998 beta-version[8] and the organization felt that CCHSA had incorporated their recommendations. The cues and descriptors within the standards are helpful, but guidelines for the rating in 2002 were felt to be missing. More indicators could also be integrated to then be transferred in the regular quality monitoring process.

> *"But if accreditation were really doing what accreditation should, we should have a consistent national set of indicators that everybody's tracking from an accreditation perspective. There's apple to apple comparison on numerators and denominators. And they need to be, in my humble opinion; they shouldn't be tied into dollars. Because there's too much variation across the country on salary range rates for example, they need to be not tied into financial indicators. They need to be in to productivity indicators. It saves money. But I think the accreditation process needs to go there." (Dir. HR)*

Many respondents indicate a certain level of "know-how" developing over the years with the accreditation process as long as standards stay the same from one accreditation to the next. Good documentation and templates available in the organization also facilitates the administrative side of the process. Another strategy used at this organization is to mix new self-assessment team members to team members with past accreditation experience.

10.6 Does accreditation help organizations improve their capacity to react when faced with change?

Some people had difficulty answering the last question in the interview worded "Did accreditation help the organization to be more reactive to change?" and provided different interpretations to the question. One person suggested that organizations are perhaps more

[8] The organization was a beta site for the AIM standards in 1998

"proactive" as a result of accreditation, especially with the AIM standards, and another person stated "we try to be proactive at the best of times". One person interpreted the question to mean that accreditation is an opportunity to incorporate changes "not to fall behind" in practice. Someone also suggested that the organization is perhaps "reactive to the process, maybe not to change". *(Accreditation Coord.)*

In the series of questions regarding the impact of accreditation, several people did acknowledge that the accreditation process influences the way people look at their environment and has reinforced the population health approach. It contributes to the learning that needs to occur in an organization.

> *"I think now that we are looking more at population health and the determinants of health and integrating our internal data with that. I think we are more cognizant of that now."(Dir. HR)*

For the impact of accreditation on the connection between the Authority and its partners, people saw a link between going through the accreditation process and increasing partnership involvement, but not an exclusive one.

> *"I think it encourages that kind of liaison on a more frequent basis. Now if you look at the community structure, you'll see that we have people here, that those are our liaisons with some of our community partners." (Accreditation Coord.)*

> *"Again our quality improvement programs have done this as well as our mission statements for our partnering. We work with the other hospitals, we certainly get the community groups involved with focus groups with our QI and different organizations and all our facilities have QI programs as well."(Dir. QI))*

Looking at the impact of the accreditation process on the connection between the Authority and its administrative and financial structures, for example the ministry of health, the majority did not see a link there, aside from one person mentioning the capital funds secured for ambulatory care, but nothing long term.

In a focus group, someone pointed out that accreditation modifies the way you assess situations, which would transfer to other circumstances outside of accreditation and potentially improve the capacity to react positively when faced with change.

> *"[as a result of accreditation] we are looking at things differently, we are doing things differently, it's through the process" (FG)*

> *"And I think it just kind of opened their eyes to what their responsibility is, and how they have to fall into changes," (FG#1)*

Also noteworthy, accreditation contributed to three structural changes, the implementation of the Ambulatory Care management position, the realignment of VP Professional Services, and the reorganization and increased focus on health service planning, which will contribute to improving the capacity of the organization for answering to a changing environment.

CHAPTER VII - DISCUSSION

Following a discussion on the organizational characteristics, we compare the result of this study to others, elaborate on some of the findings and provide conclusions to the research questions. We finish the discussion by reviewing the opinion and expectations of the accreditation process in this study and others, for a better understanding of how accreditation is perceived therefore how it can be more effective. Unfortunately, more questions than answers arise from this exercise.

1. Organizational characteristics

The challenge of studying quality improvement programs and accreditation programs is that their impact is so dependent on the organizational context. A review of studies on the implementation of quality improvement programs identified factors related to organizational characteristics necessary for the successful implementation of quality improvement programs. The conditions likely to produce results were (Øvretveit J, 2002):

- The right culture;
- A focus on customer needs;
- Sufficient resources;
- Sustained attention and the right type of management roles at different levels;
- Physician involvement;
- Senior management commitment;
- Careful program management;
- Practical and relevant training which personnel can use immediately.

These points are discussed under the following sub-sections of organizational culture, organization stability, decision making process, leadership and a discussion of the overall organizational quality management.

1.1 Organizational culture

The organizational culture survey indicated a split between a tendency for *hierarchical* and *group* cultures which corresponds well to organizational structure and which combines a program management structure ('Clan' in group culture) and a certain amount of hierarchy to manage the programs (Quinn and Kimberly, 1984). The values of stability and control (Hierarchical culture) are balanced by the development of human resources. This approach was not validated in the relative rating in the Management perception of Quality Improvement survey, but both the CCHSA accreditation survey report and the MacLean's book on *Canada's Top 100 Employers* stated the human resources development program to be outstanding. This topic was not addressed during the interviews.

Shortell et al (1995) reported that "culture and bed size are negatively correlated, meaning that larger-size hospitals are less likely to have group/developmentally oriented cultures that emphasize teamwork, empowerment, risk-taking and related attributes." Considering that this organization is a larger size, a higher rating for hierarchical structure should be considered within the norm. The fact that females respondents generally perceived the culture to be more hierarchical than males is not surprising either, as it can be explained that they are more often in subaltern positions, therefore may feel the weights of the hierarchy.

Whether a more hierarchical culture or less, "what appears to matter is whether the hospital has a culture that supports QI work and an approach that encourages flexible ways of implementing it rather than whether the hospital meets certain definitional criteria." (Shortell et al, 1984:397) Embracing a quality improvement philosophy is definitely part of the culture of the organization as witnessed by the frequency of the mention of QI committees in the interviews and focus group, by the elaborate QI committee organizational chart, and by the 'Light Bulb Award' as recognition for the yearly best QI initiative.

However, our analysis is limited by the fact that only 133 questionnaires were completed which represents only 5% of the total number of staff working in the organization. This therefore is more representative of a probe into the organizational culture to give us a sense of the climate

within the organization, and enable triangulation, but no conclusion should be drawn from these results alone. The low response rate of 33.3% for the Perception of Quality Improvement Implementation survey prevents broad generalization as well, but it does provide us the opportunity to confer some of the statements from the interviews and give pointers.

1.2 Organizational stability

The organization has gone through many changes in the past ten years: the introduction of program management at the hospital in 1995, the integration of various community services within the organization, and the administrative change of a corporation becoming a regional health authority in April 2002.

The reported staff turnover of 10-12% on average for the last five years is higher for the organization than for previous years but still within the sector standards. On the other hand, increased human resource stability is provided by the many long time employees. Nevertheless, recruiting highly specialized health care workers remains a challenge.

The lack of human and financial resources is a recurrent hurdle limiting quality improvement initiatives.

1.3 Decision-making

As mentioned in the results section, the managers reported that they participate 'often' in the decision making process, and at minimum, they feel consulted. This corresponds to the decision making process in a 'group culture' described as "participation support" (Quinn and Kimberly, 1984) and to the descriptions of empowerment to the lower levels. It balances out the more control oriented decision making process (hierarchical culture) attributed in the interviews to bigger, organization wide decision-making.

1.4 Leadership

Leadership for QI in the organization occurs at all levels in the organization which corresponds to the idea that "Quality has become an important "value" to which employees at all levels can be committed; middle managers are in the best position to encourage and reinforce this commitment" (Ginter et al 2002:190). As a matter of fact, the very competent Quality Improvement director is very visible and plays a strong leadership role in the organization. The CEO provides more of a support role, and shows commitment to the QI process by providing financial and human resources.

1.5 Quality program

As presented in chapter V, the organisation has over 420 beds, 2600 employees and includes eight sites. According to previous studies (Shortell et al, 1995 Beaumont, 2001) "employees in larger-size hospitals report lower QI implementation than employees in smaller size hospital" (Shortell et al, 1995: 390). However, this large organization has a strong quality improvement program, which is present and alive throughout. The recent adoption of the balanced scorecard is another attestation to the will of the organization to monitor properly and improve services.

To support the quality program, specific abilities for statistical interpretation must be available to the organization. The lack of 'training in statistical and related quantitative methods to support quality improvement' identified through the management questionnaire, corresponds to comments regarding the lack of ability to interpret population health data and other statistics collected. The organization is also aware of this need.

Finally, in the theoretical framework used for this study, Quality Programs was seen as one of the strategic transformations at stake with the intervention of an accreditation program. This is understandable as the theoretical framework was developed for a study (Pomey, 2002) occurring in France where at the time, accreditation was a newly implemented process. In a Canadian context, with an organization that has had its main facility in the accreditation process for the

past 50 years, quality and risk management programs would be more appropriately seen as a part of the conditions influencing change. In support to this idea, a previous study found that health care organizations with a past in accreditation greater than 10 years had a slightly more developed CQI program than organizations joining the program (Beaumont, 2002:84). A revised framework with Quality program in the box of conditions of change can be found in Appendix 12.

2. Changes implemented in line with accreditation

It is difficult to isolate changes exclusively as a result of accreditation because so many changes are affecting any health care organization at once, and at times accreditation may only be one of the influential components.

2.1 Type of changes

According to our findings, for this organization with a long past with accreditation, changes in relation to organizational structure and process were the most frequently implemented as a result of accreditation, during the last accreditation cycle. The changes in relation to risk management should also be mentioned as noteworthy for the speed with which they were implemented. In organizations newly exposed to accreditation in South Africa, Salmon (2003) also concluded that the accreditation program was most effective in changing structures, administrative procedures, and organizational processes.

In Australia, Duckett (1983:1577) demonstrated that the areas where accreditation had most impact were "Organization of Nursing Services" and "Physical Facilities and Safety". In this study there was the implementation of the "pain management tool" which would be an example of improving nursing services, but all the other examples cited under 'Organization of Nursing Services' (e.g. policies and procedures, job descriptions, nursing notes, representation on hospital committees...) are for the most part already established in the organization studied. The type of improvement observed under the category of "Physical Facilities and Safety" such as fire safety,

physical hazards and accident prevention, do not appear to be issues within the organization studied. However, as previously evidenced by Pomey (2002) and Duckett (1983), the accreditation process is found less conducive for changes regarding the direction of the organization or in respect to external partnerships. Some influence and awareness through the standards may still occur but are challenging to isolate.

2.2 At which level?

The majority of changes occurred at the *organizational level* (10 out of 16 changes recorded). Few changes recorded happened at the clinical level. The difference could be attributed to the strong QI program already in place, which addressed the issues of patient management as they arise. In addition our result corresponds to the results of a systematic review which ascertains that fact audit and feedback such as accreditation had variable effectiveness on changing provider's behavior (Grimshaw, 2001). It also mentioned that multifaceted interventions to address potential barriers to change "are more likely to be effective than single interventions". Accreditation may be one facet to increase awareness for quality of care at the clinical level, but change in behavior will actually be triggered by other interventions.

The survey on the impact of accreditation indicated that people agreed that accreditation had an impact on external relationships, (mean=3.68) however only two changes were recorded at that level. In a study in France, Pomey (2002) found that accreditation would "primarily serve to better meet the expectations of the administrative authorities" which is not the case for this organization, perhaps because the accreditation is not mandatory as it is in France. The French study also found that accreditation would serve to develop networking with other partners of the healthcare system and to acquire more resources, which in this case study was illustrated by the securing of capital funding for ambulatory care. But this was not exclusively a result of accreditation. It would again be different in the United States, where accreditation is linked to the acquisition of more funding because of the health care system context there.

