Multi-Dimensional Space Configurations for Social Pediatrics Health Care Delivery

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ABSTRACT

Introduction/Objectives: Health inequities among children remain problematic despite a global focus on health transformation. Adverse social and material conditions continue to make children vulnerable, resulting in health and developmental problems. Social Pediatrics is a socially driven approach to health care delivery designed to mitigate social and structural barriers to care for vulnerable children while considering the child's social context and ecosystem. The Centre de Pédiatrie Sociale du Vieux-Hull (CPSVH) is an empirical social pediatrics centre that addresses the social determinants of health. It is an operationalization of the social pediatrics model of providing culturally sensitive and comprehensive health care to the children and youth of Vieux-Hull, and support to their families, with the engagement of community partners. This study examined the multi-dimensional physical, social and collaborative space configurations at the CPSVH from the child's perspective, and the extent to which the spaces were socially supportive. The theories of Lefebvre's Production of Space and Complex Adaptive Systems were combined to inform our understanding of the space configurations and their attributed meaning.

Methods: This exploratory study used a qualitative approach. Children were recruited purposively to participate. Data collection included focus groups, interviews and observation. Pictures of the CPSVH spaces were used during the focus groups. Direct observation informed my understanding of the child's social and physical interactions in the CPSVH spaces. Focus groups and interviews with health professionals and parents were conducted to complement the child focus group data. All the data sources were

coded using NVivo 12. Directed content analysis was used to analyze the focus group, interview and observation data to identify emergent themes.

Results/Conclusion: This study provided an understanding of how children interact with the multi-dimensional space configurations at the CPSVH, and the extent to which the unique design was socially supportive from the child's perspective. Twenty (n=20) children 7-13 years old, along with health professionals (n=6) and parents (n=7), participated in this study. Direct observation totalling 63.5 hours was also conducted. The Social Space Model of Health Care Delivery provides an empirical understanding of the space configurations and the interactions between the spaces. The model depicts the interactions between the structures, behaviours and social support, while considering the role of the social space. The model also provides language and terminology for modelling and understanding space configurations and social space patterns in complex health care delivery contexts. This understanding can help us design space configurations and the interconnectedness across spaces to enable tailored socially supportive patient-centred care.

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DEDICATIONS

I dedicate my thesis to my Bubby and Zaidie, Jack and Pearl Taller, who loved me and always believed in me. I know you would be so proud of this accomplishment. I love you!

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CHAPTER 1: INTRODUCTION

1.1 Background

The UN Convention on the Rights of the Child affirms the equal rights and needs of the child without distinction; however, health inequities among children remain problematic despite a global focus on health transformation. Adverse social and material conditions continue to make children vulnerable, resulting in health and developmental problems. Child vulnerability has varied definitions in the literature; however, a common point about it is it results from the interaction between biological (e.g., age) and environmental (e.g., socioeconomic status) factors over time (OECD, 2019).

Social innovations in health-care delivery emerged due to failures in the health care system to meet the needs of the population (van Niekerk et al., 2017). Social Pediatrics, a type of social medicine, is a socially innovative approach to health care delivery designed to mitigate social and structural barriers to care for vulnerable children while considering the child's social context and ecosystem. The goal of social pediatrics is to empower the child and family to be active participants in care delivery through relationship building (Julien, 2004). While social pediatrics is a novel socially driven model of care delivery, there is no evidence on how to implement it. Social pediatrics must be studied empirically to understand how to integrate a transdisciplinary team of children, parents and health care providers across physical, social and collaborative spaces of interaction.

The Centre de Pédiatrie Sociale du Vieux-Hull (CPSVH) is an empirical social pediatrics centre that uses an integrated social medicine approach developed by Dr. Julien

to address the social determinants of health. It is an operationalization of the social pediatrics model of providing culturally sensitive and comprehensive health care to the children and youth of Vieux-Hull, and support to their families, with the engagement of community partners (Centre de Pédiatrie Sociale de Gatineau, 2019; Julien, 2004). Vieux-Hull is a community in Gatineau with many vulnerable children who could benefit from the social pediatrics approach. In Vieux-Hull, 20% of people receive government financial assistance compared to 6% in Gatineau (Ville de Gatineau, 2019). Also, 27% are in lone-parent families compared to 21% in Gatineau's other communities (Ville de Gatineau, 2019). By these measures and others, children in Vieux-Hull are disadvantaged due to their material and social conditions, which impacts their physical, mental and social health.

This study provided an understanding of how children interact with the multi-dimensional space configurations at the CPSVH, and the extent to which the unique design is socially supportive from the child's perspective. The study is unique in combining the theories of Complex Adaptive Systems (CAS) (Kannampallil et al., 2011) and The Production of Space (Lefebvre & Nicholson-Smith, 1991).

CAS is a way of thinking that recognizes the complex, unpredictable, and nonlinear interactions within a system and the behaviours between the system components (Sturmberg, O'Halloran, & Martin, 2012). It provides a systems perspective to visualize health care delivery and understand the interconnectedness between the system components.

The Production of Space, via the spatial triad, elucidates the understanding of how space is lived, and the relationship between being and space (Lefebvre & Nicholson-

Smith, 1991; Merrifield, 2006). More specifically, it provides a means to understand the multi-dimensional space configurations at CPSVH and the experiences, from the child-perspective, in the spaces.

By coupling CAS and the Production of Space, this study provided an understanding of the social pediatrics approach and its evolution over time, informing how to optimize the current model and the implementation of social pediatrics in other settings, to maximize care benefits for vulnerable families.

1.2 Research Questions

This exploratory study used a qualitative approach to examine the extent to which the design of the CPSVH space socially supports vulnerable families, with investigations centered on the child (e.g., perspective and experience). This study also developed a model to clarify concepts and terminology.

The overarching research question being explored in this study was: What are the experiences of children within the space configurations of the CPSVH, and what impact do the space configurations have on the provision of social support? Additional questions are as follows:

1) How can the physical and social space configurations be defined and what do they represent?

2) How do these space configurations at the social pediatrics centre enable the development and sustainment of social interactions and collaboration? b) How do the formal and informal spaces at the centre interplay?

3) How do these space configurations inform broader dynamic health systems transformation, in terms of health system design in a way that better supports vulnerable populations?

1.3 Thesis Contributions

This study provides an understanding of spaces (i.e., physical, social and conceptual) and the extent to which the space configurations impact the provision of social support (which we specified as informational, appraisal, instrumental, and emotional support). Our main contribution is the Social Space Model of Health Care Delivery which provides language and terminology for modelling and understanding space configurations in complex health care delivery contexts, such as social pediatrics. This understanding of space configurations can be applied to other health care contexts to improve health care delivery for vulnerable populations, while also supporting broader health system transformation.

1.4 Thesis Organization

Chapter 2 provides a description of the extant literature and an overview of the methods used to conduct the literature review.

Chapter 3 articulates the methodology used to conduct this exploratory study, including the research design, study participants, data collection and analysis, and framework for model development and evaluation.

Chapter 4 presents the results of this study. More specifically, the Social Space Model of Health Care Delivery that emerged from the results of this study, along with a discussion on the spaces at the CPSVH – the social, conceptual and physical spaces. This

is followed by a micro-level analysis that articulates the components of the model, including behaviours, structures and social support, and their interactions. The social space and its patterning are also discussed with examples from the CPSVH. Complex Adaptive Systems is then mapped to better understand the functioning of the CPSVH, its components, and the interactions between them, to explore the extent to which social pediatrics is socially supportive.

Chapter 5 discusses the results of this study and provides recommendations to inform broader health care system transformation.

Chapter 6 provides a conclusion to this thesis and discusses the strengths and limitations of this study, and areas for future research.

CHAPTER 2: LITERATURE REVIEW

This chapter provides an overview of the methods used to conduct the literature review, and then reviews the extant literature. The literature reviewed includes: 1) Social Innovation, 2) Social Pediatrics, 3) Social Space, 4) Systems Thinking, 5) Complex Adaptive Systems, 6) Social Support. This chapter ends with a discussion on the gaps in the literature.

2.1 Approach for the Literature Review

Informed by a literature search, the literature review is divided into the following sections to articulate the current state of knowledge as it relates to the research questions of this thesis: 1) Social Innovation, 2) Social Pediatrics, 3) Social Space, 4) Systems Thinking, 5) Complex Adaptive Systems, 6) Social Support, 7) Gaps in Literature.

A narrative literature review was conducted using academic databases which included: Scopus, PubMed and Scholars Portal. Keywords used included: design, social pediatrics, children, spaces, health care, complex adaptive systems, social support, and social innovation. A librarian was consulted on the search strategy and methods used to undertake this literature review.

The search was conducted by combining key words using AND and OR in the search screen of each database. For example, “social pediatrics AND design AND spaces”. Language and date limits were placed on the searches to include articles published in French or in English and in the last 10 years. An individual key word search was also conducted for specific concepts or methodologies, using terms such as ‘social support’ and ‘complex adaptive systems’. The articles were initially screened by title and

then the abstracts were reviewed. The reference lists from retrieved articles were also reviewed for additional articles.

2.2 Social Innovation

Globally, social innovation is of growing interest to researchers, policymakers, and organizations. There is a lack of agreement in the literature on the definition (van Niekerk, Manderson & Balabanova, 2021). One definition of social innovation is *"the process of developing and deploying effective solutions to challenging and often systemic social and environmental issues in support of social progress"* (Stanford Graduate School of Business, par. 1). Social innovations are new solutions that are designed and implemented (e.g., process, product, concept) and driven by concern for people or communities, transcending beyond organizational gain (do Adro, & Fernandes, 2020; OECD, n.d.). Much of the literature on social innovation has emerged in the last ten years (Davies & Boelman, 2015) in response to complex social, environmental and demographic problems (e.g., health care, an ageing population, climate change) (Nicholls & Murdock, 2011). Epistemologically, social innovation aligns with pragmatism, which elucidates that ideas are tools that are used by people to form solutions to problems to better cope with the world around them (Creswell, 2013; Menand, 1997).

Social innovation builds on open innovation to tackle social challenges by opening organizational (i.e., health-care system) boundaries to external actors stimulating the innovative process, by supporting information and knowledge exchange (Bogers, Chesbrough & Moedas, 2018; Chesbrough, 2003). Traditionally, knowledge and information was sought from internal actors in organizations (Reinhardt, Bullinger & Gurtner, 2014). Open innovation assumes that knowledge and information must be

sourced externally and equalizes the value of internal and external ideas; however, this depends on the organization's level of 'openness' (Bogers, Chesbrough & Moedas, 2018; Chesbrough, 2003). Chesbrough (2003) argues that open innovation contributes to prior theorizing on innovation by placing external knowledge and information at the forefront, rather than in an ancillary role. Open innovation has been widely embraced not only in business research and development (Di Pietro, Prencipe, & Majchrzak, 2018; Moellers, Visini, & Haldimann, 2020; Trott & Hartmann, 2009), but also in the health care sector (Bullinger et al. 2012; Reinhardt, Bullinger & Gurtner, 2014).