2.3 The accreditation survey report: a catalyst for change

For this organization, few changes were implemented during the preparation period. The interviews, focus groups and the responses in section C of the questionnaire to management, all stated the same. Even people on the self-assessment teams or highly involved in the last accreditation, did not perceive more changes during that period than people less involved in the process. A strong quality improvement process which provides ongoing monitoring, a long past with accreditation, and a transition period from being a corporation to a regional authority may all be contributing factors to the lack of specific changes during this period. The desire to get surveyed with no special preparation to pass accreditation on the basis of how the organization functions on a regular basis may have been another factor.

The most memorable change was the one related to the high number of incomplete charts, which could be attributed to a change in power, as a result of the feedback from the accreditation survey. Prior to the accreditation, the issue had been flagged by the health records department, but no action had been taken, partially not to further damage the fragile relationship between medical staff and the administration while physicians were negotiating their contract with the province. However, this power relationship shifted as a result of the accreditation recommendation in addition to the medical-legal implications if action had not been taken. The hospital administration with the support of the Chief of medical staff imposed a quick correction to this problem.

As illustrated by the example, for organizational change to occur, there needs to be certain readiness for change (French, 2005:299) and the creation of a sense of urgency (Kotter and Cohen, 2002:15) In the case of the incomplete charts, there was an awareness of the problem (readiness) and the recommendation brought on the sense of urgency which triggered the change within a month of the survey. That external trigger is at times needed to create action. French (2005:304) typology of readiness (Table 24) helps to better understand why recommendations or suggestions are dealt with differently. Even if there is high readiness, with no urgency, change is unlikely to occur: "organizations - like living creatures - tend to be homeostatic or continuously working to maintain a steady state. This helps us understand why organizations require external

impetus to initiate change, and indeed, why that change will be resisted even when it is necessary." (French 2005:355)

Table 24: A typology of readiness program: (French, 2005: 304)

		Urgency	
		High	**Low**
Readiness	**High**	Quick Response	Maintenance of readiness
	Low	Crisis Time constraints	Aggressive over time

Even if most changes occurred as a result of the accreditation survey report, the self-assessment plays an important role in getting a higher level of readiness and in involving staff members. Coch and French (1948) demonstrated that "participation reduced resistance to organizational change" (in French 2005:299). Therefore even if few changes actually happen during the self-assessment phase, it should not necessarily be dismissed as having no impact.

QUESTION 1
Does accreditation as an intervention in quality improvement introduce changes within the organisation, measured by the characteristics of change in the conceptual framework on the dimensions of change?

CONCLUSION 1
Some changes within the organisation occurred as a direct result of the accreditation process, in particular as a result of the recommendations. Most changes were: • at the organizational level; • related to processes and organizational structures.

3. Accreditation as a capacity building tool

Does accreditation help the organization to improve its capacity to react when faced with change? The respondents of the questionnaire agreed with the idea that the organization's participation in accreditation enables it to be more responsive when changes are to be implemented (mean = 4.00) remembering that this represents the perception of only 19 people who took the time to complete the survey. It does however represent people from a cross section of independent variables, i.e. people who did and didn't participate as members in a self-assessment team, members and non-members of quality body, and people with varying degree of involvement in the last accreditation, and their perceptions were not significantly different.

Accreditation has played a role in the organization adopting a more population health approach, which will be helpful in the long run to identify change and react to it more promptly and with more knowledge.

Any time that the accreditation process initiates a structural change that will enable better management, it is likely to impact positively on the reaction time and quality to meet the new challenges.

The development of a quality improvement program would be another change that would improve the capacity for an organization to react to change. However, no strong links between accreditation and the QI programs were observed in this cycle of accreditation. Some of the participants on the accreditation teams were the link back to the QI committees but otherwise the two processes were observed to be quite independent.

The hypothesis for the multiple-case study is that organizations with a history of successful accreditation for more than ten years would have more pertinent and dynamic quality programs than organization that have more recently embarked in the process. We can not answer this question with this single study, but we can ascertain that the organization studied does have a vibrant, dynamic and pertinent quality management program.

QUESTION 2
Does accreditation introduce changes that make an organisation better able to respond to changing needs?

CONCLUSION 2
The adoption of a population health approach and some of the structural changes as a result of accreditation will equip the organisation to better identify changes needed in the future and facilitate their implementation.

4. Building social capital through the accreditation process

The quantity and type of social capital built through accreditation will first depend on the composition of the accreditation self-assessment teams as it impacts on the structural dimension of social capital. In the organization studied, two types of accreditation teams existed. Some were built around an already established QI team (e.g. Extra-Mural services, Mental Health Program). In this case, accreditation may serve more to reinforce already existing ties between the members (bonding). The other accreditation teams grouped a variety of programs (e.g. Community Health, Surgical Care) which served more as an opportunity for creating new relationships outside each participant's respective programs (bridging). Because these later teams have diversity "bringing knowledge from disparate sources and disciplines", they are more prone to exchange ideas and create new ideas (Nahapiet and Ghoshal, 1998). However because the accreditation self-assessment teams met only a few times with each member then returning to their own QI committees, and because building social capital depends on stability and continuity of the social structure, (Nahapiet and Ghoshal, 1998) one can question if some of the benefits of 'bridging' social capital were maximized.

For the cognitive dimension we see that the accreditation self-assessment phase is an opportunity to get better understanding of the organization and of the programs and to exchange ideas; but the sense of acquiring common goals or shared vocabulary or beliefs did not come out strongly

in the interviews or the focus groups. This is contrary to the findings in a previous case study in France where the accreditation self-assessment process helped employees in that organization develop shared values (68.9% of respondents) (Pomey, 2004). The main difference may be that it was a new process introduced in France while this organization had already developed some common vocabulary around quality and accreditation over the many years of experience with the accreditation process.

In the relational dimension of social capital, feeling integrated can be seen as a sign of shared identity, which held more meaning for programs in the communities. The development of trust was not as much emphasized perhaps because it is already underlying. However the couple of examples that were mentioned as a result of accreditation, correspond to the influence of social capital on the conditions for knowledge exchange such as access to people for exchange, and the motivation of people to engage in creating new ideas (Nahapiet and Ghoshal, 1998)

To better understand the dynamics at play we have distinguished between the structural, cognitive and relational dimensions, but they inevitably affect one another. Meeting new people (structural dimension) and discussing issues, naturally leads to mutual understanding (cognitive dimension). Also, developing shared language (cognitive dimension) in turn increases trust (relational dimension).

In a business article, it is recommended that to build social capital "Managers also need to facilitate personal conversations." (Prusak, 2001) Social spaces are important to meet to promote knowledge exchange, but they also spur the discovery of mutual interests that support communities. One of the clinical teams met for the whole day, breaks and lunch were provided and spoke highly of their experience exchanging. To maximize the opportunities for accreditation to build social capital, team meetings could be scheduled in such a way as to facilitate informal chat before or after the meeting.

From the discussion above we can see how accreditation contributes to the building of social capital within an organization - some aspects more than others. Nevertheless the change in relationships between the various players is observed and can be seen as a type of change in the conceptual framework for dimensions of change. We propose a revised framework including the

development of social capital in the 'Types of change' box, under 'players' (see Appendix 12). Further study is required to measure the extent to which accreditation contributes to building social capital in various organizations, and to confirm that an increase in social capital does lead, to improved quality of care and services. The first step towards this would be the ability to measure the quantity of social capital within a healthcare organization at any point in time.
It is also understood here that the potential for social capital creation and accumulation through accreditation, will be contingent on the context and the culture of the organization. High turnover rate for example would affect the accumulation of social capital negatively, while relationship building behaviors such as "ongoing and proactive communication", "aiming to learn instead of convince" would have a positive effect (Svendsen, 2003:30).

QUESTION 3
Does the self-assessment phase of accreditation enable the development of social capital through the creation of networks, trust and the development of mutual understanding?

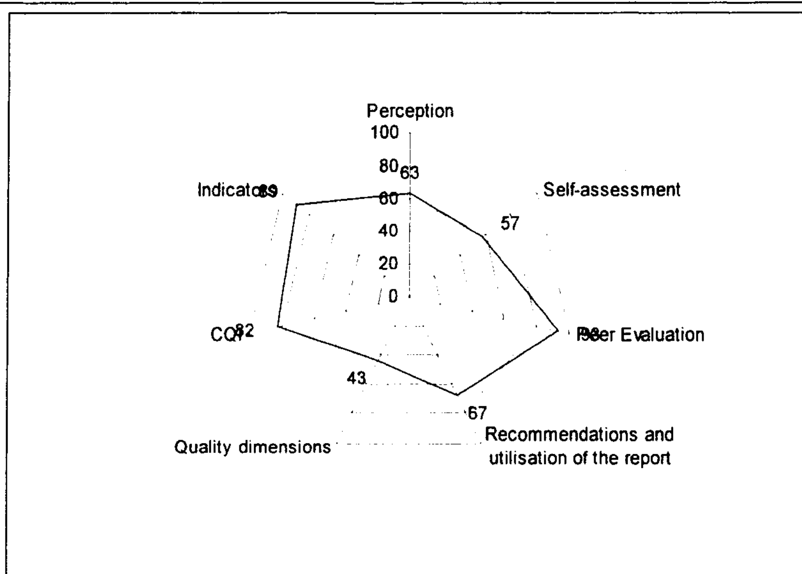
CONCLUSION 3
As exploratory work, the accreditation self-assessment phase appears to be an opportunity for developing social capital through the creation of new networks of relationships, developing mutual understanding and shared identity. However, the quantity and type of social capital acquired depends on the composition of the accreditation teams, the follow-up done after the accreditation survey, and the overall organizational culture.

5. Opinion and expectations of the accreditation process

Despite acknowledgement of some value to the self-assessment process, people's perception is that the self-assessment component of accreditation has less impact than the survey component of accreditation. This statement is supported by the results from the survey to managers on the impact of accreditation, in which the preparation phase was rated as having the lowest impact. It is also supported by the statements during the interviews that the accreditation preparation did not reveal a lot of information which was not already known. These results also correspond to a CCHSA survey on the effectiveness of accreditation, (CCHSA, 2002) where overall, people valued the self-assessment component less than the peer review component. Finally it corroborates with the results of a previous survey completed in 2001 by the organization studied, during its preparation phase for the 2002 accreditation survey (Beaumont, 2002). The results pertaining to all the facets studied in this 2001 survey were extracted and they are presented in Figure 7 with the interpretation in the boxed text below.

Interestingly, in the 2001 survey, there is partial to minimal agreement that accreditation is an overall useful tool (Beaumont, 2002), yet there was little questioning reported in the interviews and focus group regarding pursuing accreditation or not. In addition, this result also contradicts our findings in the survey to managers who agreed with the idea that accreditation was a valuable tool (n=19) In the methodology, it specifies that only *one* copy of the 2001 survey was sent to each institution's CEO (Beaumont, 2002:44) but no specification were given as to how the questionnaire was completed.

Figure 7: Perception of the accreditation program by the organization in preparation for the 2002 accreditation survey visit. Survey was in 2001 (Beaumont, 2002:39 and Appendix 6)



Interpretation

- The perception of accreditation program as an **overall useful tool** was half way between partial agreement and minimal agreement (rating: 63%)

- There was minimal agreement that **self-assessment process** facilitates changes within organization (rating: 57%)

- There was total agreement that the **peer evaluation** component adds value to the process (rating: 93%)

- There was partial agreement that **changes occurred as a result of recommendations** (rating: 67%)

- There was minimal agreement that **quality dimensions in AIM enabled learning** (rating: 49%)

- There is partial agreement that the accreditation program facilitated **the integration and evolution of the organization regarding CQI** (rating: 82%)

- There is total agreement that **utilization of indicators** is positively influenced by the accreditation program (rating: 89%)

Praise and recognition as a by product of accreditation at the different phases of the process was mentioned by many. Although unexpected in the framework of this study, it was written previously that "Morale was also found to be favorably affected by accreditation. Similar increases in morale were noted by all of the surveyed hospitals and by those hospitals at present preparing for survey" (Duckett, 1983:1577). Whether accreditation's link to recognition and improved morale can be generalized or whether it is as a result of this organization being in a

smaller, more removed area, or yet as a result of other factors, will have to be considered at the multiple-case level.

Another facet of accreditation is the composition of the self-assessment teams. It was noted that the more the team members came from a variety of programs, the more opportunities existed to exchange and learn, but at the cost of specificity and possibly decreasing the participation of physicians. Another case study within this multiple case study is looking more specifically at teams and team composition, but further study should look at the optimal size and composition for the accreditation teams.

To ascertain the value of the survey, a rough comparison of the accreditation survey report to the self-assessment revealed that on average four new 'areas to improve' were highlighted in the report. It also highlighted the great number of additional areas to improve in the self-assessment compared to the ones in the report. How surveyors select their areas of improvement? What criteria do they use? These questions would be interesting to pursue especially at a time when accreditation is trying to minimize subjectivity.

Finally as we saw in the results section, cost and time were the two most frequently mentioned disadvantages of the accreditation process, which correspond to the main concerns normally voiced in regards to accreditation. In an older study on the cost of accreditation of a US school of public health, the time spent in meetings was only 12% which concurs with the feedback that what takes time is the administrative work, and the time spent in team meetings is not such a burden (Kennedy et al, 1985). No study is currently available to report costs associated with the CCHSA accreditation process. However complex the calculations may become, efforts should be made towards developing a methodology to calculate the costs and move towards obtaining at least an estimate of the minimum cost for the accreditation process. This would then allow organizations to embark in the process knowingly and it would be a first step towards potential cost-effectiveness studies.

CHAPTER VIII – LIMITATIONS AND FUTURE RESEARCH

1. Internal validity

The case study benefited from a good cross-representation of professionals, and self-assessment accreditation teams which increased the internal validity of the study. However concerns about social desirability bias during the interviews and focus groups, and sample bias for the surveys are discussed below.

1.1 Social desirability bias

Social desirability bias is linked to respondents distorting the information given to the researcher for the purpose of answering what is "correct" or socially acceptable (Fisher, 1993:303). Any study involving interviews and focus groups are at risk of social desirability bias.

The section on opinion and expectations of the accreditation process is likely to have suffered most of this bias. However the survey to managers confirmed the perceptions heard in interviews and comments were balanced between favorable and less favorable ones.

The main purpose of the study was to establish a link between the accreditation process and changes within the organisation, and all changes mentioned were recorded regardless of their origin. However, changes had to be linked to the actual accreditation documents before they could be recorded as being as a result of accreditation. Other interventions within the last accreditation cycle were also considered and related to changes.

For answers related to questions on social capital, they were corroborated with comments made by respondents when answering other questions during the interview, therefore less likely to consciously distort information provided on building social capital.

As noted in the chapter four, triangulation with the surveys and other documents from the organisation were never brought contradictory responses, hence increasing internal validity of the study.

1.2 Sample bias for quantitative data

As mentioned previously in the results section and the discussion, the samples for both surveys were quite small. The results of the organizational culture survey are more representative of a probe into the organisation and no conclusion should be drawn from this survey alone. The absence of physicians and volunteers for the organizational culture survey points to a potential unexpected bias in the selection method (Thiétard, 2003) for this organisation by using the cafeteria as a central point for the distribution of the survey. To remedy to this issue, alternate survey distribution points to the cafeteria should be considered to target physicians, volunteers and other professionals who do not go to the cafeteria for their meals (e.g. lunch rooms, resource rooms, cafés, etc...).

A bias from non-response (Thiétard, 2003) may also have been introduced in the study through the low response rate of the Quality Management Perception of Quality Improvement Survey (33%). However the sample was shown to be fairly representative of the total population of managers and included individuals that were involved in the accreditation process and others that were not. Nevertheless, the results of the survey are meant mainly for triangulation within this case study. For the collection of data in the other organizations in the multiple case study, it is recommended that the response rate for this survey be monitored and reminders sent to managers if needed to achieve a response rate higher than 50%.

2. External validity

There is obvious limitation to the external validity of a single-case study as the specific findings are limited to the context of the organisation studied. However each case study part of a multiple-case study is to be considered a "whole" study for which a case report must be written and conclusions drawn (Yin, 2002:50). Applying a *theoretical replication* (Yin, 2002:47) the multiple case study will then draw cross-case conclusions which will have high external validity.

3. Future research

Following are suggestions for further research in the field of health care accreditation. Specific suggestions for data collection at the other sites in the multiple-case study are presented in Appendix 13.

- **Accreditation and Social Capital**

Following exploratory work to link the accreditation process to potential increased social capital, it would be interesting to develop a measuring tool in the form of a survey. The survey could be sent to all the members of the accreditation teams to assess the level of social capital prior to and following an accreditation cycle.

- **Physicians' participation in accreditation**

There is consensus that physicians' participation is valued as they play a key role in the decision making process within the health care system, yet it is noted in this case study as well as in others (Pomey, 2002; Duckett, 1984) that physician's involvement could be increased. Further research is needed to identify why physicians are reluctant to participate in the process and how can more physicians be more involved.

- **From Self-assessment to the accreditation survey report**

We identified that all the recommendations and many of the 'areas to improve' in the accreditation survey report were identified in the self-assessments, but many other areas identified were not reported in the final accreditation survey report. How does it compare to other organizations? Are organizations with a longer history in accreditation better able to identify areas to improve? What motivates only selecting a few areas for the report? Are there differences between surveyors? All these questions could be the subject of more specific research on the development of the self-assessment report and the final accreditation survey report.

- **Implementation of changes from CCHSA report vs. the ones identified only in the self-assessment**

Further to this multiple-case study linking phases of accreditation to changes, a more quantitative approach could take place to quantify and compare the number of changes that occurred as a result of recommendations, the 'areas to improve' identified in the CCHSA report, and the ones identified during the self-assessment process.

- **Accreditation team size and composition**

In this research we saw the advantage of mixed accreditation teams for increased networking and knowledge exchange, and the inconvenience of not being specific enough was pointed out. Should accreditation teams be bigger and broader or smaller and more program focused? What are the advantages and disadvantages of each? What are some of the factors to take into consideration when making the decision to go one way or the other? All these questions could be the subject of further research with very applicable findings.

- **Cost of accreditation**

Little is known regarding the actual cost of accreditation for organizations, and even less on the cost-effectiveness. Further research needs to be done on these two topics, starting on developing an accounting model for recording the cost associated with the accreditation process.

CHAPTER IX – RECOMMENDATIONS FOR THE ORGANIZATION

Below are some recommendations for the organization as a result of the analysis completed regarding the impact of accreditation on the organization.

- Create a stronger more visible link between the strong QI program and the accreditation process.

- Transfer all 'areas to improve' into a QI action plan to prioritize which ones are to be addressed in which order and by whom, and keep track of the progress in the same way as for the recommendations using a similar table as outlined at the end of the CCHSA accreditation survey report.

- Monitor some selected 'areas to improve' in the balanced scorecard.

- Further question the benefits of the organization's involvement in the accreditation process to better understand the potential benefits of accreditation and see how they can be maximized.

- Consider having annual meetings with the self-assessment teams to evaluate progress since last accreditation, and facilitate further knowledge exchange

- Consider staff training in the area of statistical and related quantitative methods to support quality improvement

- Consider the benefits of having self-assessment teams include different programs to facilitate building of social capital and knowledge exchange across programs.

- Continue to promote a 'group' culture emphasizing teamwork, support and development of everyone's potential which promotes greater implementation of quality improvement work (Shortell et al, 1995)

CHAPTER X – CONCLUSION

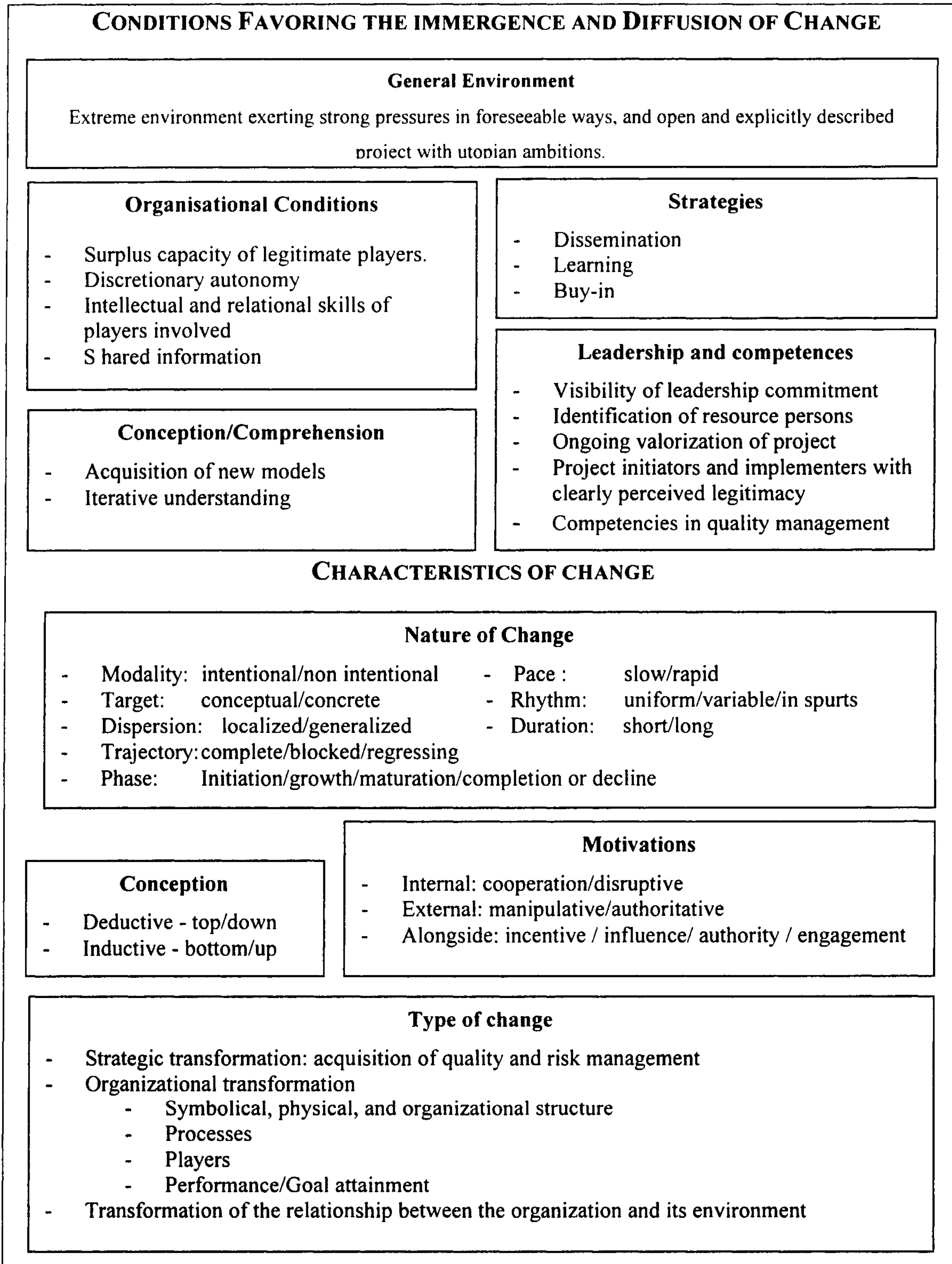
In this organization, representing a regional health authority with a flag ship hospital in the accreditation process for over 50 years, it was demonstrated by the changes that occurred in relation to accreditation, that accreditation did have an impact on the organization. Changes as a result of the recommendations in the accreditation survey report were particularly easy to track; accreditation was a true catalyst for change in these cases. Needed changes identified in the self-assessment report or as suggestions in the accreditation survey report were harder to isolate, but overall most were at the organizational level, and related to processes and organizational structures. Many other events, interventions, and constraints also initiate changes in the organization and the strong quality improvement program in this organization is continually affecting change. The adoption of a population health approach and some of the structural changes as a result of accreditation will likely enable the organization to better identify the changes needed in the future and facilitate their implementation. Through this exploratory work, it appears that the accreditation self-assessment phase can contribute to the development of social capital within the organisation - through the opportunity for networking and through the development of mutual understanding and a shared identity. The quantity and type of social capital acquired will likely vary, depending on the composition of the self-assessment teams, the follow-up done after the accreditation survey, and the organizational culture. The implications of this study for management practice is to consider accreditation not only as acquiring a status of 'accredited' but to see the potential in the accreditation process as a catalyst for change, as a result of recommendations and also in the more subtle ways through the development of relationships and mutual understanding in the accreditation self-assessment teams which enable access to new resources and exchange of ideas. Any change requires dedicated time and money, the question now becomes how to optimize the operational aspects of accreditation?