Health care is a social business that is cause-driven, dedicated to alleviating the burden of illness (Yunus, 2007). Social innovation provides a lens for the transformation of health care delivery and often emerged due to failures in the health care system to meet the needs of the population it serves (van Niekerk, Manderson & Balabanova, 2021; van Niekerk et al., 2017) – for example social pediatrics. These failures surface challenges or social injustice that require a solution (Molecke & Pache, 2019; Murray, Caulier-Grice, & Mulgan 2010): for example, access to health care services for the First Nations peoples in remote areas.

Often the best persons to identify a social need and support the development of a solution are those who 'live it' daily – a bottom-up view – emphasizing the importance of community engagement through participatory approaches (e.g., community-based participatory research, ethnography, participatory action research). Integrating external actors (e.g., patients) into health care research, and policy and program development (Bullinger et al. 2012; van Niekerk, Manderson, & Balabanova, 2021) ensures inclusion, and enhances quality of care and delivery. For example, patients and their families, who

play a significant role in care delivery, can help design innovative health care solutions (De Freitas et al., 2017; Tang et al., 2015). Increased involvement of the public in care provision also reflects a social change in medicine (Epstein & Street, 2011).

Various approaches have been identified in literature for the design of social innovations for health care delivery. Qualitative approaches are commonly used, including committees, focus groups, interviews, workshops, and discussions (Iannuzzi et al., 2016; Woitas et al., 2014; Zhang et al., 2017). Community engagement through media, such as web-based tools or online platforms like crowdsourcing, is another option that can facilitate the sharing of ideas and collaboration beyond a strictly face-to-face approach (Murphy & Parsons, 2020; Murray, Caulier-Grice, & Mulgan 2010). With collaboration comes compromise and negotiation, as people of different backgrounds and experiences come together to develop the solution to the social need.

Characteristics of a social innovation for health care delivery are as follows (Davies & Boelman, 2015; van Niekerk et al., 2017):

- It addresses a gap in the health care system.
- It is developed from the 'bottom-up' by engaging communities and the public.
- It is context specific: bound by place and time.
- It includes an innovative program (e.g., health professional education program), product (e.g., tool or application), process (e.g., diagnosis and treatment of diseases), or practice (e.g., integrated health care models).
- It fosters accessible and equitable health care delivery to a population segment.
- It is a more effective solution that illustrates, via measurable outcomes, improvements in the care or health of the population.

These criteria represent an idealized view of social innovation. With every innovation comes the potential for possible harm given the complexity and its unpredictable implications, illustrating the importance of engaging external actors throughout the design and implementation of a social innovation. Nonetheless, the road to a social innovation is uncertain and emergent, where some become a stable program that are evaluated and replicated in other settings (Preskill & Beer, 2012).

Murray, Caulier-Grice & Mulgan (2010) identified six stages of social innovation (see figure 1) that transform ideas into impact and systematic change. However, the stages may not be sequential given the feedback loops. The six stages of innovation include:

1. *Prompts, inspirations and diagnoses*: The factors the contribute to the need for a social innovation are identified in this stage, along with determining the problem and framing the question.
2. *Proposals and ideas*: This stage involves idea generation, where formal methods might be used, to acquire insights and experiences from various sources.
3. *Prototyping and pilots*: In this stage ideas are tested either using more formal or informal mechanisms, which might include randomized control trials, a simple test, or pilots and prototyping. Success indicators are also determined at this stage.
4. *Sustaining:* This stage is where ideas are implemented. As such, financial and human resources are required. Legislation may also be needed if it's being implemented in a public context.
5. *Scaling and diffusion:* In this stage the goal is to grow and spread the innovation through diffusion, such as licensing and franchising or organizational growth.

6. *Systemic change:* This stage is the transformation of a fundamental system that populations depend on, such as health care or education, but there needs to be incentive for change often stimulated by a crisis or disruptive technology.

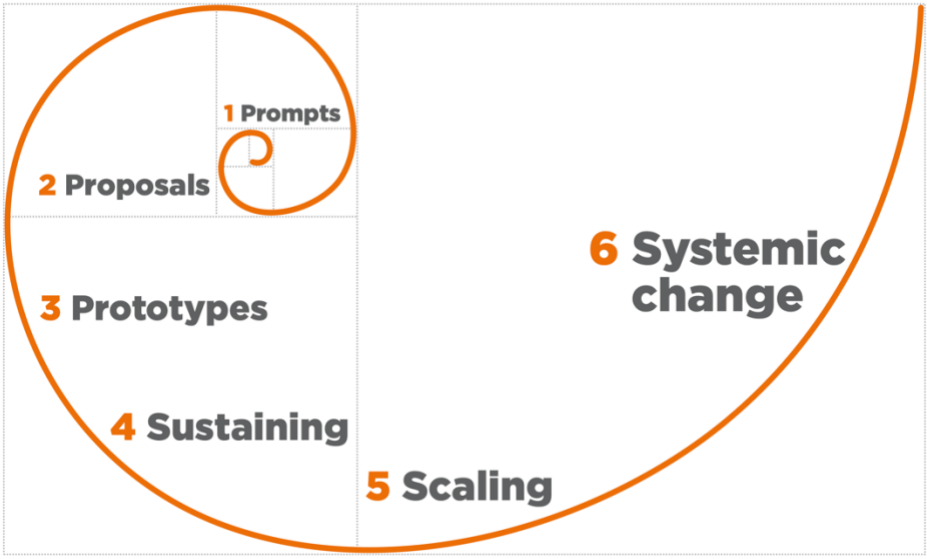

Figure 1: The six stages of social innovation (Murray, Caulier-Grice & Mulgan, 2010)

Evaluations are conducted to measure the success of an innovation, but social innovations can be challenging to evaluate given their unique features and social nature (e.g., social value) (Milley et al., 2018). For example, social innovations leverage actors from various levels and sectors for their development and implementation, which may result in conflicting criteria when measuring and determining their social value, for example (Milley et al., 2018). Also, the process to social innovations and the achievement of their goals are not always clear. As such, traditional approaches to evaluation, such as formative and summative evaluation, may not be well suited to evaluating social innovations (Preskill & Beer, 2012). Given the recent emergence in literature, there is a need to better understand how to evaluate social innovations, such as social pediatrics, that takes into consideration their social nature.

Social pediatrics, a social innovation, adopts a bottom-up approach by including external actors, specifically vulnerable families and community members at-large, in the design and implementation of pediatric centres nationally. This fosters a tailored, accessible, and equitable approach to health care delivery for this population.

2.3 Social Pediatrics

> *It takes a village to raise a child.*
> *- African Proverb*

The UN Convention on the Rights of the Child affirms the equal rights and needs of the child without distinction; however, health inequities among children remain problematic, despite a global focus on health transformation. According to the World Health Organization, health inequity is defined as the "differences in health status or in the distribution of health determinants between different population groups" (World Health Organization, 2019, p.1).

Adverse social and material conditions continue to make children vulnerable. For example, children represent 4.7% of Canadians living in low-income, and most commonly in female lone-parent families (Statistics Canada, 2022). Socioeconomic status, specifically poverty, is an example of a social determinant of child health that is strongly related to health and well-being (Raphael, 2010; Singh, 2022). Vulnerable children are more likely to experience a greater number of negative events (e.g., abuse, neglect), have developmental delays, have poorer educational performance, and are more likely to engage in negative health behaviours (e.g., smoking, alcoholism, drug use) that can impact their lives (Hunt, Slack, & Burger, 2017; Leitch, 2017; Raphael, 2010; Singh, 2022; Wong et al., 2012).

Recently, social pediatrics has been accepted in limited applications as an approach to address the health and social needs of children who are vulnerable due to material and social conditions (Clément, Berube, & Moreau, 2016; Connors et al., 2022; Esposito, Roy, Chabot, & Trocme, 2017; Wong et al., 2012). Dr. Julien's social pediatrics model is a socially innovative and child-centered approach to health care delivery for vulnerable children, designed to mitigate social and structural barriers to care while also considering the child's social context and ecosystem (Julien, 2004). Social pediatrics is founded on the overarching principle that all children have the right to be healthy and excel to their utmost potential, despite social and economic inequalities (Esposito, Roy, Chabot, & Trocme, 2017). It is a multi-disciplinary approach that integrates the legal, medical, educational and psychosocial communities to gain a more holistic understanding of the child – not only meeting the child's health needs, but also addressing the social determinants of health (Clément et al., 2015; Connors et al., 2022; Julien, 2004). It also draws on the UN Convention on the Rights of the Child which is at the heart of their medical practice. As such, social pediatric centres are in disadvantaged communities that are close to the families and other community supports and services, which fosters continuity and mitigates barriers to care (Clément, Berube, & Moreau, 2016).

Social pediatrics has three core premises. The first premise is partnership. The concept of partnership lies between the parents, the child, and the health professionals and is essential to continuity of care and the child's health and development (Julien, 2004). The concept denotes a shared involvement in the decision-making process, whereby the health professionals provide their medical perspective on the health of the

child and the parents provide their experience-based input (Julien, 2004). This concept aligns with Article 18 in the United Nations Conventions on the Rights of the Child, as it recognizes the role of the parent and provides them with the necessary information and support to enable them to make the best decisions for their child (Julien, 2004; United Nations Human Rights, 2019). However, for the partnership to be fully established, it requires a horizontal power structure and a horizontal approach to communication – a shift from the traditional approach to health care delivery (Julien, 2004). This approach encourages the participation of parents and children and fosters their relationship with the health professionals by providing a safe, non-judgmental, flexible, and comfortable space where information is shared, supporting family engagement and perceptions of support (Clément, Berube, & Moreau, 2016; Julien, 2004).

The second premise is networks. Although care is centered on the child, the social pediatrics approach acknowledges the social networks in the child's life, including their connections in the community (Julien, 2004). Social networks are interconnected systems of support (Rogers et al., 2011). A social network approach aligns with a holistic perspective to health care delivery where the engagement of all people in the child's life (e.g., friends, neighbours, teachers) are essential despite their degree of interaction (Julien, 2004; Rogers et al., 2011). This is of particular importance for vulnerable children as their challenges are often multi-faceted due to material and social conditions (Clément, Berube, & Moreau, 2016; Singh, 2022). However, the social pediatrics approach not only engages the child's social network, but also draws on multi-disciplinary and intersectoral collaborations (e.g., legal, medical, educational and psychosocial) in the community to address the social determinants of health (Clément et

al., 2015) – also known as social prescribing (Singh, Owens, & Cribb, 2018). This approach addresses needs in a holistic way and builds individual family and community capacity acting as a protective factor to mitigate the negative impacts of material and social disadvantage (Julien, 2004; Singh, Owens & Cribb, 2018; Wong et al., 2012).

The third premise is empowerment. The goal of the social pediatrics approach is to empower the child and family to be active participants in their health and well-being (Julien, 2004). Empowerment is defined as the process by which a person gains power over his/her life (Laverack, 2006). Empowerment is fostered in social pediatrics through partnerships and networks as discussed above. This provides families with knowledge and strategies to manage the child's health condition, while also connecting them to community resources to address the associated social determinants of health (Julien, 2004; Wong et al., 2012). By doing so, families are provided with the capacity to take responsibility for their health and well-being, while being supported by a multi-disciplinary team of professionals (Julien, 2004).

Not only is social pediatrics a socially innovative approach to health care delivery, but it is a descriptive theory that reinforces the importance of partnerships, networks and empowerment to effectively support vulnerable families. However, there is a need to better understand the social pediatrics approach, its implementation and functioning (Doucet et al., 2022; Kittler, 2006) and its evolution over time. Also, few studies have explored the evaluation of social innovations, like social pediatrics, that are centered on the child and their specific experiences, in deference to the United Nations Convention on the Rights of the Child. Research has also not yet examined social pediatrics using a social design lens and systems approach. This study provides an

understanding of the social pediatrics approach by examining the extent to which the design of the space at a social pediatrics centre (CPSVH) socially supports vulnerable families, with investigations centered on the child (e.g., perspective and experience), using the theories of Complex Adaptive Systems and the Production of Space.

2.4 Social Space

Space is a broad concept. Often defined by its physicality, space is socially transformed and experienced in a specific context impacting social processes and interactions (Saidi, de Villiers, & Douglas, 2017). In *The Production of Space*, Henri Lefebvre proposed that space is social and is socially produced. He reimagined space not as dead, but as alive, organic, free flowing, and interacting with other spaces (Merrifield, 2006; Lefebvre & Nicholson-Smith, 1991). Building on the Marxist notion of "production", Lefebvre strived to "expose" and "decode" space to gain a deeper understanding of how it was produced – physically and mentally – within its material and political context (Merrifield, 2006, p.104). As such, to understand how space is socially produced, it is essential to understand its context: e.g., the people, the processes, and the interactions within it (Benade, 2017).

In *The Production of Space*, Lefebvre developed a "spatial triad" to understand how space is lived and elucidates the relationship between being and space (Merrifield, 2006; Lefebvre & Nicholson-Smith, 1991). This triad is a major pillar in his work on space and has been applied empirically to examine space in the domains of education (Berti, Simpson, & Clegg, 2018; Tolonen, 2018; Zhang, 2022); urbanism (Aboualy, Mansour & El-Fiki, 2022; Mady, 2022, Nkooe, 2018; Skår, Nordh, & Swensen, 2018); health care (Meer & Müller, 2017; Jeyasingham, 2014); geographical land use (Dekel,

Meir, & Alfasi, 2019); architecture (Bahauddin, Prihatmanti & Putri, 2022; Bern, 2022); and tourism (Buzinde & Manuel-Navarrete, 2014; Lapointe, Renaud & Blanchard, 2021). The "spatial triad" includes three components: representations of space, spaces of representation, and spatial practices. These components are fluid and alive, interacting and blurring into one another: they provide flexibility and opportunity for interpretation (Lefebvre & Nicholson-Smith, 1991).

Representations of space, or *conceived space*, are the conceptualized spaces that are constructed and informed by professionals such as engineers and architects. This space is planned with respect to object placement, the distribution of people, and the existence of symbols and jargon (Merrifield, 2006). According to Lefebvre, ideology, power, and knowledge exist within the representations of space, impacting its production, and the formation and existence of relations within it (Lefebvre & Nicholson-Smith, 1991).

Spaces of representation, or *lived space*, are alive and represent human daily experience (Merrifield, 2006). These spaces arise from the symbolic meaning we attribute to them (Saidi, de Villiers & Douglas, 2017): such as the coffee shop on the corner, or the flower shop down the street. According to Lefebvre, lived spaces "*speak […]. It embraces the loci of passion, of action, and of lived situations. […] It is essentially qualitative, fluid, and dynamic*" (Lefebvre & Nicholson-Smith, 1991, p.42).

Spatial practices, or *perceived space*, are "*society's space*" (Lefebvre & Nicholson-Smith, 1991, p.38). Spatial practices represent patterned movements and interactions within a given space that is structured by 'practices' (e.g., routes, monuments, walls), impacting our experiences and everyday life (Merrifield, 2006; Saidi,

de Villiers, & Douglas, 2017). Perceived space is mediated by the influence of conceived space on lived space experiences (Lefebvre & Nicholson-Smith, 1991; Merrifield, 2006). For example, the open concept layout of a living area can support interaction and communication, facilitating conversation and sharing.

In this study, space provides a means to understand the multi-dimensional space configurations at the CPSVH and its impact on social support. The understanding of spaces, including social spaces, can inform social pediatrics implementation and evaluation. As such, Lefebvre's spatial triad lends itself to our proposed study of social pediatrics, because the conceived spaces are designed in collaboration with the children, with the intention of positively supporting them through lived and perceived spaces.

2.5 Systems Thinking

> *"When you change the way you look at things, the things you look at change."*
>
> - *Max Planck*

Systems thinking emerged in the 20th century as a field of inquiry and practice, stemming from various disciplines including biology, anthropology, physics, psychology, mathematics, management and computer science (Peters, 2014). A system is defined as *"an organised assembly of components that share a special relationship with each other"* (Sturmberg, 2004, p.1033). The concept of systems thinking surfaced as a meta-discipline and meta-language given its roots and ability to be applied to many disciplines (Checkland, 1999), influencing research in areas such as, health care (Clarkson et al., 2018; Richardson et al., 2021), climate change (Berry et al., 2018), management (Grewatsch, Kennedy & Bansal, 2021) and education (Mahaffy et al., 2018). Despite a lack of consensus in literature on the definition (Arnold & Wade, 2015), central to the

concept, systems thinking aims to visualize how components are interconnected (including their linkages, relationships, and behaviours) making up a whole entity (Peters, 2014) that can adapt to a changing environment (Checkland, 1999), and one where no one component acts independently (Sturmberg, 2004). The greater the number of components and interconnectedness, the greater the degree of complexity within the system (Kannampallil et al., 2011). Boundaries segregate the system from the external environment; however, a feedback loop to and from the system to the external environment supports the provision of inputs and outputs (Sturmberg, 2004).

Drawing on health care as an example, systems thinking provides a means to understand the health care system, in order address its challenges while supporting system improvements (Khan et al., 2018; Komashie, Hinrichs-Krapels, & Clarkson, 2021). The health care system is a multi-layered system (micro, meso, macro) made up of interconnected components (e.g., people, processes, technology) that foster interdependence where an action or change can have broader implications to the system-as-a-whole (Khan et al., 2018). A systems approach integrates multiple perspectives such as people, design, risk, structures and processes, making it applicable to the health care systems at all levels (Komashie, Hinrichs-Krapels, & Clarkson, 2021). Systems thinking has been applied to health care efficiency improvement (Monreal, Valerdi & Latt, 2014), interprofessional continuing education (Will & Essary, 2020), system transformation (Khan et al., 2018), chronic disease management (Kang et al., 2017), and health promotion (Mohammadi et al., 2021).

Although systems thinking enables the understanding and visualization of a system, like the health care system, capturing the degree of complexity of that system can

be challenging. As such, health care system frameworks can be used to visualize and describe characteristics, such as the organization, structures, processes, and functions of health systems, and illustrate relationships geared to improving performance. As is evident by the many health system frameworks in existence, one framework cannot fully capture a health system and its complexity (Sacks et al., 2019).

The World Health Organization (WHO) Health Systems Framework (see figure 2) is an example of a health systems framework. It depicts the six system building blocks of a health system – service delivery, health workforce, information, medical products, vaccines and technologies, financing, and leadership/governance - and illustrates its relationship to overall goals and outcomes (e.g., improved health) (De Savigny & Adam, 2009). This framework serves to understand the components of a health system and identifies the impact interventions can have on health system outcomes, while also serving as a common language to describe a health system (De Savigny & Adam, 2009; Sacks et al., 2019). However, this framework has been criticized for being static (Sacks et al., 2019).

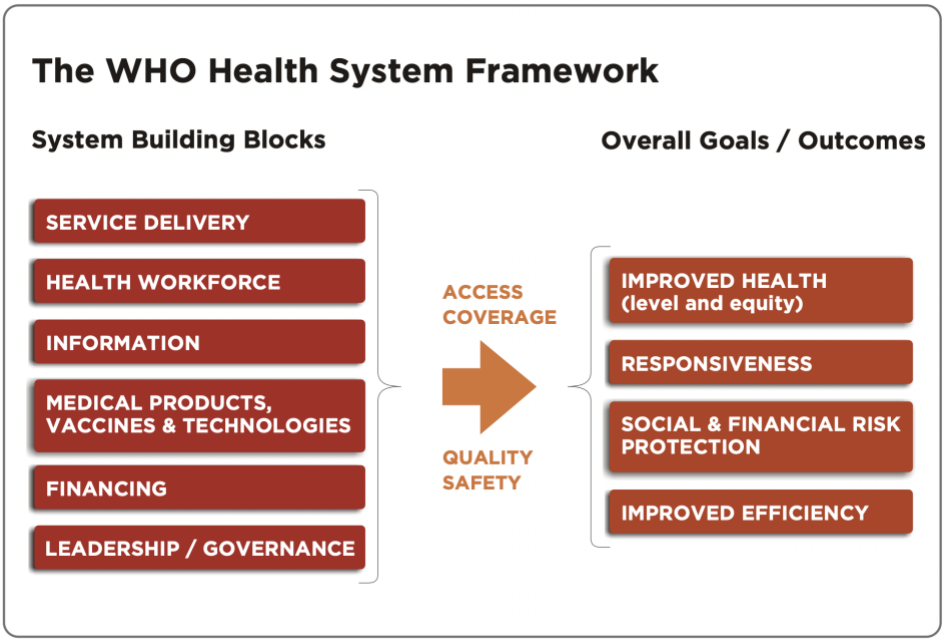

Figure 2: The WHO Health Systems Framework (also known as WHO Building Blocks) (De Savigny & Adam, 2009)

As such, the WHO clarified that the building blocks puts boundaries around a health system for measurement purposes and the identification of indicators. As per the WHO, the building blocks can be seen as sub-systems with interactions and relationships within and between them, aligning with a systems approach. People were also included at the centre of the building blocks given their role as key actors responsible for driving the system (see figure 3) (De Savigny & Adam, 2009).