APPENDICES

1. Initial Conceptual Framework for the Dimensions of Change (Pomey 2002)
2. Definitions of CCHSA Dimensions and Quality Descriptors
3. List of Individuals and Institutions Involved in the Research Project
4. Interview Guide for the Focus Group
5. Interview Guide for the Individual Interviews
6. Questionnaires Used for the Surveys
7. Codes Used for the Qualitative Analysis
8. Coding Guide for Focus Group Questions
9. Coding Guide for the Interview Questions
10. Research questions with codes
11. Definition for the Seven Scales for the Management Perception of Quality Improvement Questionnaire
12. Revised conceptual framework for the dimensions of change in an organisation with a long past with accreditation
13. Suggestions for collecting data at the other sites for the multiple-case study

APPENDIX 1

Initial Conceptual Framework for the Dimensions of Change



From Pomey (2002), used in the multi-case study.

APPENDIX 2

Definitions of CCHSA Dimensions and Quality Descriptors

Responsiveness

The organization anticipates and responds to changes in the needs and expectations of the (potential) client and/or community populations, and to changes in the environment.

Availability: Services and resources (e.g. financial, human, information, equipment) are available to meet the needs of the client and/or community populations.
Accessibility: The client and/or community easily obtains required or available services in the most appropriate setting.
Timeliness: Services are provided and/or activities are conducted to meet client and/or community needs at the most beneficial or appropriate time.
Continuity: Coordinated services are provided across the continuum, over time.
Equity: Decisions are made and services are delivered in a fair and just way.

System Competency

The organization consistently provides services in the best possible way, given the current and evolving state of knowledge. The organization achieves the desired benefit for clients and/or communities, with the most cost-effective use of resources.

Appropriateness: Services meet the needs of the client and/or community populations, achieve the organization's goals, are proven (evidence-based) to produce benefits, and are based on established standards.
Competence: An individual's knowledge, skills, and attitudes are appropriate to the service provided.
Effectiveness: Services, interventions, or actions achieve optimal results.
Safety: Potential risks and/or unintended results are avoided or minimized.
Legitimacy: Services and/or activities conform to ethical principles, values, conventions, laws, and regulations.
Efficiency: Resources (inputs) are brought together to achieve optimal results (outputs) with minimal waste, re-work, and effort.
System Alignment: The mission, vision, goals, and objectives are clear, well-integrated, coordinated, and understood both internally and externally. These are reflected in organization plans, delegations of authority, and decision-making processes.

Client/Community Focus

The organization strengthens its relationship with the client and/or community. The organization does this by encouraging community participation and partnership in its activities.

Communication: All relevant information is exchanged with the client, family, and/or community in a manner that is ongoing, consistent, understandable, and useful.

Confidentiality: Information to be kept private is safeguarded.

Participation and Partnership: The client and/or community actively participates as a partner in decision-making, and in service planning, delivery, and evaluation.

Respect and Caring: Politeness, consideration, sensitivity, and respect are incorporated into all interactions with the client and/or community.

Organization Responsibility and Involvement in the Community: The organization supports and strengthens the community and its development, and contributes to its overall health.

Worklife

The organization provides a work atmosphere conducive to performance excellence, full participation, personal/professional and organizational growth, health, well-being, and satisfaction.

Open Communication: The organization fosters a climate of openness, free expression of ideas, and information sharing.

Role Clarity: Staff have clearly defined job scope and objectives, and these are aligned with the team and organizational goals.

Participation in Decision-Making: Staff input is encouraged and used in decision-making.

Learning Environment: Staff creativity, innovation, and initiative are encouraged. The necessary training and development to attain organizational goals and personal/professional development objectives, is provided.

Well-being: The organization provides a safe, healthy, and supportive environment, recognizes staff contributions, and links staff feedback to improvement activities.

APPENDIX 3

List of Individuals and Institutions Involved in the Research Project

Professors Involvement

- Marie-Pascale Pomey, University of Ottawa
- Doug Angus, University of Ottawa
- Louise Lemieux-Charles, University of Toronto
- André-Pierre Contandriopoulos, Université de Montréal
- François Champagne, Université de Montréal
- Jean-Louis Denis, Université de Montréal

Involvement of Other Stakeholders

- Gilles Lanteigne, CCHSA

Student Involvement

- Madeleine Pichoir Drew, University of Ottawa, MHA Program
- Amy Tosh, University of Ottawa, MHA Program
- Sophia Weber, University of Ottawa, MHA Program

APPENDIX 4

Interview Guide for the Focus Group
Members of Self-assessment Teams
(Clinical Group and Support Group)

We are going back to 2001-2002

1. When you were preparing the 2002 CCHSA's visit, did you identify any problems inside the organization?
   a. If so, which ones?
   b. Did you implement any measures to resolve them before the 2002 survey?
      i. If yes, please give examples.
      ii. If no, why not?

2. When the final report was sent to the hospital in 2002, did each of your self assessment teams receive a copy?
   a. If so, did management ask you to review the results or to act on them?
   b. If not, how did you find out about the report?

3. After receiving your report, what did you decide to do? How did you tackle the work on the recommendations or the weaknesses? Give me examples of actions.

4. How do you characterize the changes implemented at the health authority?
   - In line with the weaknesses
   - In line with the recommendations

5. How do you keep track of the changes?

6. Would these changes have taken place without the accreditation? Why or why not?

7. Did the changes made by your self-assessment team impact other areas of the heath authority? Which ones?

8. Are the 2002 self assessment teams still working as a group? If yes, are they working towards the 2005 survey? Are they using the 2002 report as a working tool?

9. I wish to conclude with a few questions concerning how being part of a self-assessment team has benefited you as a person:
   a. Were you able to meet new people and establish new working or personal relationships, and also to better understand what these people do?
   b. Were you able to get to know your organization better?
   c. Were you able to feel more integrated in your organization?
   d. Are you under the impression that you belong to a certain common culture in your group? (Acquisition of vocabulary, certain expectations, work norms, etc.)?

10. What do you think of the survey tools?

APPENDIX 5

Interview Guide for the Individual Interviews

The dimensions used to categorize the questions are those proposed in the theoretical framework which takes up the different analytical directions regarding the dynamics of change. The questions relate to the characteristics of an organization that can favor change and the elements that can characterize the changes implemented in line with the accreditation of hospitals.

1. Introduction

1.1 Can you in a few words describe your career? How long have you worked for this organisations and in this position?

2. Factors of Change

2.1 Did the professionals working for this organisation change much over the past five years? At the management level, clinical services level, support level and others?

2.2 Could this organisation be characterized as dynamic and enterprising? Give examples.

2.3 Do the professionals have a certain margin of freedom to express their opinion, to make decisions, to act independently? Can you give some examples?

2.4 What are the main values shared by this organisation's professionals? Quality, public service, health, efficacy, efficiency, etc.?

2.5 When important decisions are necessary, which strategies are implemented? How are they implemented? Does one seek professional approval?
- Existence of formal consultation forums involving all of the professionals or informal forums involving administrative and health care staff
- Possibilities of prompt consultations
- Existence of representative elected committees that participate

2.6 Do formal or informal discussion forums exist in which new ideas can be exchanged?

2.7 Are people that exert strong leadership present at the management level? At the clinical level? At other levels?

2.8 Did these people participate in important changes within this organisation?

2.9 Is general management involved in quality improvement? Is the CEO also involved in decisions relating to quality improvement and security?

2.10 Are people present within this organisation, which are recognized for their competencies in the area of quality improvement and security?

3. Accreditation

3.1 Why did this organisation enter the accreditation process? What are this organisation's goals?

3.2 Did you hesitate before entering the last/first accreditation process? Why?

3.3 Is time recognized and allocated to the professionals that participate in the accreditation's preparation?

3.4 Does a financial estimate exist for the cost of this organisation's accreditation? And the return on investment?

3.5 Over the course of the accreditation cycles in which this organisation participated, are you under the impression that know-how was acquired? For example, is the preparation easier to implement as it has been done before? Why?

4. Accreditation and changes in line with the latest survey

This part of the interview is about the accreditation process and the changes that were able to take place during the self-assessment phase and in line with the survey's conclusion.

4.1 Were you able to integrate the preparation for accreditation with your regular quality improvement activities, or was it necessary to invest extra effort and specific resources a couple of months before the accreditation?

4.2 Can you tell me how the preparation for the survey went? How long did the self-assessment take? How were the self-assessment teams formed? Did they already exist before? If so, through the previous survey? If not, why not? How do you characterize the participation of different groups of professionals in the preparation? (doctors, administrators, nurses, pharmacists, others)?

4.3 Did the implemented changes of standards lead to important changes during the preparation of the accreditation survey?

4.4 Was the accreditation preparation an opportunity to implement any changes? If so, which ones? At which level were they implemented? How were they implemented?

4.5 Did the self-assessment teams implement any changes? Give examples.

4.6 Was the submission of the final report occasion to implement changes? If so, which ones? For each of the presented recommendations in the report, could you indicate which ones

were implemented following the report? In case there were no recommendations, following the conclusion, which were the changes or actions pursued?

4.7 Did any of these changes that took place during the self-assessment phase or in line with the survey's conclusion (please specify), relate to this organisation's practices? If so, please give examples relating to health care services, management, or in other sectors within this organisation.
- o Did new functions or jobs appear?
- o Can you give me examples of innovative modes of strategic directions or special changes that were implemented within this organisation? In one or more care units? Were they brought to the attention of other professionals who might then be inspired?
- o Do you believe that the self-assessment was an opportunity to acquire new views on existent practices?
- o Were clinical practices modified? Is there a more profound integration of "evidence-based medicine"?
- o Were management practices modified? If so, which ones?

4.8 Did other changes during the self-assessment or in line with the survey's conclusion (please specify), take place in connection with the organization?
- o Which structures were modified or created?
- o Were new organizational charts put in place?
- o Did new organizational models get implemented?
- o How were the information systems adapted to the accreditation's requirements? (Creation of an intranet, the collection of other data of this organization, etc.)
- o Were hierarchical structures of services modified? If so, please give examples
- o Did certain departments acquire a more important authority? If so, please give examples.
- o Did the hierarchical relationships in this organisation get modified (for example between the services and management)?

4.9 Which professionals are most involved in these changes? Which are least involved?

4.10 Did people receive leadership roles in the implemented changes? If so, which ones?

4.11 How would you characterize these changes? Were they important? Did they get implemented rapidly? Were the professionals involved?

4.12 Is the training plan for the professionals influenced by the accreditation requirements? If so, since when?

4.13 Did the involvement of patients and their families in quality improvement get modified? If so, how? Give examples.

4.14 Did resistance to change exist? If so, what was its effect?

4.15 Was this organisation's CEO/yourself actively involved in the changes that were implemented?

4.16 Which phase of the accreditation cycle do you consider the most favourable to implement change?
- o Self-assessment, the visit, after the report? Another time?