Figure 3: The dynamic architecture and interconnectedness for the health system building blocks (De Savigny & Adam, 2009)

Sacks et al. (2019) advocates to expand the WHO Health Systems Framework by illustrating that to effectively implement community health, there is a need to go beyond the building blocks as descriptive labels. It is important to consider the outcomes related

to healthy communities and articulate the need for resources and investment in communities, as community health at a high-level relies on the delivery of quality services, the production of health in households, and the social determinants of health. Investment in community health can have a large impact on vulnerable populations such as women, children and families. However, this requires collaboration between sectors, systems, and actors at all levels, and illustrates the importance of a systems approach. Social pediatrics is a community-based approach to primary health care for children and their families that engages the child's social network and draws on multi-disciplinary and intersectoral collaborations (e.g., legal, medical, educational and psychosocial) in the community to address the social determinants of health (Clément et al., 2015).

A limitation of a systems approach is the subjectivity involved in the visualization as it relates to what components are included and the degree of independence between them (Sturmberg, 2004). This illustrates the importance of using a rigorous approach when applying a systems approach (Komashie, Hinrichs-Krapels, & Clarkson, 2021). Nonetheless, learning about and understanding the *system-as-a-whole* is important in order to improve a system, such as the health care system, within its respective context (Sturmberg, 2021).

2.6 Complex Adaptive Systems

Complex Adaptive Systems (CAS) emerged in the late 1960's when the term was coined by sociologist Walter Buckley in his work on society (Buckley, 2017). CAS has since become a movement influencing research in areas such as communication, organizational science (Poutanen, Siira, & Aula, 2016), urban planning (Shi et al., 2021), health care (Best et al., 2016; Forde et al., 2022; Graham, Steel & Wardle, 2021; Nic

Giolla Easpaig et al., 2022; Willis et al., 2014), biology (Holland, 2006; Winkler, 2019) and ecology (Thoms & Sheldon, 2019). Although there is a lack of consensus in the literature on the definition of CAS, we define it as *"the interrelatedness of components of a system"* (Kannampallil et al., 2011, p. 944). This definition highlights the interactions between the components in a system and its environment, whereby the number of components and associated interactions determine the degree of complexity (Graham, Steel & Wardle, 2021; Kannampallil et al., 2011; Shi et al., 2021).

CAS is an example of systems thinking that recognizes the complex, unpredictable, and nonlinear interactions within a system at the system levels (i.e., macro, meso, micro). These interactions form patterns and provide information that is fed back into the system, informing future interactions (Sturmberg, O'Halloran, & Martin, 2012). Given the connectivity between the different system components and levels in the system, change in one area can result in unanticipated changes to other areas (Sturmberg, O'Halloran, & Martin, 2012). As such, CAS views systems as organic living entities that shift, grow, and adjust in response to internal and external environmental changes (Edgren & Barnard, 2012). Characteristics of CAS include feedback, emergent behaviours, and non-linear processes (Benham-Hutchins & Clancy, 2010; Easpaig et al., 2022; Edgren & Barnard, 2012; Ellis & Herbert, 2011). CAS may also illustrate properties such as co-evolution, requisite variety, connectivity, simple rules, self-organization, and non-discrete boundaries (see table 1) (Burns, 2001).

Health care systems have been recognized as complex adaptive systems in the literature (e.g., Crossing the Quality Chasm – a seminal report) (Institute of Medicine, 2001). One such example is the public health care system in Canada. It is a system that

was designed to provide inpatient acute care to patients. However, Canadians' health care needs have shifted from acute diseases to complex chronic conditions (Canadian Medical Association, 2016). Many people require care from various health professionals across multiple health care settings over time, while often transitioning within and between them resulting in complexity. As the system becomes more complex, due to the increased interactions, some processes evolve while others become extinct or remain the same (Coiera, 2011). CAS has been adopted by researchers, policy makers, and leaders in the health care and management sectors as it provides a lens to understand whole-system engagement that occurs at many levels: the micro level (e.g., patients, families, physicians), the meso level (e.g., organizations), and the macro level (e.g., policy) (Best et al., 2012; Best et al., 2016; Sturmberg, 2019; Willis et al., 2014). It also provides a means to understand the dynamic and non-linear nature of a health system and its evolution.

CAS has been used to study various aspects of health systems, resulting in an understanding of a system that might not have otherwise been reached (Pype et al., 2018). It has been applied in health information technology research (Abbott, Foster, de Fatima Marin & Dykes, 2014; Kuziemsky & Ghazzawi, 2019; Nan, 2011; Palmieri, Peterson & Noeding, 2015); has been combined with theories such as continuity of care and pragmatism in the health care context (Ghazzawi 2012; Long, McDermott & Meadows, 2018); and has been applied to mental health and chronic care services (Ellis, Churruca & Braithwaite, 2017; Gilman, 2021). CAS has also been used to understand health system reform and health transformation (Best et al., 2016; Best et al., 2012; Holden, Boustani & Azar, 2021; Sturmberg, 2019; Sturmberg, O'Halloran & Martin, 2012; Willis et al., 2014)

and has been leveraged to understand the functioning of health care teams (Pype et al., 2018). CAS has also made contributions to the management of health system literature by understanding the degree of complexity and the considerations required to improve system performance (Braithwaite, 2018) enabling organizational decision-making. CAS in combination with applications, such as machine-learning techniques, can be used to enhance decision-making in response to system complexity, supporting improvements in care delivery and cost effectiveness (Shahid, Rappon & Berta, 2019).

Although CAS gains its strength by complementing other approaches, it has been criticized for lacking a rigorous approach (Komashie, Hinrichs-Krapels, & Clarkson, 2021). Prior research that applies CAS to health care systems is often descriptive in nature providing a limited understanding of the systems' complexity and how to study them (Kannampallil et al., 2011).

CAS will be used in this study to conceptualize social innovation and spaces to gain an understanding of how they work and how best to configure them within the health care context, specifically social pediatrics.

Table 1. Tenets of CAS

Tenets of CAS	**Definition**
Non-linear processes	Non-linear processes are characterized by unpredictability and result from changes to the system and/or external influences.
Emergent behaviours	Unexpected behaviours that result from a complex system
Feedback loops	Information that is fed-back into the system.
Requisite Variety	Unique characteristics of the system and its components.

Co-evolution	The ability of the system and its components to evolve and adapt.
Connectivity	The relationship between system components and/or actors in the system
Simple rules & non-discrete boundaries	Rules and boundaries that govern and direct the system and its components.
Self-organization	The system's ability to adapt and organize.

Sources: Lansing, J. S. (2003). Complex adaptive systems. Annual Reviews of Anthropology, 32, 183-204.
Kannampallil, T. G., Schauer, G. F., Cohen, T., & Patel, V. L. (2011). Considering complexity in health care systems. *Journal of biomedical informatics*, *44*(6), 943-947.

2.7 Social Support

Social support, defined as "the functional content of relationships" (Bourgeault et al., 2010, p.186), has been widely examined in the context of health care. Themes in the literature include the importance of social support for patients with chronic conditions (Fox et al., 2020; Ginter & Braun, 2019; Guan, Qan'ir & Song, 2021; Henry et al., 2019; Kim, Johnston & Sawatzky, 2019; Roberts et al., 2021); the provision of social support by health professionals to families (Fearnley & Boland, 2017; Franklin, Arber, Reed & Ream, 2019); social support from social networks pertaining to health service provision (Mengesha et al., 2021); family support for breast feeding adolescent mothers (Priscilla, Afiyanti & Juliastuti, 2021); and information technology as a source of social support – specifically informational and/or emotional (Bernstein et al., 2012; Lal, Nguyen & Theriault, 2018; Vosbergen et al., 2015). Four types of support categorize the concept: Informational, appraisal, emotional and instrumental.

Informational support is defined as the provision of information during a time of stress or need to facilitate problem-solving (Langford, Bowsher, Maloney, & Lillis, 1997). It might include advice, suggestions, online or print information, or other forms of

information to help support the decision-making process. For example, families rely on health professionals, such as social workers, as a source of information to support their child's health and well-being (Julien, 2004).

Appraisal Support is similar to informational support, but it involves the communication of information for self-evaluation (Langford, Bowsher, Maloney, Lillis, 1997). Appraisal support has also been referred to as affirmational support, as it includes the affirmation of acts made by others (Kahn & Antonucci, 1980). For example, a parent may provide their child with feedback on their behaviour in a social setting.

Emotional support is the most significant form of social support, and is characterized by the provision of caring, love, trust and empathy (Langford, Bowsher, Maloney, Lillis, 1997). Emotional support is also viewed as affective assistance as it results in the exchange of feelings or admiration. For example, a child may seek comfort and affection from a parent, family member or person in their social network (Julien, 2004).

Instrumental support is defined as the provision of tangible assistance, goods or services (Langford, Bowsher, Maloney, Lillis, 1997). Tangible assistance is concrete and can be distinguished from emotional support despite that its provision may be perceived as feelings of love or caring (Langford, Bowsher, Maloney, Lillis, 1997). For example, health professionals at social pediatric centres provide families with tangible material support such as food, clothes, toys and books.

The above characterization of social support will aid in our examination of the multi-dimensional space configurations in social pediatrics.

2.8 Gaps in Literature:

There is a need to better understand social pediatrics health care delivery for vulnerable children, to inform health system design and current policy to mitigate social and structural barriers to care while considering the child's social context and ecosystem.

In examining, in a child-centered fashion, the extent to which the design of the CPSVH space socially supports vulnerable families, the current research study and research questions, guided by the literature review, address several gaps in the literature (see Appendix A for themes). Few studies have examined the design and evaluation of socially innovative methods of health care design: in particular, its conceptualization and evolution over time. There are limited studies on the social pediatrics approach and how to evaluate social innovations centered on the child and their specific experiences, in deference to the United Nations Convention on the Rights of the Child. Also, no studies have examined social pediatrics using a social design lens and systems approach - specifically combining the theories of the Production of Space and Complex Adaptive Systems. There is also limited empirical research on socially innovative spaces that explore all aspects of a health care system to support meaningful changes to it. Our study is unique: previous research has not examined social pediatrics space configurations from the child's perspective, and its impact on social support (which we specified as informational, appraisal, instrumental, and emotional support). Theoretically, few studies have applied all the tenets of CAS which would enable completeness. CAS has also not been combined with a social space approach, like the theory on the Production of Space, nor has it been examined in the social pediatrics context to understand the system components and their interactions, and the space configurations over time.

CHAPTER 3: METHODOLOGY

Informed by the literature review and gaps, this exploratory study set out to answer the overarching question using a qualitative approach: What are the experiences of children within the space configurations of the CPSVH, and what impact do the space configurations have on the provision of social support? Additional questions included:

1) How can the physical and social space configurations be defined and what do they represent?

2) How do these space configurations at the social pediatrics centre enable the development and sustainment of social interactions and collaboration? b) How do the formal and informal spaces at the centre interplay?

3) How do these space configurations inform broader dynamic health systems transformation, in terms of health system design in a way that better supports vulnerable populations?

These qualitative research questions are concerned with how the children, parents and health professionals understand and experience the space configurations at the CPSVH and the extent to which these spaces are socially supportive.

Epistemologically, this study aligns with social constructivism. Focus groups, interviews, and observation were used as the method of data collection and analysed using content analysis. The theories of Lefebvre's Production of Space and Complex Adaptive Systems were combined to inform our understanding of the space configurations over time and their attributed meaning, to inform broader health system transformation for vulnerable populations.

This chapter will discuss the methodological aspects of the study, including the research design, the epistemology, methods of data collection and analysis, and the evaluation framework.

3.1 Research Design

A qualitative approach was selected as it provides a means to understand multiple realities through the eyes of the population being studied, as they experience it (Creswell, 2013; Gibbs, 2002). In this study, detailed descriptions of the experiences enhanced our understanding of their reality and provided the ability to analyze those experiences and articulate their perspectives (Creswell, 2013; Gibbs, 2002).

It is important to note that in contrast to a quantitative approach, qualitative research:

- Can have research questions that change over the course of the study.
- Is a reflexive process where the researcher adapts their approach to what the study participants say or do.
- Requires that the research evaluate the importance and relevance of the questions being asked to the participants.
- Can have a shift in focus of inquiry as the researcher gains information from the participants.

3.2 Epistemology

Social constructivism is a worldview where people try to understand the world around them. As such, meaning is developed from their lived experiences and interactions with others, which is influenced by the social and historical context

(Creswell, 2013). Epistemologically, this research study aligns with social constructivism, as it examines the lived experiences of children and their parents interacting with the multi-dimensional spaces at the social pediatrics centre. Social facets such as educational attainment, social supports (e.g., family and friends), socioeconomic status, family history, and culture impact the lens in which the children and parents negotiate their experiences and interactions within the spaces at the social pediatrics centre as well as in the community setting in which they live.

3.4 Research Site

There are over 40 community social pediatric centres in Quebec serving more than 10,000 children and their families that are affiliated with the Foundation Dr. Julien, including the CPSVH (Foundation Dr Julien, n.d.). Other social pediatric centres exist in Canada, such as the Vanier Social Pediatric Hub in Ottawa, Ontario, and the New Brunswick Social Pediatrics in St. John, New Brunswick, that are inspired by the Dr. Julien framework (New Brunswick Social Pediatrics, 2023; Vanier Social Pediatric Hub, 2023).

Data collection took place at the CPSVH: a social pediatrics centre in Vieux Hull, Quebec, established February 2015 that is guided by Dr. Julien's framework, and supports nearly 1,000 children annually (Julien, 2004; Centre de pédiatrie sociale de Gatineau, 2016). The CPSVH provides vulnerable children with tailored medical care and social programming to mitigate factors, such as stress, that impact their growth and development. The centre also provides families with support (e.g., informational,

emotional, appraisal and instrumental) as it acknowledges the impact of social context on child health and well-being.

Historically, in the Outaouais, the first social pediatrics centre emerged from a partnership between Dr. Julien, the Gatineau CSSS and the Youth Centres to provide integrated social medicine to vulnerable children, and their families, in the community.

Philosophically, social pediatrics considers the sharing of power by health professionals with families to be of pertinence, in support of the child's health and well-being.

The mission of the CPSVH is "to welcome vulnerable, suffering, sick, victims, excluded or abandoned children from the community, with the aim of helping them to recover health and hope and to develop to their full potential, while in compliance with the UN Convention on the Rights of the Child" (Centre de pédiatrie sociale de Gatineau, 2016).

The overarching goal is "to promote the overall development of children from 0 to 17 years old" (Centre de pédiatrie sociale de Gatineau, 2016) by:

- Leveraging resources to improve the child's health and well-being
- Gaining the commitment of the parents and/or guardians to use the resources provided to improve their living conditions and so they take ownership and power over their life;
- Influencing the practices of organizations serving children;
- Combatting the toxic impacts of chronic stress in children living in poverty;
- Encouraging children to continue dreaming.

3.5 Research Ethics

The principal investigator applied to the University of Ottawa Office of Research Ethics and Integrity for approval to conduct study. Ethical approval was obtained on June 20, 2019.

3.6 Study Participants

Upon receiving ethics approval, convenience sampling was used as the method to recruit children for this study. Although the study is centered on the child, parents and health professionals (at the CPSVH) were also recruited using convenience sampling to supplement the data, as they make-up part of the child's ecosystem (see Appendix B, C & D for recruitment scripts). To be eligible for this study, the child must speak English or French, be between the ages of 7-13, and must be receiving services from the CPSVH for no more than 5 years. We were originally recruiting children who were at the CPSVH for no more than 6 months; however, we were advised by the clinical director to expand the time frame as the children would be more familiar with the CPSVH. If more than one child within the same family were being followed by the CPSVH and both would like to participate, the child with the age that fits best with the other children in the study was selected to participate.

For the health professionals to be eligible to participate, they must be an employee of the CPSVH for at least 1 year and speak English or French. For the parent to be eligible to participate, they must identify as the child's parent or guardian and speak English or French.

Parents and children were recruited to participate in the study by the staff at the CPSVH (see Appendix C for recruitment script), given the vulnerability of the

population. If the participants agreed to participate in the study, the parents were provided with a consent form and the children were provided with a pediatric assent form to ensure the UN Convention of the Rights of the Child was respected. The parents were also required to provide the child with permission to participate (see Appendix F). The health professionals who agreed to participate in this study were also provided with a consent form. The consent and assent forms (see Appendix G, H & I) were approved by the University of Ottawa Research Ethics Board and signed prior to the focus groups or interviews.

The focus groups with the children and interviews with the parents were scheduled by the principal investigator in collaboration with the CPSVH, at a time of convenience. The principal investigator had trouble scheduling the times for the interviews with the parents, as they would not answer their phone if they were not familiar with the phone number. As such, we were required to phone the parents from the CPSVH – a familiar phone number they trust. Scheduling the interviews was also challenging given their day-to-day challenges meeting their basic needs coupled with possible mental health issues. In a few cases, parents did not answer their phones for the scheduled interview and would not phone back or respond when contacted for follow-up.

3.7 Data Collection

To understand how children interact with the multi-dimensional space configurations at the CPSVH and the extent to which the unique design is socially supportive from the child's perspective, focus groups were conducted with the children at the CPSVH. Interviews with the parents and clinical director and focus group with the health professional were also conducted to supplement the data.

3.7.1 Focus Groups

Focus groups, a form of group interview, were originally developed to investigate the effects of film and television in communication studies (Kitzinger, 1995). They generate data by providing participants with the opportunity to ask questions, exchange information and comment on each other's experiences (Cooper & Yarbrough, 2010; Kitzinger, 1995). This tool is widely used in health research as a data collection method (Bateman et al., 2019; Christiansen, Gadhoke, Pardilla & Gittelsohn, 2019; Lee et al., 2019; Rochelle, 2019; Schumann, Maaz & Peters, 2019; Wenke et al., 2019).

For the focus groups, the children were picked up after school by the social worker/ educator and brought to the CPSVH to participate in the study. The focus groups were children-only groups and were completed prior to the COVID-19 pandemic. The children were assigned to the focus groups based on age and language profile, grouping children of similar age and language ability together.

The focus groups were approximately 1 hour in length (see Appendix K for focus group questions). The focus groups were conducted in person, at the CPSVH prior to the COVID-19 pandemic.

All focus groups were audio-recorded and conducted in a private space at the CPSVH.

3.7.1.1 Photographs.

The use of photographs as a qualitative research tool has been employed by several scholars (Cooper & Yarbrough, 2010; D'Amico et al., 2016; Drew, Duncan & Sawyer, 2010; Padgett et al., 2013). Photographs have become a popular tool in research with vulnerable children, specifically, as it fosters a sense of empowerment and mitigates

the distance between the child and the researcher (D'Amico et al., 2016; Lipponen, Rajala, Hilppo & Paananen, 2016). Photographs also help mediate participation by promoting inward reflection, stimulating memory, and facilitating communication and interaction (Lipponen, Rajala, Hilppo & Paananen, 2016). The benefits associated with photographs in qualitative data collection are also evident among other vulnerable study populations, such as women of colour with HIV, family caregivers, and the homeless (Angelo & Egan, 2015; Davtyan et al., 2016; Seitz & Strack, 2016). In this study, the photographs of the CPSVH and surrounding community were used to stimulate the child's memory while acting as a support tool, during the focus group, as they describe their experiences at the CPSVH and the extent to which the design of the CPSVH space is socially supportive. Pictures were not used during the interviews with the parents given the inability to present pictures by phone.

3.7.2 Interviews

Qualitative interviewing is a method of data collection that attempts to understand lived experiences, behaviours and processes (Rowley, 2012). A research interview is a conversation that has a structure and a purpose and facilitates the construction of knowledge from the interaction between two people- the interviewer and the interviewee (Kvale & Brinkmann, 2009). The rapport developed between the interviewer and interviewee is important as it facilitates the conversation and exchange of information.

Interviews are widely used in health research as a data collection method (Clarke et al., 2018; Faithfull, Brophy, Pennell & Simmons, 2019; Filler et al., 2020; Gardner, Green, Gardner & Geddes, 2019; Prior et al., 2020; Sherriff et al., 2019).

Types of interviews used in health research include face-to-face, phone, or online interviews. Face-to-face interviews are more traditional forms of interviewing, whereas phone and online interviews are forms of remote interviewing that allow the interviewer to collect data or information from participants at a distance (Bolderston, 2012). An advantage of face-to-face interviews is the participant's ability to express their viewpoints or experiences in private; however, the interviewer requires interpersonal skills to develop rapport with the participant to support the exchange of information (Bolderston, 2012). Telephone interviews, unlike face-to-face interviews, are a cost-effective and convenient way to conduct an interview, especially with participants who are geographically dispersed. They also reduce the impact of interviewer characteristics, such as age, gender, or race, on the participant's response. However, despite the advantages, a challenge is a conversation that is less free-flowing or smooth given the lack of non-verbal cues. Similar to telephone interviews, online interviews are also convenient and cost-effective, but sound and quality may be impacted by the technology (e.g., tablet, laptop) or bandwidth, and not all populations have access to these technologies or know how to use them (Bolderston, 2012).

Interviews are also classified by level of structure: structured, unstructured, and semi-structured. Structured interviews consist of pre-determined questions, whereas unstructured interviews are an open conversation about a particular topic (Rowley, 2012). Semi-structured interviews, commonly used in health research, consist of a set of questions but offer flexibility to probe for more information or clarification as required. This allows for the exploration of lived experiences and perspectives on topics (Barribal & While, 1994).

Given the timing of the pandemic, the interviews with the parents were conducted by phone, at a time of convenience (see Section 3.6 for discussion on challenges). The interviews were approximately 1 hour in length (see Appendix K for interview questions). At the beginning of the interview, each parent was asked a series of demographic questions (see Appendix J). Also, an interview with the clinical director of the CPSVH was conducted. We also met with the clinical director twice for an informal discussion during the COVID-19 pandemic to understand its impacts on the social pediatrics clinic and delivery of care. Each interview was approximately 1 hour in length.