4.17 Does a group exist independent of the accreditation process that proposed and implemented changes within this organisation over the past five years? If yes, which and could you give us some examples?

4.18 Where did the most important changes within this organisation originate over the past five years?
- o (Hospital closures, mergers, regionalization, reduction of deficits (budgetary cuts), changing demographics, unions, problems of recruitment and retention of personnel, competition with the private sector, alliances with the private sector, patient-centred emphasis, international competition for personnel and/or patients, accountability, technology, others?)

5. Changes of the relationship between this organisation and its network in connection with the accreditation

5.1 In which manner did the accreditation help this organisation to be more responsive to its environment's needs? (for example adaptation to the population's needs or the creation of a new service)

5.2 What are the principal impacts of the accreditation on the connection between this organisation and its other partners? (Other hospitals, community groups, different organizations, private clinics, etc.)

5.3 What are the principal impacts of the accreditation on the connection between this organisation and its administrative and financial structure?

6. Conclusion

6.1 What is your assessment of the CCHSA's accreditation process? Did you appreciate the survey team? Did you appreciate the new norms? Do you agree with the report's conclusion?

6.2 How do you characterize the accreditation experience for this organisation? (Advantages / disadvantages)

6.3 Do you believe that this organisation's participation in the accreditation process helps it to be more reactive to change? If so, why? Give examples.

- Thank you for your cooperation -

APPENDIX 6

Questionnaires Used for the Surveys

1. **Organisational Culture questionnaire (3 pages)**

2. **Perception of Quality Improvement Implementation and Professional Implication in Health Care Organization (9 pages)**

Organizational Culture

QUESTIONNAIRE FOR PROFESSIONALS WORKING IN A HEALTH CARE ORGANIZATION

A. HOSPITAL CULTURE

(Please distribute 100 points)

a. This Hospital is a very personal place. It is a lot like an extended family. People seem to share a lot of themselves.

Points for A ______________

b. This Hospital is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.

Points for B ______________

c. It is a very formalized and structured place. Bureaucratic procedures generally govern what people do.

Points for C ______________

d. This place is very production oriented. A major concern is with getting the job done. People aren't very personally involved.

Points for D ______________

(Please distribute 100 points)

a. Managers are warm and caring. They seek to develop employees' full potential and act as their mentors or guides.

Points for A ______________

b. Managers are risk-takers. They encourage employees to take risks and be innovative.

Points for B ______________

c. Managers are rule-enforcers. They expect employees to follow established rules, policies, and procedures.

Points for C ______________

d. Managers in Hospital D are coordinators and coaches. They help employees meet the hospital's goals and objectives.

Points for D ______________

(Please distribute 100 points)

---

a. The glue that holds the Hospital together is loyalty and tradition. Commitment to this hospital runs high.

Points for A ______________

b. The glue that holds the Hospital together is commitment to innovation and development. There is an emphasis on being first.

Points for B ______________

c. The glue that holds the Hospital together is formal rules and policies. Maintaining a smooth running operation is important here.

Points for C ______________

d. The glue that holds the Hospital together is the emphasis on tasks and goal accomplishment. A production orientation is commonly shared.

Points for D ______________

(Please distribute 100 points)

---

a. The Hospital emphasizes human resources. High cohesion and morale in the organization are important.

Points for A ______________

b. The Hospital emphasizes growth and acquiring new resources. Readiness to meet new challenges is important.

Points for B ______________

c. The Hospital emphasizes permanence and stability. Efficient, smooth operations are important.

Points for C ______________

d. The Hospital emphasizes competitive actions and achievement. Measurable goals are important.

Points for D ______________

B. GENERAL INFORMATION

1. What is your gender?

Female ☐ Male ☐

2. What is your age?

Below 30 years ☐ Between 30 to 45 years ☐ ☐

Between 46 to 55 years ☐ Over 55 years ☐

3. What is your working status?

Full Time ☐ On Call ☐

Part Time ☐

4. How long have you worked for or been associated with this hospital?

/______/ year(s) /______/ month(s)

5. Which of the following areas are you primarily associated with?

CCU or ICU Nurse ☐ Hospital Administration ☐

Medical Staff Member ☐ Operating Room Nurse ☐

Medical/Surgical Floor Nurse ☐ Other (please specify): ☐

____

6. Are you a member of the hospital-wide quality assurance or quality improvement steering council (or equivalent body)?

Yes ☐ No ☐

Thank you for your collaboration!

A. QUALITY OF CARE

In this section, you will evaluate your organization's involvement in the improvement of customers' quality of care. Read the following sentences and circle the appropriate answer (1= strongly disagree, 5= strongly agree). When you answer these questions you must think of your organization at the present time and not how it was or how it will be.

Leadership (*circle the appropriate number)*

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree	Don't know
1. The senior executives provide highly visible leadership in maintaining an environment that supports quality improvement.	1	2	3	4	5	9
2. The *top management* is a primary driving force behind quality improvement efforts.	1	2	3	4	5	9
3. The senior executives allocate available organizational resources (e.g., finances, people, time, and equipment) to improving quality.	1	2	3	4	5	9
4. The senior executives consistently participate in activities to improve the quality of care and services	1	2	3	4	5	9
5. The senior executives have articulated a clear vision for improving the quality of care and services.	1	2	3	4	5	9
6. The senior executives have demonstrated an ability to manage the changes (e.g., organizational, technological) needed to improve the quality of care and services.	1	2	3	4	5	9
7. The senior executives act on suggestions to improve the quality of care and services.	1	2	3	4	5	9
8. The senior executives leadership is personally involved in quality improvement efforts.	1	2	3	4	5	9
9. The senior executives have a thorough understanding of how to improve the quality of care and services.	1	2	3	4	5	9
10. The senior executives generate confidence that efforts to improve quality will succeed.	1	2	3	4	5	9
11. The team seeks information on needs and suggestions for quality improvement directly from external customers (e.g., patients, families, and payers).	1	2	3	4	5	9

Information and analysis *(circle the appropriate number)*

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree	Don't know
12. Your team collects a wide range of data and information about the quality of care and services.	1	2	3	4	5	9
13. Your team uses a wide range of data and information about the quality of care and services to make improvements	1	2	3	4	5	9
14. Your team continuously tries to improve how it uses data and information on the quality of care and services.	1	2	3	4	5	9
15. Your team continuously tries to improve the accuracy and relevance of its data on the quality of care and services provided.	1	2	3	4	5	9
16. Your team continuously tries to improve the timeliness of its data on the quality of care and services provided.	1	2	3	4	5	9
17. Your team is actively involved in determining what data are collected for the purpose of improving the quality of care and services.	1	2	3	4	5	9
18. Your team compares its data to data on the quality of care and services at other organizations.	1	2	3	4	5	9

Strategic quality planning *(circle the appropriate number)*

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree	Don't know
19. Organizational employees are given adequate time to plan for and test improvements.	1	2	3	4	5	9
20. Each department and work group within this organization maintains specific goals to improve quality.	1	2	3	4	5	9
21. The organization's quality improvement goals are known throughout the organization.	1	2	3	4	5	9
22. Organizational employees are involved in developing plans for improving quality.	1	2	3	4	5	9
23. Middle managers (e.g., department heads, program directors, and first line supervisors) play a key role in setting priorities for quality improvement.	1	2	3	4	5	9

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree	Don't know
24. External customers play a key role in setting priorities for quality improvement.	1	2	3	4	5	9
25. Non-managerial employees play a key role in setting priorities for quality improvement.	1	2	3	4	5	9

Human resources utilization (*circle the appropriate number)*

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree	Don't know
26. Organizational employees are given education and training in how to identify and act on quality improvement opportunities.	1	2	3	4	5	9
27. Organizational employees are given education and training in statistical and other quantitative methods that support quality improvement.	1	2	3	4	5	9
28. Organizational employees are given the needed education and training to improve job skills and performance.	1	2	3	4	5	9
29. Organizational employees are rewarded and recognized (e.g., financially and/or otherwise) for improving quality.	1	2	3	4	5	9
30. Inter-departmental cooperation to improve the quality of services is supported and encouraged.	1	2	3	4	5	9
31. Organizational employees have the authority to correct problems in their area when quality standards are not being met.	1	2	3	4	5	9
32. Organizational employees are supported when they take necessary risks to improve quality.	1	2	3	4	5	9
33. The organization has an effective system for employees to make suggestions to management on how to improve quality.	1	2	3	4	5	9

Quality management *(circle the appropriate number)*

	Strongly disagree	disagree	Neither disagree nor agree	agree	Strongly agree	Don't know
34. The organization regularly checks equipment and supplies to make sure they meet quality requirements.	1	2	3	4	5	9
35. The quality assurance staff effectively coordinates its efforts with others to improve the quality of care and services the organization provides.	1	2	3	4	5	9
36. Data from suppliers are used when developing the organization's plan to improve quality.	1	2	3	4	5	9
37. The organization has effective policies to support improving the quality of care and services.	1	2	3	4	5	9
38. The organization works closely with suppliers to improve the quality of their products and services.	1	2	3	4	5	9
39. The organization tries to design quality into new services as they are being developed.	1	2	3	4	5	9
40. The services that the organization provides are thoroughly tested for quality before they are implemented.	1	2	3	4	5	9
41. The organization views quality assurance as a continuing search for ways to improve.	1	2	3	4	5	9
42. The organization encourages employees to keep records of quality measurements.	1	2	3	4	5	9

Quality results *(circle the appropriate number)*

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree	Don't know
43. Over the past few years, the organization has shown steady, measurable improvements in the quality of customer satisfaction	1	2	3	4	5	9
44. Over the past few years, the organization has shown steady, measurable improvements in the quality of services provided by the administration (finance, human resources, etc.)	1	2	3	4	5	9

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree	Don't know
45. Over the past few years, the organization has shown steady, measurable improvements in the quality of care provided to medical, surgical and obstetric patients.	1	2	3	4	5	9
46. Over the past few years, the organization has shown steady, measurable improvements in the quality of services provided by clinical support departments such as laboratory, pharmacy, and radiology.	1	2	3	4	5	9
47. Over the past few years, the organization has maintained a high quality despite budget constraints	1	2	3	4	5	9

Customer satisfaction *(circle the appropriate number)*

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree	Don't know
48. The organization does a good job of assessing current patient needs and expectations.	1	2	3	4	5	9
49. The organization does a good job of assessing future patient needs and expectations.	1	2	3	4	5	9
50. Organizational employees promptly resolve patient complaints.	1	2	3	4	5	9
51. Patients' complaints are studied to identify patterns and prevent the same problems from recurring.	1	2	3	4	5	9
52. The organization uses data from patients to improve services.	1	2	3	4	5	9
53. Data on patient satisfaction are widely communicated to organizational staff.	1	2	3	4	5	9
54. The organization does a good job of assessing physician satisfaction with organizational services.	1	2	3	4	5	9
55. The organization uses data on customer expectations and/or satisfaction when designing new services.	1	2	3	4	5	9
56. The organization does a good job of assessing employee satisfaction with services provided by other employees and departments.	1	2	3	4	5	9

B. PROFESSIONAL PARTICIPATION TO ORGANIZATIONAL MANAGEMENT

The goal of this section is the examine the degree of participation of the organization's administration, the perception that professionals have of being consulted in the administrative decision-making processes, as well as their degree of influence in the decision-making process. ***For each of the following questions, please circle the appropriate number.***

	Never				Always
1. Are you involved in administrative decisions concerning the following areas:					
a) Budgets	1	2	3	4	5
b) Human resources	1	2	3	4	5
c) Professional practices	1	2	3	4	5
d) Acquisition of new equipment and technologies	1	2	3	4	5
	Never				**Always**
2. Since you are consulted in the decision-making process, do you feel that your opinion is taken into consideration?	1	2	3	4	5
	None				**Very high**
3. How would you rate your level of participation in the organization's management?	1	2	3	4	5
	None				**Very high**
4. How would you rate the level of participation of professionals in the organization's management?	1	2	3	4	5

C. ACCREDITATION IMPACT

The goal of this section is to examine the impact of the accreditation in terms of dynamics of change at your organization. ***For each of the following sentences, please circle the appropriate number.***

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree	Don't know
1. During the preparation for the last survey, important changes were implemented at the organization.	1	2	3	4	5	9
2. You participated in the implementation of these changes.	1	2	3	4	5	9
3. You learned of the recommendations made to your organization since the last survey (if it's the case).	1	2	3	4	5	9
4. These recommendations were an opportunity to implement important changes at the organization.	1	2	3	4	5	9
5. You participated in these changes.	1	2	3	4	5	9
6. Accreditation enables the improvement of patient care.	1	2	3	4	5	9
7. Accreditation enables the development of values shared by all professionals at the organization.	1	2	3	4	5	9
8. Accreditation enables the organization to better use its internal resources.	1	2	3	4	5	9
9. Accreditation enables the organization to better respond to the populations needs.	1	2	3	4	5	9
10. Accreditation enables the organization to better respond to its partners (other organizations, diverse organizations, private clinics, etc.)	1	2	3	4	5	9
11. Accreditation contributes to the development collaboration with partners in the health care system (other organizations diverse organizations, etc.)	1	2	3	4	5	9
12. Accreditation is a valuable tool for the organization to implement changes.	1	2	3	4	5	9
13. The organization's participation in accreditation enables it to be more responsive when changes are to be implemented.	1	2	3	4	5	9

D. INFORMATION ABOUT YOURSELF

1. What is your gender?

Female ☐ Male ☐

2. What is your age?

Below 30 years /___/ Between 30 and 45 years /___/

Between 46 and 55 years /___/ Over 55 years /___/

3. How long have you worked for or been associated with this organization?
/______/ years /______/months

4. Do you have a clinical background? **Yes** ☐ **No** ☐

5. What is your occupational category?

Medical Doctor /___/ Nurse /___/

Allied Health Professionnals /___/

Other: /___/ Specify:

6. . You were member of a self-assessment team that participated in the completion of the accreditation manual? Yes ☐ No ☐

7. Are you a member of an organization-wide quality assurance or quality improvement steering council (or equivalent body)? Yes ☐ No ☐

8. How do you judge you involvement into the accreditation process on a scale from 1 to 10?

1 10

Thank you for your collaboration

Feel free to write comments on the back of this sheet

APPENDIX 7

Codes for qualitative analysis
May 2005

I. Conditions favouring emergence and dissemination of change			
General Environment and fundamentals	GE	environment	Strong external pressures: technology, social, legal, financial, regulatory
		capacity	Surplus capacities of legitimate actors; both internal and external
		autonomy	Capable of making autonomous decisions (2.2)
		relationship	Relationships with external stakeholders (2.7)
		information	Sharing of information
		comparison	Comparison to other organizations and/or benchmarking
		knowledge	Ability to gather knowledge on the environment i.e. population health statistics
Strategies	ST	learning	Any media available for the exchange of ideas e.g.: forum, committees, rounds, etc. (2.5/2.6)
		participation	Encouraging participation
		resistance	Resistance to participation
Leadership	LE	dissemination	Project initiators and implementers
		visibility	Visibility of leadership commitment (2.7/2.8/2.9)
		resources	Identification or key resource people (2.9)
		recognition	Ongoing recognition of projects
		competencies	Competencies in quality management: recognition of quality management competency through credentials, training, etc (2.10)
Conception	CO	model	Capacity to acquire new models of thinking, capacity to face complexity.
		critique	Ability to self-assess / critique oneself or ones organization
		intervention	Knowledge of the accreditation as an intervention; e.g. as a merger tool or method of acquiring best practices
Purpose	PU	open	open and explicit knowledge process; communication of purpose of accreditation for everyone.
		future	capacity to see the project in the future

II. Characteristics of change

Nature	NA	target	conceptual/concrete
		intent	intentional/unintentional
		pace	slow/rapid
		rhythm	uniform/variable/one-time shock/incremental
		dispersion	localized/generalized
		trajectory	completed/blocked/regressed
		phase	Initiation/growth/maturation/completion or decline
		duration	Short/long
		unspecified	Change mentioned
Action	AC	incentive	
		influence	
		authority	
		commitment	E.g. Putting patient welfare first could be a commitment that comes with an action
Resistance	RE	indifference	Indifference towards change (4.14)
		dissent	Dissent / counteracting change (4.14)
		refusal	Refusal to participate in change (4.14)
		none	No resistance to change
Initiation	IN	deductive	top/down (4.15)
		inductive	bottom/up (4.15)

III. Hospital's characteristics

Hospital's characteristics	HC	values	values (2.4)
		social climate	Reference to culture of the organization (2.1)
		budget	Any mention of budget
		accr issues	Issues for the HCO related to the accreditation process
		entrepreneurship	Dynamic and enterprising (2.2)
		strength	Strength
		weakness	Weakness
		stability	Professional stability, turnover (2.1)
		information system	Information system
		structures	Any indication of a formal structure, e.g. committee
		organization	Program management has had changes from silos to something new (i.e. from department to program management)
		team	Evidence of presence or lack of team work

IV. Quality programs and interventions			
Quality programs	QP	structure	Organizational structure of a quality program e.g.: quality improvement teams
		policy	Any policies mentioned related to the quality program
		accreditation	Relationship between the quality program and the accreditation process (4.1)
		complaints	complaints
		satisfaction	satisfaction
		risk management	risk management
		dysfunction	dysfunction
		clinical practices assessment	Whether the quality program assesses clinical practices
		cost	cost
		participation	participation
		protocol	protocols
		recognition	recognition
		balanced scorecard	balanced score card
		indicators	indicators
Accreditation's preparation	AP	teams formed	Accreditation teams formed (4.2)
		self-assessment	The self assessment work
		participation	(4.2)
		Physician participation	Physician participation in accreditation
		standards	Changes of the accreditation standards (4.3)
		changes	Implementation of changes during the accreditation preparation (4.4/4.5)
		report	Implementation of changes related to the previous final report (4.6)
		recommendations	Recommendation implemented from the old report (4.6)
		functions	New jobs, new functions as a result of preparation (4.7)
		Strategic directions	New strategic dimensions
		clinical guidelines	New clinical guidelines
		management practices	New management practices
		structures	New organizational chart or model or hierarchical structure (4.8)
		information systems	New information systems (4.8)
		authority	Description of how people are in hierarchical or individual relationships; relationships between people, not structure related e.g. Physicians having authority over nurses, without being their superiors. (4.8)
		Risk management	Risk management
Accreditation's visit	AV	Participation	(4.2)
		standards	Changes of the accreditation standards (4.3)

		changes	Implementation of changes during the visit (4.4/4.5)
		report	Implementation of changes related to the experts' feedback (4.6)
		functions	Functions: new jobs, new functions (4.7)
		Strategic directions	Strategic directions: new strategic dimensions
		Clinical guidelines	Clinical guidelines:
		management practices	Management practices:
		structures	New organizational chart or model or hierarchical structure (4.8)
		Information systems	Information systems 4.8
		authority	Description of how people are in hierarchical or individual relationships; relationships between people, not structure related e.g. Physicians having authority over nurses, without being their superiors. (4.8)
		risk management	Risk management
Accreditation's report	AR	report	Implementation of changes related to the final report (4.6)
		functions	New jobs, new functions (4.7)
		Strategic directions	Strategic directions: new strategic dimensions (4.7)
		clinical guidelines	Clinical guidelines: (4.7)
		Management practices	New management practices: (4.7)
		structures	New organizational chart or model or hierarchical structure (4.8)
		Information systems	New information systems (4.8)
		authority	Description of how people are in hierarchical or individual relationships; relationships between people, not structure related e.g. Physicians having authority over nurses, without being their superiors. (4.8)
		risk management	Risk management
		meeting	Meeting after report – no change implemented
Accreditation in general	AG	cost	Evaluation of the accreditation process cost (3.4)
		motivation	Reasons to enter into the accreditation process (3.1/3.2)
		time	Time recognized for the accreditation process (3.3)
		know-how	Accreditation know-how is acquired through the years (3.5)
		professional	Professionals involved in changes (4.9)
		leadership	Leadership roles in the implemented changes (4.10)
		training	Training plan influenced by the acc. Process (4.12)
		patient	Involvement of patients and families (4.13)
		best phase	Phase of the accreditation cycle to implement change (4.16)
		hesitation	Hesitated to enter into the accreditation process (3.2)
		structure	New organizational chart or model or hierarchical structure unrelated to a specific phase (4.8)

		culture	MP to add definition.
		social capital	Reference to social capital concept (establishing networks, exchange of information, sharing of values, development of a same vocabulary) instead of a completely new category for social capital.
		In the past	Reference to accreditation that happened before the one studied. (not to mix references to the assessment of AIM and prior accreditation programs)
Others changes	OC	five years	Important changes during the past five years (4.18)
		environment	More responsive to the environment (5.1)
		partners	Changes concerning the organization's partners (5.2, and 5.3)
		administrative structure	Changes in administrative structure, e.g. Mergers, regionalization, organizational charts, unrelated to accreditation
		groups	Other groups independent of the accreditation process that proposed and implemented changes(4.17)
Expectations and opinions	EX	Capacity for change	expectation for the capacity for changes related to the accreditation process (6.3)
		advantages and disadvantages	advantages and disadvantages of the accreditation experience (6.2)
		assessment	assessment of the procedure / process / Surveyors (6.1)
Recognition	RC	internal	within hospital – recognition received via internal systems within the hospital
		external	via external organization – recognition received from organisations outside of the hospital
		accreditation	Recognition for work well done received through accreditation
Means	lack of means		lack of means to implement changes, etc.

IV Personal data

Personal characteristics	PC	Less than 5 years	number of years on the H <5 years (1.1)
		5 to 10 years	number of years on the H between 5 to 10 years (1.1)
		More than 10 years	number of years on the H more than 10 years (1.1)
		physician	(1.1)
		pharmacist	(1.1)
		nurse	(1.1)
		management	(1.1)
		proud	proud to work on this institution (1.1)
		motivated	motivated to work in this institution (1.1)
		Nurse management	PC nurse management: nurse in a management position (1.1)
		Other professional backgrounds	PC other professional backgrounds
Personal involvement	PI	characteristics	Characteristics of involvement in the accreditation process (1.1)
		strategies	(1.1)
		learning	(1.1)
		focus	professional focus

V Social Capital

Social Capital	SC	Structural	The structure of the networks in which the relationship is embedded
		Cognitive	Mutual understanding, understanding each other's language, vocabulary, paradigms, goals and values (Nahapiet and Ghoshal, 1998)
		Relational	Trust, shared identity
		Manifestation	Linked to the willingness to share information, adherence to same norms, exerting influence on agents through social ties., development of new ideas
		In social capital questions	Quotes were found when asking questions in relation to the Social capital concepts
		In other questions	Quotes were found when answering other types of questions

APPENDIX 8

Coding Guide for Focus Group Questions

Question #	NVivo Coding options (but not limited to)
1.	AP self-assessment, AP changes and other AP, NA as appropriate for changes (also CO)
2.	GE information, AR meeting after report,
3.	AR Report, and other AR category depending on the change that occurred CO model, critique Characteristics of change section: NA, AC, RE, IN GE information, ST learning, HC QP section
4.	AR report (two sub groups: weaknesses and recommendations??) NA (EX Section & HC as apply)
5.	QP protocols? (I had a lot of QP balanced Scorecards in one and CO intervention in the other)
6.	QP accreditation?
7.	NA dispersion (localised/generalised) NA intent, AP change
8. a	QP structure or AP teams
8.b	AP teams
8.c	AP report, AP recommendations
9.	Social Capital: SC relationships, SC Org Knowledge, SC integration, SC common culture,
10.	EX assessment, EX advantages_disadvantages, EX Capacity for change