All the interviews in this study were audio-recorded.

3.7.3 Observations

Observation is the "act of noting a phenomenon in the field setting" (Creswell, 2013, p.166). It is an important tool in qualitative research that enables the researcher to observe interactions, conversations, activities, and behaviours in a specific setting (Creswell, 2013).

In this study, undisguised naturalistic observation was conducted at the CPSVH on different days of the workweek and at various times depending on CPSVH programming and totaling to 63.5 hours. In undisguised naturalistic observation, the researcher tries to understand behaviours, social interactions and relationships without engaging with the participant (Ciesielska, Boström & Öhlander, 2018). A limitation of this approach is reactivity which is when participants change their behaviours knowing that they are being studied or observed (Jhangiani et al., 2019). Prior to conducting observation, time was spent at the centre interacting and engaging with the children and families (e.g., participating in activities) to enhance our understanding of social

pediatrics. During this time, the principal investigator developed rapport with the health professionals, children and families (Creswell, 2013). During observation, the principal investigator was an overt non-participant observer whose presence was known by the participants, but who did not partake in the activities. The principal investigator was introduced to the parents and children, if they did not already know who she was, allowing for adaptation and limiting the potential for reactivity. Examples of contexts observed included: a medical appointment with the child and mother, an art activity with a group of children led by an educator, swimming in the community pool, a follow-up appointment with the social worker, and a holiday gathering at the CPSVH with all the families. The principal investigator also moved around the spaces at the CPSVH, as a neutral observer, to observe the children, but also the parents and health professionals. We conducted time sampling by observing and recording the types of interactions, the activities, and behaviours that occurred in the spaces at the CPSVH at various times using an observation template (see Appendix L). This template was developed by drawing on the categories presented in the table of literature in Chapter 4 (see table 2) to gain a better understanding of the CPSVH and provide context to the data. For example, the child's interaction with a health professional (e.g., social worker) at the kitchen counter (an informal space). We also examined the implicit and explicit rules of engagement that govern behaviours and inform the interactions. This enhanced our understanding of the multi-dimensional space configurations and their impact on social support, as well as the interplay between informal and formal spaces at the CPSVH. This also complemented our focus group and interview data by providing context and examples.

3.8 Data Analysis

The focus group recordings were transcribed verbatim. The focus group transcripts, observation notes, reflection data, and photographs were coded using NVivo 12, a qualitative data management software. The multiple data sources enabled data triangulation providing validity to the findings in this study (Creswell, 2013). Direct coding was conducted by drawing on literature and the emergent categories (see table 2 in Chapter 4). This resulted in an initial set of codes. Additional codes (or nodes) were developed inductively by the principal investigator and thesis supervisor by reading through each transcript and then line by line identifying more specific codes. The coding scheme was reorganized to include the additional codes (see Appendix N for coding scheme).

Photographs were also linked to the coding scheme. Photographs were coded in-part or in-whole based on the interview, focus group, and observation data. Descriptions were provided for each photograph when coded to a node. Once the narrative and photograph data were coded (see Appendix O for sample coding), thematic analysis was conducted using directed content analysis to identify emergent themes related to social support (Hsieh & Shannon, 2005). The emergent themes were used to understand the multi-dimensional space configurations and the extent to which social support is provided. Also, the method of analyzing photographs in conjunction with transcript data has been used in the literature (Fleury, Keller & Parez, 2009; Lorenz, 2011; Padgett et al., 2013). Frequencies and supporting quotes were provided for each theme (Hsieh & Shannon, 2005). The Complex Adaptive Systems and Production of Space lens were combined to inform our understanding of the space configurations and their attributed

meaning. The theories of Production of Space and Complex Adaptive Systems informed the development of the Social Space Model of Health Care Delivery, and the components were mapped on to the refined themes.

Ongoing discussions amongst the research team (principal investigator and thesis supervisor), which included meetings at standard intervals (i.e., bi-monthly), were held throughout the data analysis (e.g., to identify and confirm emergent themes), to enhance the rigour of the analysis process. Insight and confirmation from the clinical director at the CPSVH and the Thesis Advisory Committee members was also sought to further enhance rigour. This included follow-ups with the clinical director and consultation with the Thesis Advisory Committee members. For example, feedback was obtained from a Thesis Advisory Committee member during the development of the discussion section and recommendations for broader health system transformation. Member checking was not conducted due to feasibility given the vulnerability of these families and the fact that it was the beginning of the COVID-19 pandemic, where these families were busy re-organizing their lives with their children out of school.

3.9 Framework for Model Development and Evaluation

The Framework for Model Development and Evaluation (see figure 4) describes the process used to develop and evaluate the Social Space Model of Health Care Delivery (see figure 6). This framework was informed by design science research (DSR), a problem-solving paradigm rooted in engineering and the sciences that has been central to information systems research for the last 20 years (Vom Brocke, Hevner, & Maedche, 2020). DSR strives to generate knowledge through the development and evaluation of

innovative artifacts to address specific needs or solutions to real-life problems (Kuechler and Vaishnavi, 2008; Tremblay, Hevner & Berndt, 2010; Vom Brocke, Hevner, & Maedche, 2020). The solutions might come in the form of models, methods, or constructs (Vom Brocke, Hevner, & Maedche, 2020).

Inspired by the work of Tremblay, Hevner and Berndt (2010), the Framework for Model Development and Evaluation (see figure 4) illustrates the iterative approach used to develop and evaluate the Social Space Model of Health Care Delivery, aimed to understand the spaces at the CPSVH and their impact on the provision of social support.

Prior to conceptualizing this study, consultations often in the form of informal discussion took place with the clinical director and health professionals at the social pediatrics centre to better understand the social pediatrics approach. Time was also spent at the centre interacting with the children and families (e.g., participating in activities) to further enhance this understanding. The understanding gained helped inform the development of the Social Space Model of Health Care Delivery (figure 6) – a model rooted in literature and multiple sources of primary data including focus groups, interviews, and observation. The Social Space Model of Health Care Delivery operationalizes each component of the preliminary model (figure 5) based on the literature. The design and operationalization of the Social Space Model of Health Care Delivery was iteratively refined as the multiple sources of data were collected and analysed.

Once the model was developed, the clinical director was consulted at two stages to evaluate the model: mid-way through development and for finalization, where the model was released to ensure it aligned with the social pediatrics environment and was

valid. The principal investigator presented the model to the clinical director and through a two-way exchange it was discussed to ensure it aligned with the social pediatrics environment and met the needs of the CPSVH. Each consultation with the clinical director was approximately 1 hour in length. The design of the model was refined based on the feedback provided and then finalized.

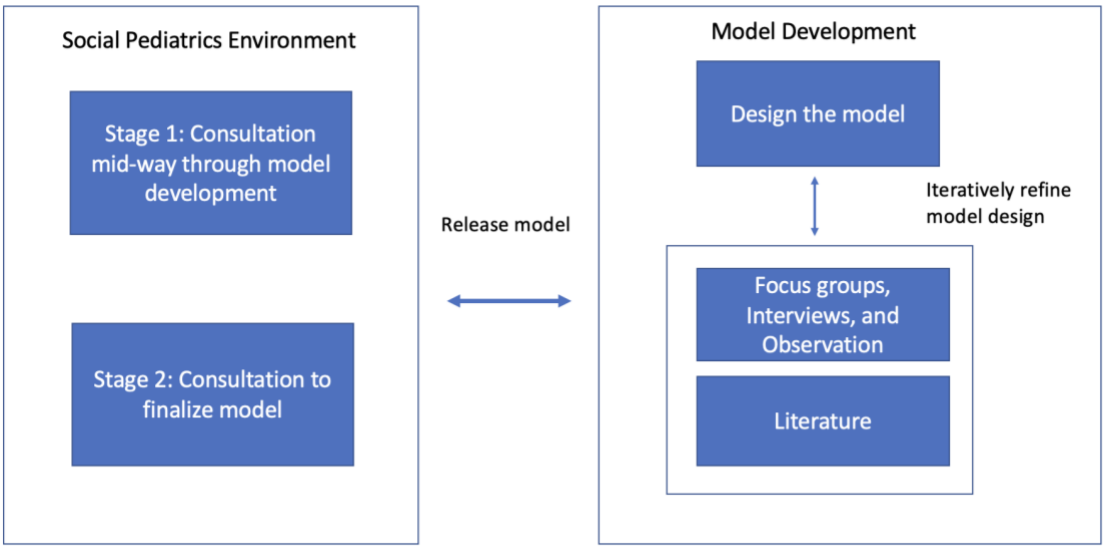

Figure 4: Framework for Model Development and Evaluation

CHAPTER 4: RESULTS

In this chapter, I begin with a description of the study participants and then present the Social Space Model of Health Care Delivery informed by the literature and the results of this study. This is followed by a discussion on spaces and a micro-level analysis to articulate the components of the model and their interactions, as well as the social space and patterning. Complex Adaptive Systems tenets are then mapped on the family experiences to better understand the functioning of the system, its components, and the interactions between them, to explore the extent to which social pediatrics is socially supportive.

4.1 Study Participants

A total of 20 children between the ages of 7-13 participated in this study (see Appendix M for demographic information). Six child focus groups were conducted with a maximum of 5 children and minimum of 3 children in each group.

Additionally, 6 health professionals, including 2 educators, 3 social workers and 1 occupational therapist, from the CPSVH participated in a focus group. The health professionals who participated in this study, based on observational data, were all females between the ages of 20-35. The health professionals who worked at the CPSVH were also all female resulting in a representative sample. Seven parents between the ages of 26 and greater than 40 and who all identified as female also participated in semi-structured phone interviews (see Appendix M for demographic information). Also, an interview with the clinical director of the CPSVH was conducted.

4.2 The Social Space Model of Health Care Delivery

Initially, I drew on the literature (see table 2) to develop a preliminary model (see figure 5). The literature in Table 2 stems from the literature review (see chapter 2) and was categorized into structures, behaviours, social support, and the systems-level perspective.