APPENDIX 9

Coding Guide for the Interview Questions

Question	NVivo Coding options (but not limited to)
1.1	PC & PI
2.1	HC social climate, HC stability
2.2	GE autonomy, HC entrepreneurship, HC social climate, LE visibility, LE resources
2.3	GE autonomy, HC structures
2.4	HC values
2.5	ST learning, LE visibility
2.6	ST learning
2.7	GE relationship, LE visibility
2.8	LE visibility
2.9	LE visibility, LE resources, QP participation
2.10	LE competencies, RC Internal
3.1	AG motivation
3.2	AG motivation, AG hesitation
3.3	AG time
3.4	AG cost
3.5	AG know-how
4.1	QP accreditation, AG cost
4.2	AP teams formed, AP participation, AV participation, AP self assessment
4.3	AP standards
4.4	AP change, AV change
4.5	AP change, AV change
4.6	AR meeting, AR strategic directions, AP report, AP recommendations, AR report
4.7	AP functions, AV functions, AR functions, AR strategic directions, AR clinical guidelines, AR management practices, QP accreditation, AP clinical guidelines
4.8	AP structure, AP information systems, AP authority, AV structure, AV information systems, AV authority, OC administrative structures
4.9	AG professional
4.10	AG leadership
4.11	NA target, NA intent, NA pace, NA rhythm, NA dispersion, NA trajectory, NA phase, NA duration, IN inductive, IN deductive
4.12	AG training
4.13	AG patients
4.14	RE indifference, RE dissent, RE refusal, RE none, ST resistance
4.15	AG professional, IN deductive, IN inductive
4.16	AG best phase
4.17	IN deductive, IN inductive, OC five years
4.18	OC five years, OC administrative structure, IN deductive, IN inductive, GE environment
5.1	OC environment, GE comparison, GE environment
5.2	OC partners, GE relationship
5.3	OC partners
6.1	EX assessment
6.2	EX advantages and disadvantages, EX assessment, HC accr issues
6.3	EX capacity for changes

APPENDIX 10

List of codes searched by questions for the analysis

1. Conditions Favouring Change
What are the organizational characteristics of the hospital?

General environment	*GE environment, GE capacity, GE relationships,* *GE information, GE comparison,* *HC budget, HC stability* *OC five years, OC Admin Structure*
Basic Conditions	*HC social climat, HC values* *HC entrepreneurship, HC organisation,* *HC team, HC strength, HC weaknesses* *HC structures, HC organisation* *HC information system, HC teams* *GE autonomy GE knowledge,* *All QP section (except for QP accreditation)* *Lack of means, PI proud, PI motivated*
Strategies	*ST learning, ST participation, ST resistance,* *PI strategies, PI learning*
Leadership	*LE dissemination, LE visibility, LE resources, LE recognition, LE competencies* *RC internal, RC external recognition*
Conception and comprehension	*CO section: CO model, CO critique, CO intervention* *AG hesitation* *PU open, PU future*

2. Changes in line with Accreditation
2.1. What changes were implemented during the self-assessment phase?

Generally	*AP self-Assessment, AP changes, AP report,* *AP recommendations, AP participation,* *AP teams formed, AP physician participation* *NA sections*
a. At the individual practices level b. At the group practices level	*AP functions, AP clinical guidelines,* *AP authority, AP changes*

c. At the organizational level	*AP strategic directions,* *AP management practices,* *AP structures, AP information system* *AP risk management,* *AP recommendations,* *AP report, AP changes*
d. At the external partnerships level (organization and its partners)	*OC partners*

2.2. What changes were implemented during the **accreditation survey**?

Generally	*AV Section: AV changes, AV report* *AV participation,* *NA Section*
a. At the individual practices level b. At the group practices level	*AV functions, AV clinical guidelines,* *AV authorit AV changes*
c. At the organizational level	*AV strategic directions,* *AV management practice,* *AV structures, AV information system* *AV risk management* *AV report, AV changes*
d. At the external partnerships level (organization and its partners)	*OC partners*

2.3 What changes were implemented as a result of the **accreditation survey report**, and in particular as a result of its recommendations?

Generally	*AR Section: AR Report, AR meeting* *NA section*
a. At the individual practices level b. At the group practices level	*AR functions, AR clinical guidelines,* *AR authority, AR report*
c. At the organizational level	*AR strategic directions,* *AR management practices,* *AR structures, AR information system* *AR risk management* *AP report*
d. At the external partnerships level (organization and its partners)	*OC partners*

3. Other changes

What other events occurred during the period of time before and after accreditation (e.g., regionalization, changes in government, mergers, etc.) and what changes are related to them?

Generally a. At the individual practices level b. At the group practices level c. At the organizational level d. At the external partnerships level (organization and its partners)	*OC five years, OC groups* *NA section,* *GE relationship, GE environment*

4. The Accreditation Process

What are the organization's expectations and opinion of the accreditation process? a. Generally b. Accreditation preparation process c. Accreditation visit d. Accreditation survey report	*HC Accreditation issues* *QP accreditation* *RC accreditation* *EX assessment, EX advantages_disadvantages* *AG motivation, AG know-how, AG best phase* *AG hesitation, AG in the past* *PU open, PU future* *GE information*
Did accreditation help the organisation improve their capacity to react in the face of change? i.e. change in culture, organisational learning, new working processes which facilitates change	*EX capacity for change* *OC environment, OC partners* *CO model, CO critique,* *CO intervention,* *PU Future, PU open,*

APPENDIX 11

Definition for the Seven Scales for the

Management Perception of Quality Improvement Questionnaire

(Section A)

1. **Leadership**: extent to which senior executives' personal leadership and involvement creates and sustains a customer focus and clear, visible quality values and the extent to which these quality values are integrated into the hospital's management system (including the extent to which the hospital addresses its public responsibilities and corporate leadership)

2. **Information and Analysis**: extent to which the scope, management, and use of data and information maintain a customer focus, drive quality excellence, and improve operational and competitive performance

3. **Human resources Utilization**: extent to which hospital employees are provided adequate education and training for quality improvement efforts

4. **Strategic Quality Planning**: extent to which employee's are involved and empowered involved in the hospital's quality planning efforts

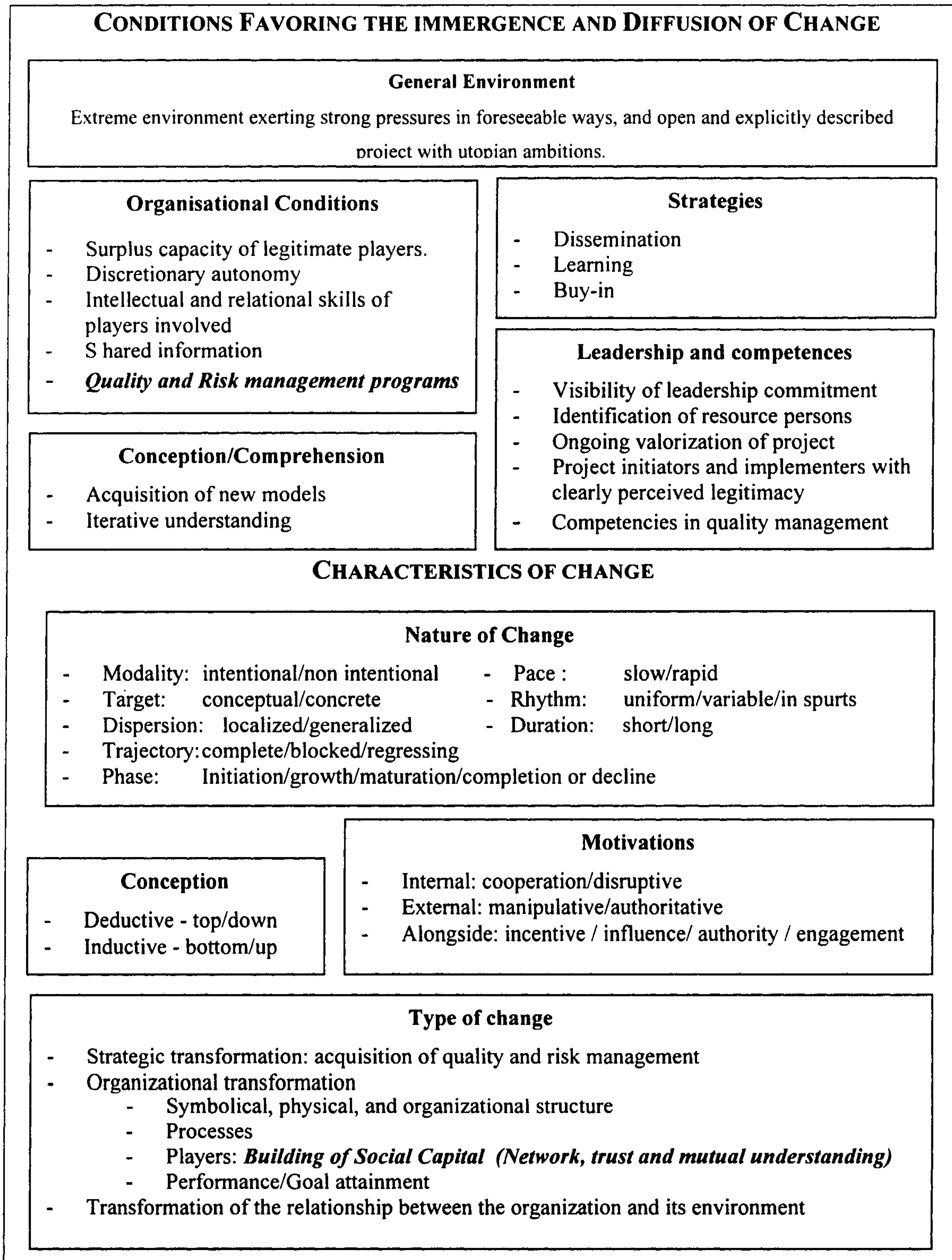
5. **Quality Management**: extent to which all work units, including research and development units and suppliers, contribute to overall quality and operational performance requirements. Examines the key elements of process management including design, management of day-to-day production and delivery, improvement of quality and operational performance, and quality assessment

6. **Quality Results**: extent to which hospital has shown measurable improvement in quality, hospital operational performance, and supplier quality

7. **Customer Satisfaction**: extent to which hospital effectively assesses and meets customer (including patients, employees, physicians) requirements and expectations

APPENDIX 12

REVISED CONCEPTUAL FRAMEWORK for THE DIMENSIONS OF CHANGE
In an organisation with a long past with accreditation



Adapted from Pomey (2002), suggested modifications in bold and italic.

APPENDIX 13

Suggestions for collecting data at the other sites in the multiple-case study

- Find out how many managers are in the organizations and monitor the response rate for the Perception of Quality Improvement Implementation questionnaire given to management. Identify the minimum response rate, and the corresponding number of questionnaire to be returned, and if need be ask the coordinator to send a reminder if response rate is low.

- Change the scale from 1-10 to 0-10 in the Perception of quality improvement implementation and professional implication in health care organization (Management questionnaire)

- Re introduce questions in the Organizational Culture questionnaire regarding the participation on self-assessment team as it may affect the way people perceive the organization's culture

- Consider distributing the Organizational Culture questionnaire in other gathering locations than the cafeteria, such as cafes, lunch rooms, resource rooms.

- For increased clarity change the last question of the interview "Do you believe that your hospital's participation in the accreditation process helps it to be more reactive to change?" to

    - " Do you believe that accreditation is a tool to facilitate change that needs to occur and that may not occur if accreditation was not there" and/or
    - "Do you believe that accreditation is a tool which helps organizations in the future to be better equipped to meet the challenges of implementing change"

- Interesting to have a board member on the focus group. Different perspective, and a witness to the changes that are occurring

- For the focus groups and for the interviews, half way through the questions on changes following the report, distribute to each member, the section of the report that concerns them, and have them write on the paper, if there was change or progress regarding that item. Discussion can then follow to comment on the different ways change took place or did not. The marked reports are collected at the end of the interview.