Table 2: Literature for model development

Category	Summary of Literature
Structures	• Space is social and is socially produced (Lefebvre & Nicholson-Smith, 1991; Saidi, de Villiers, & Douglas, 2017). The "spatial triad" is a major pillar in Lefebvre's work and includes three components: o The representations of space (*conceived space)* are the conceptualized spaces that are constructed. o The spaces of representation (*lived space)* are alive, represent human daily experience and emotion, and arise from the symbolic meaning we attribute to them. o The spatial practices (*perceived space)* are "*society's space*" (Lefebvre & Nicholson-Smith, 1991, p.38). Spatial practices represent patterned movements and interactions within a given space, structured by 'practices', impacting our experiences and everyday life. • Space has been examined in the domains such as education (Zhang, 2022); urbanism (Aboualy, Mansour & El-Fiki, 2022; Mady, 2022); health care (Meer & Müller, 2017); geographical land use (Dekel, Meir, & Alfasi, 2019); architecture (Bahauddin, Prihatmanti & Putri, 2022; Bern, 2022); and tourism (Lapointe, Renaud & Blanchard, 2021). • The social ecosystem is represented as a social triad in the Connectivity Framework and includes three concepts: peoples, processes and technology (in the context of social information system design) (Kuziemsky et al., 2016). • Social pediatrics is a family-centered approach to health care delivery that considers the child's social context and ecosystem (Julien, 2004).
Behaviours	• Given that space is socially produced, social interactions within space shape experiences, contributing to lived experiences and the meaning attributed to a space (Lefebvre & Nicholson-Smith, 1991). This can be extended to

	collaboration, as we think about the health care context and social pediatrics. • Structures can impact the behaviours of a social ecosystem (represented as a social triad in the Connectivity Framework) (Kuziemsky et al., 2016). • It is important to understand rules of engagement given their role in shaping structures, such as processes (e.g., social processes) within a system (Kuziemsky et al., 2016). • In social pediatrics, partnership between the parents, the child, and the health professionals is essential to continuity of care and the child's health and development (Julien, 2004). • The social pediatrics approach engages the child's social network and draws on multi-disciplinary and intersectoral collaborations (e.g., legal, medical, educational and psychosocial) in the community (Clément et al., 2015) in support of the child's health and well-being.
Social Support	• Social support, defined as "the functional content of relationships" (Bourgeault et al., 2010, p.186), has been widely examined in the context of health care. • Social support as an interpersonal process (Finfgeld-Connett, 2005) • Four types of support categorize the social support concept: Informational, appraisal, emotional and instrumental (Langford, Bowsher, Maloney, Lillis, 1997). o Informational support is the provision of information during a time of stress or need to facilitate problem-solving (e.g., advice, suggestions). o Appraisal Support is similar to informational support, but it involves the communication of information for self-evaluation. o Emotional support is characterized by the provision of care, love, trust and empathy. o Instrumental support is defined as the provision of tangible assistance, goods or services. • Social support has been examined in health care contexts, such as patients with chronic conditions (Roberts et al., 2021; Guan, Qan'ir & Song, 2021); the provision of social support by health professionals to families (Franklin, Arber, Reed & Ream, 2019; Fearnley & Boland, 2017); social support from social networks pertaining to health service provision (Mengesha et al., 2021). • The social pediatrics approach ensures that families are provided with a safe, non-judgmental, flexible, and comfortable space fostering relationships and their perceptions of support (Clément, Berube, & Moreau, 2016; Julien, 2004).

Systems-level Perspective	• Systems thinking is the concept of a whole entity (or system) made up of individual parts, which can adapt and survive in a changing environment (Checkland, 1999). It provides a means to visualize an entire system, such as social pediatrics. • Health care systems have been recognized as complex adaptive systems in the literature (e.g., Crossing the Quality Chasm – a seminal report) (Institute of Medicine, 2001). • CAS articulates the interactions between the components in an entire system within its environment. Complexity is determined by the number of components, the relations between them, and the types of relations (Kannampallil et al., 2011). • Social pediatrics is a multi-disciplinary approach that integrates the legal, medical, educational and psychosocial communities to gain a more holistic understanding of the child (Connors et al., 2022; Clément et al., 2016; Julien, 2004), leveraging the micro and macro levels of the health and social systems. • CAS provides a lens to understand whole-system engagement that occurs at many levels: the micro level (e.g., patients, families, physicians), the meso level (e.g., organizations), and the macro level (e.g., policy) (Sturmberg, 2019; Best et al., 2012; Best et al., 2016; Willis et al., 2014).

The preliminary model (figure 5) provides a systems-level perspective, by drawing on systems thinking, to visualize the macro level (community), meso level (CPSVH), and micro level (structures, behaviours and social support). Focus is placed on the micro-level as it lends itself to the experiences of the families at the individual level, aligning with the research questions of this study. The broken arrows illustrate the interaction between the structures, behaviours and social support; however, although described in literature, these interactions have not been studied in the social pediatrics context. The results of this study were then used to further design, develop, operationalize and validate the model using an iterative process as the data was being collected. The Framework for Model Development and Evaluation (see section 3.9) illustrates this iterative process detailing how the model was developed and validated.

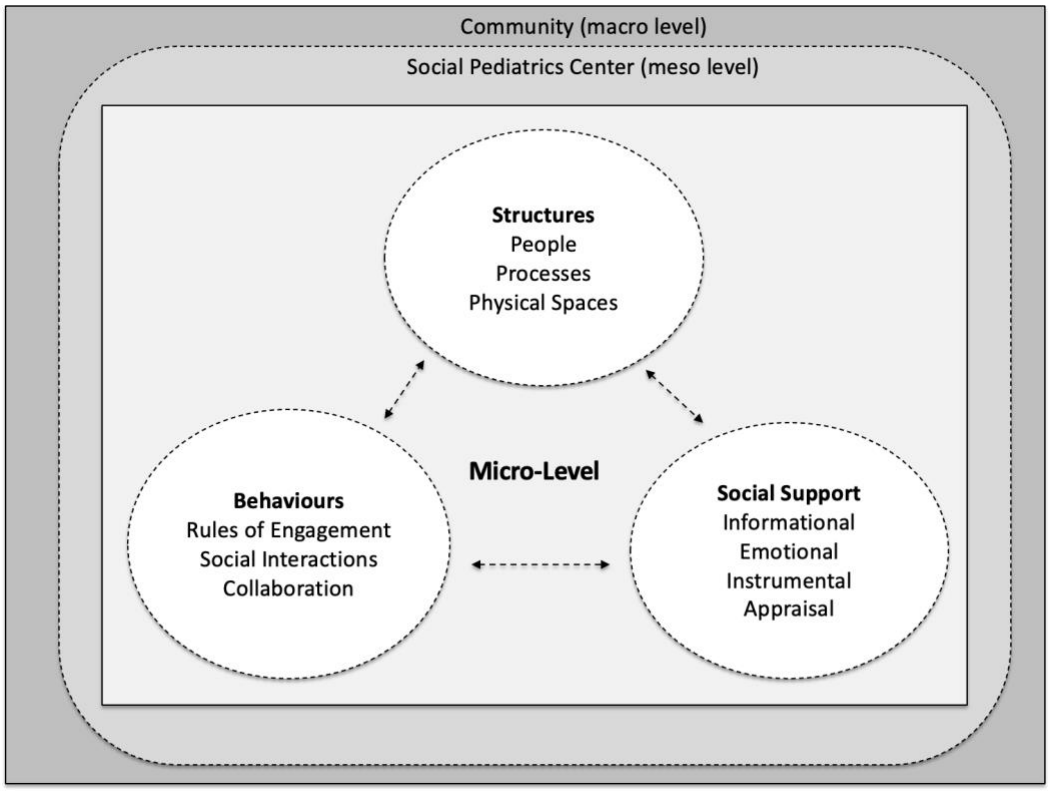

Figure 5: Preliminary model based on the literature

The Social Space Model of Health Care Delivery (figure 6) operationalizes each component of the preliminary model (figure 5) by defining it empirically to identify a set of structures (e.g., people, processes of care delivery, physical spaces) and behaviours (e.g., collaboration, social interactions, rules of engagement) and to understand how they interact to influence the provision of social support (including informational, emotional, instrumental, and appraisal support), all while considering the impacts of the social space on their interconnectedness. The CAS lens was used to understand the system properties and their interconnectedness (see table 1), while the Production of Space theory was used to understand the spaces at the CPSVH, their evolution, and the experiences of the families in those spaces.

The structures at the CPSVH include the people (e.g., health professionals, parents, children), the spaces (e.g., physical spaces – kitchen, living room, clinic room),

and the processes of care delivery (e.g., information exchange, communication). The components of this social triad are interconnected and brokered by emotions, influencing the child's (and parent's) experiences and the provision of social support. The behaviours at the CPSVH include rules of engagement, social interaction, and collaboration, while social support includes instrumental, emotional, appraisal and informational support. The structures and behaviours at the CPSVH interact with social support. For example, the kitchen table in the clinic room provides a structural space for opportunities for information sharing and collaboration between the professionals and the family (parent and child) in a formal, private space, where care is centered on the child. However, the health professionals also use the clinic room, specifically the kitchen table, as a space for informal and social discussion. Section 4.2.1 further discusses spaces at the CPSVH and the extent to which it enables the provision of social support.

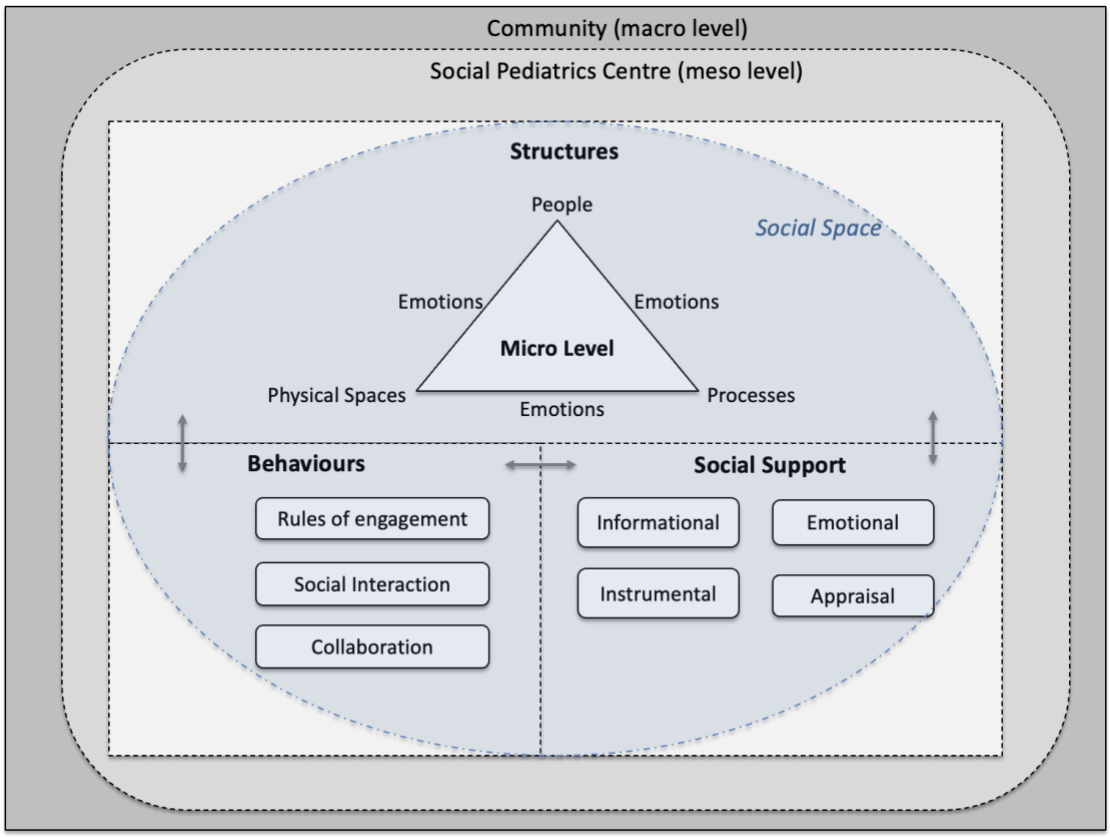

Figure 6: The Social Space Model of Health Care Delivery

4.2.1 Spaces

The CPSVH is within proximity to the community it serves and was conceived to resemble a home – unique for a medical centre. Figure 6 depicts the physical and social spaces at the CPSVH. The physical space, furnishings, and open-concept layout of the CPSVH fosters a sense of warmth, comfort and security. This serves as a catalyst for movement and interactions enhancing the frequency and opportunity for collaborative and social activities, and the flow of communication. For example, the CPSVH has an open concept living area with a sectional sofa, toys and books, facing the kitchen and dining room table. As such, the health professional in the kitchen preparing toast for a