BIBLIOGRAPHY

ISQua, (2004), "International Principles for Healthcare Standards, Second Edition," The International Society for Quality in Health Care.

Adler P.S. and Kwon S.W. (2002), "Social Capital: Prospects for a new concept," *Academy of Management Review*, 27(1), 17-40.

Baker G.R., Barnsley J., and Murray M. (1995), "Continuous Quality Improvement in Canadian Health Care Organizations," *Leadership*, 2(5), 18-23.

Beaumont M (2002), "Recherche sur l'efficacité du programme d'agrément du Conseil canadien d'agrément des services de santé: Méthodologie et résultats,".

Benson, J.K. (1975), "The interorganizational network as a political economy," *Administrative Science Quarterly*, 20(2), 229-249. *

Berwick, D.M., Blanton, G.A., & Roessner, J. (1990), *Curing Health Care: New Strategies for Quality Improvement*, San Francisco, Ca: Jossey-Bass. *

Berwick, D.M., & Nolan, T.W. (1998), "Physicians as Leaders in Improving Health Care: A New Series in Annals of Internal Medicine," *American College of Physicians*, 128(4), 289-292. *

Bolin K, Lindgren B, Lindström M, and Nystedt P (2003), "Investments in social capital - implications of social interactions for the production of health," *Social Science Medicine*, 56(12), 2379-90.

Canadian Council on Health Services Accreditation (2004), "Canadian Health Accreditation Report 2003," 1-113.

Canadian Council on Health Services Accreditation (2002), *CCSHA Accreditation Survey Report September 2002*, for the organization studied.

Canadian Healthcare Association website, www.cha.ca, accessed May 2005.

Coleman J.S. (1988), "Social Capital in the Creation of Human Capital," *American Journal of Sociology*, 94(S), 95-121.

Conger, J.A., & Kanungo, R.N. (1998), *Charismatic Leadership in Organizations,* Thousand Oaks, CA: Sage Publications. *

Crozier, M. (1973), *Communication à l'Académie des Sciences Morales et Politiques,* 18 juin 1973. Paris : l'Académie des Sciences Morales et Politiques. *

Cross R. and Prusak L (2002), "The People Who Make Organizations Go - or Stop," *Harvard Business Review*, 105-12.

Denis, J-L.; Lamothe, L., & Langley, A. (2001), "The dynamics for collective leadership and strategic change in pluralistic organizations," *Academy of Management Journal*, 44(4), 809-837. *

Duckett S.J. (1983), "Changing Hospitals: The Role of Hospital Accreditation," *Social Science Medicine*, 17(20), 1573-9.

Farmer J, Lauder W, Richards H, and Sharkey S (3 A.D.), "Dr. John has gone: assessing health professionals' contribution to remote rural community sustainability in the UK," *Social Science & Medicine*, 57(4), 673-86.

Fassin D (2003), "Social Capital, from sociology to epidemiology critical analysis of a transfer across disciplines," *Revue d'Epidemiologie et de Santé Publique*, 51(4),

Firth-Cozens, J., & Mowbray, D. (2001), "Leadership and quality of care," *Quality in Health Care,* 10 (supll II), ii3-ii7. *

Fisher R.J. (1993), "Social Desirability Bias and the Validity of Indirect Questioning," *Journal of Consumer Research,* 20(2), 303-314

French W.L., Bell C.H., and Zawacki R.A. (2005), *Organization Development and Transformation, Managing Effective Change*. McGraw-Hill Irwin.

Francois P (2001), "Quality management systems in Quebec hospitals *(in French)*," *La Presse Médicale*, 30(12), 591-5.

Ford, J., & Ford, L. (1995), "The role of conversations in producing intentional change in organizations," *Academy of Management Review,* 20(3), 541-570. *

Giraux, A., & Jolly, D. (1992), "How to induce physicians to engage in quality assurance activities in university hospital: a policy," *Quality assurance in health care*, 4(1), 19-24.*

Hinings, C.R., & Greenwood, R. (1988), *The Dynamics of Strategic Changes*, New York, NY: Basil Blackwell. *

Ginter P.M., Swayne L.E., and Duncan W.J. (2002), *Strategic Management of Health Care Organizations*, Oxford, UK: Blackwell Publishers.

Gopee N (2002), "Human and social capital as facilitators of lifelong learning in nursing," *Nurse Education Today*, 22(8), 608-16.

Grimshaw J M, Shirran L, Thomas R, and et al (2001), "Changing provider behavior: an overview of systematic reviews of interventions," *Medical Care*, 39(8 Suppl 2), II2-45.

Health Edition Online (2004), 8(23), June 11, 2004, http://www.healthedition.com

Hawe P and Shiell A (2000), "Social Capital and health promotion: a review," *Social Science Medicine*, 51(6), 871-85.

Hooghe M. and Stolle D. (2003), "Introduction: Generating Social Capital and the sources of Social Capital," in *Generating Social Capital, Civil Society and Institutions in Comparative Perspective* Palgrave MacMillan, 1-42.

Juran, J.M. (1989), *Juran on Leadership for Quality*, New York, NY: Free Press. *

Juran, J.M. (1994), "Achieving Sustained Quantifiable Results in an Interdepartmental Quality Improvement Project," *The Joint Commission Journal on Quality Improvement*, 20 (3), 105-19. *

Kleiber, C. (1997), "Organisation du changement à l'hôpital, " *Ruptures*, 4(2), 218-229. *

Longest, Jr.B.B., Rackich, J.S., & Darr, K. (2000), *Managing Health Services Organizations and Systems* (4ème éd.), Maltimore, MA: Health Professions Press. *

Kennedy V.C., Moore F.I., and Thibadoux G.M. (1985), "Determining the Costs of Self-study for Accreditation: A Method and a Rationale," *Journal of Allied Health*, 14(2), 175-82.

KotterJ.P. and Cohen D.S. (2002), *The Heart of Change*. Boston, Massachusetts: Harvard Business School Press.

Leana C and VanBuren III H J (1999), "Organizational Social Capital and Employment Practices," *Academy of Management Review*, 24(3), 339-55.

Lemieux-Charles L., Gault N., Champagne F., Barnsley J., Trabut I., Sicotte C., and Zitner D. (2000), "Use of Mid-Level Indicators in Determining Organizational Performance," *Hospital Quarterly*, Summer 48-52.

Lin N (2001), *Social Capital: A theory of Social Capital Structure and Action*. Cambridge University Press.

Lozeau D (1996), "The quiet collapse of quality management: study results of twelve hospitals in Quebec" *(in French)*," *Ruptures*, 3(2), 187-208.

Lozeau D (2002), "The Tortuous road of quality management in Quebec public hospitals *(in French)*," *Gestion*, 27(3), 113-22.

Mays N and Pope C (2000), "Qualitative research in health care, Assessing quality in qualitative research," *British Medical Journal*, 320(1), 50-2.

Mignone J. (3 A.D.), "Social Capital in First Nations Communities: Conceptual Development and Instrument Validation," Department of Community Health Sciences, University of Manitoba.

Mintzberg, H. (1983a), *Power In and Around Organizations*, Englewood Cliffs, N.J.: Prentice-Hall, Inc. *

Mintzberg, H. (1983b), *Structure in fives: designing effective organizations,* Englewood Cliffs, N.J.: Prentice-Hall, Inc. *

Mintzberg, H., Ahlstrand, B., & Lampel, J. (1999), "Transformer l'entreprise," *Revue Internationale de Gestion. Numéro thématique: Transformer l'organisation*, 24(3), 122-130.*

Nahapiet J. and Ghoshal S. (1998), "Social Capital, intellectual capital, and the organizational advantage," *Academy of Management. The Academy of Management Review*, 23(3), 242-66.

New Brunswick, Health and Wellness (2003), *Reporting to New Brunswickers, The New Brunswick Health Care Report Card 2003,* 18 p

Øvretveit J and Gustafson D (2002), "Evaluation of quality improvement programs," *Qual Saf Health Care*, 270-5.

Pomey, M.-P. (2003), *Preparing for accreditation: a tool for organizational change in hospitals?* (in French), Ed GRIS, University of Montreal, Montreal.

Pomey M.-P, Contandriopoulos A.-P, Francois P, and Bertrand D (2004), "Accreditation: A tool for organizational change in hospitals?," *International Quality of Health Care Quality Assurance*, 17(3),

Prusak L. and Cohen D (2002), "How to invest in Social Capital," *Harvard Business Review*, 86-93.

Quinn R.E. and Kimberly J.R. (1984), "Paradox, planning and perseverance: Guidelines for managerial practice," in *Managing Organization Transitions,* J.R.Kimberly and R.E.Quinn., ed. Homewood, IL: Dow Jones-Irwin, 295-313.

Rocher, G. (2000), "Le changement," Conférence donnée dans le cadre du Groupe de recherche interdisciplinaire en santé. Université de Montréal. *

Shaw, C. (2000), "The role of external assessment in improving health care," *International Journal for Quality in Health Care*, 12(3), 167 *

Shaw C D (2001), "External assessment of health care," *British Medical Journal*, 322 851-4.

Shaw C D (2003), "Evaluating accreditation - Editorial," *International Quality of Health Care Quality Assurance*, 15(6), 455-6.

Shaw C D (2004), "Toolkit for Accreditation Programs," International Society for Quality in Health Care, 1-67.

Shortell, S.M. (1983), "Organizational Theory and Health Services Delivery," In Conference American Public Health Association Annual Meeting, 16 November, Dallas, Texas. *

Shortell S.M., O'Brien J.L., Carman J.M., Foster R.W., Hughes E.F.X., Boerstler H., and O'Connor E.J. (1995), "Assessing the Impact of Continuous Quality Improvement/Total Quality Management: Concept versus Implementation." *HSR: Health Services Research*, 30(2), 377-401.

Shortell S.M., Jones R.H., Rademaker A.W., Gillies R.R., Dranove D.S., Hughes E.F.X., Budetti P.P., Reynolds K.S.E., and Huang C.F. (2000), "Assessing the Impact of Total Quality Management and Organizational Culture on Multiple Outcomes of Care for Coronary Artery Bypass Graft Surgery Patients," *Medical Care*, 38(2), 207-17.

Shortell S.M., Zazzali J., Burns L.R., Alexander J.A., Gillies R.R., Budetti P.P., Waters T.M., and Zuhkerman H.S. (2001), "Implementing Evidence-Based Medicine," *Medical Care*, 39(7), I-62-I-78.

Svendsen A, Boutilier R.G., and Wheeler D (2003), "Stakeholder relationships, social capital and business value creation," The Canadian Institute of Chartered Accountants, 1-72.

Thiétard R-A. (2003), *Méthodes de recherche en management.* (2ème édition). Paris: Edition Dunod

Tsai W and Ghoshal S. (1998), "Social Capital and value creation: the role of intra-firm networks," *Academy of Management Review*, 41(4), 464-76.

Vandangeon-Derumez, I. (1998), "La dynamique des processus de changement," *Revue Française de Gestion, Les organisations face au changement. Numéro spécial,* 120 (Septembre-Octobre), 120-138. *

Weiner, B.J., Alexander, J.A., & Shortell, S.M. (1996), "Leadership for Quality Improvement in Health Care: Empirical Evidence on Hospital Boards, Managers, and Physicians," *Medical Care Research and Review,* 53(4), 397-416. *

Woolcock M and Narayan D (2000), "Social Capital: Implications for development theory, research, and policy," *The World Bank Research Observer*, 15(2), 225-49.

Yerema R. W. (2005), *Canada's Top 100 Employers,* Mediacorp Canada Inc, Toronto

*As referenced in the submission for the CIHR grant