child, a form of instrumental support, can interact with a parent sitting on the sofa. This example illustrates the interconnectedness between structures, behaviours and social support (as per figure 6). These movements and interactions shape the social space and the experiences, emotions, and meaning that occur in the physical spaces, making them alive and lived (Lefebvre & Nicholson-Smith, 1991). In the living room area, children laugh while playing a board game on the sectional sofa, while parents in that same space on a separate occasion share their lives with the health professionals and seek emotional support. This illustrates the interaction between the physical and social space, as well as the interplay between formal and informal. The experiences, meaning and emotions within the physical space are unique to each parent, child and health professional (for more detail see section 4.3.2). Also, given that space is dynamic, it evolves over time based on the needs of the people in the space illustrating its conceptual nature, thus shaping the social and physical spaces. Although the dining room table (see figure 7) is a flexible structure meant for eating a meal, it is also used by health professionals to complete documentation, such as medical or daycare application forms, for the child with the parent – a form of instrumental support. This is another example that illustrates the interplay between formal and informal spaces.

Figure 7: Dining room table

As such, the conceptual, physical and social spaces are interconnected to facilitate the provision of social support (i.e., appraisal, emotional, informational, and instrumental) at the CPSVH (as illustrated in figure 8).

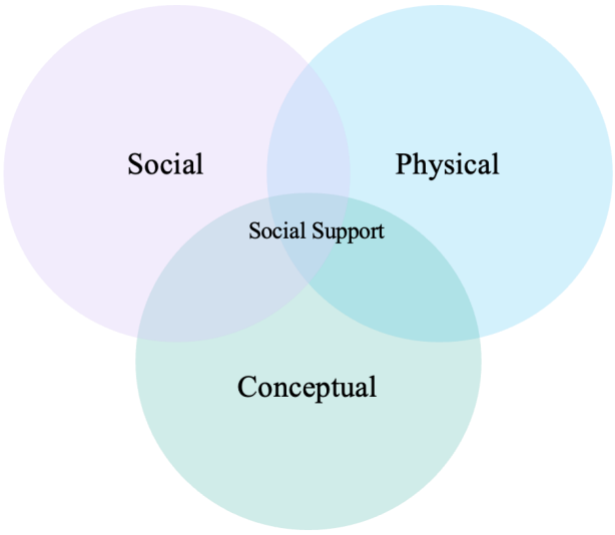

Figure 8: Interaction between the spaces resulting in social support

4.3 Micro-level Analysis of the Family Experience

A micro-level analysis was conducted to understand the extent to which the CPSVH space configurations impact the provision of social support. Drawing on the systems-level approach, the micro-level analysis provides a granular perspective, illustrates the family experience at the CPSVH, and operationalizes each component of the Social Space Model of Health Care Delivery (see figure 6) – specifically, the structures (e.g., people, processes of care delivery, physical spaces), the behaviours (e.g., collaboration, social interactions, rules of engagement) and social support (including informational, emotional, instrumental, and appraisal support), all while taking into consideration the role of the social space.

4.3.1 Social Space

The social space, as illustrated in Figure 6 at the micro-level, emerged from the data as a concept at the micro-level that is overlayed on to and interconnects the structures, behaviours and social support. Drawing on the Production of Space and the results from the study, the social space at the CPSVH is influenced by the conceived space (or physical design tailored to the needs of the child), but is shaped by and evolves with the lived experiences and meaning attributed to it by the children, parents and health professionals, and the social interactions within it– that are both formal and informal in nature. As such, the social space creates a sense of place for the families and the health professionals, given the multi-dimensional space configuration.

4.3.1.1 Social Space Patterns.

Social space patterns emerged from the data and provided a more in depth understanding of the social space. Figure 9 maps a generic social space pattern that

illustrates the interactions between the structures, behaviours, and social support (as per the Social Space Model of Health Care Delivery– see figure 6), and the role of spaces at CPSVH on social interactions, collaboration, and the provision of social support. This generic social space pattern evolves with and is shaped by the child (e.g., context and needs), as care is centered on the child.

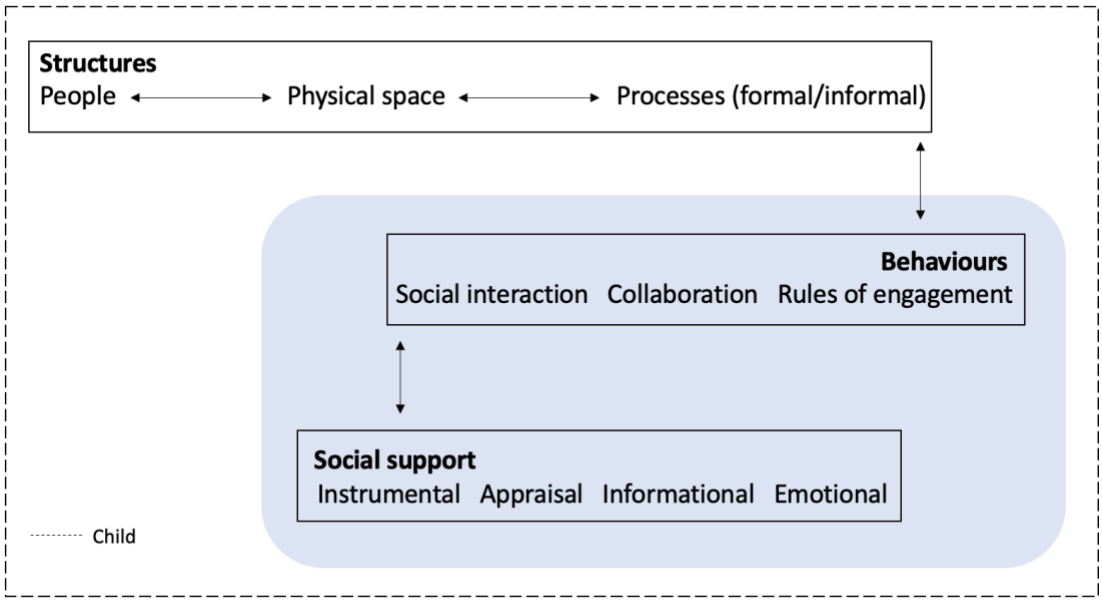

Figure 9: A generic social space pattern at the CPSVH

The pattern begins with structures, specifically people (e.g., health professional, child, parent) in a physical space (e.g., CPSVH) and is shaped by formal and/or informal processes. The actions of the people inform the behaviours (e.g., social interaction, collaboration, rules of engagement) and the provision of social support (e.g., instrumental, informational, emotional, appraisal). The bi-directional arrows illustrate the iterative nature of the social space pattern, while the grey bubble around behaviours and social support depict where the social space begins to become more apparent, as it requires people in a space to socially interact or collaborate. It is the individual or group

behaviours that drive sociality (as illustrated in medical appointment example). Table 3 defines four typical social space patterns – social activity, hang-out at the centre, medical appointment, and a contextual event and the CPSVH. The social space patterns highlight the extent to which the CPSVH provides a sense of place for the families.

Table 3: Social space patterns at the CPSVH

Social Space Patterns
Social Activity: The children arrived at the centre for an activity. The children went straight to the sofa and toys. The educator prepared a snack for the children, and they sat at the table to eat. After the snack, the children, educator, and social worker took the kids to the park. Games are played in the park like hide and seek, ball etc. The children were dropped back off at home.
Hang out at the Centre: The mother entered the centre and was greeted by the receptionist. The mother decided to come to the centre to hang out. The mother went to the kitchen to make herself a coffee. The mother sat on the sofa drinking her coffee. A social worker entered the space and noticed the mother. They started chatting informally. The social worker decided to go through paperwork with the mother, and then went to sit at the table. The mother said goodbye and left the centre.
Medical Appointment: Mother and father with two kids came to the CPSVH for a medical appointment. The mother and father sat on the sofa with the infant, and the toddler was playing with the toys. The social worker, medical student trainee, and physician came out of the clinic room and greeted the family in the living room. The physician greeted the toddler and gives her a hug. Everyone made their way to the clinic room, but the toddler stayed seated on the sofa during her infant siblings' appointment. The physician waited for the family to enter the clinic room first. The health professionals waited for the family to be seated at the "kitchen" table and then sat down. The physician introduced the other health professionals at the table. The infant's health was discussed. The physician examined the infant. When the appointment was over, the health professionals followed the family out of the clinic room and into the living room. The physician sat with the family on the sofa and chatted informally. The mother was going through boxes of children's clothing provided to her by the receptionist who got the boxes from the storage room.

The health professionals debriefed in the clinic room before the next appointment.
Contextual Event at the CPSVH: The centre was decorated for the holidays with a large white Christmas tree decorated in blue ornaments at the entrance. The centre was full of families for their annual Christmas lunch. Volunteers were in the kitchen preparing all the food, which was laid out on the counter buffet-style. Parents were socializing with each other and with health professionals at the centre. The kids were playing with the toys or sitting with their parents on the ground, at the table, or on the sofa. The families were helping themselves to food. Santa Claus waved from outside and entered the centre. He sat on a chair and greeted the children and their families, and children sat on his lap. Gifts donated to the centre were handed out to the children. Families came and left.

To provide a more granular illustration of the social space, I mapped the medical appointment pattern (see table 3) to the general social space pattern in table 4. The medical appointment pattern exemplifies the interactions between the structures, behaviours, and social support (as per the Social Space Model of Health Care Delivery– see figure 6). More specifically, I discuss the people, the physical space, the processes, the rules of engagement, social interaction, collaboration, and instrumental support.

Table 4: Mapping the medical appointments pattern to the generic social space pattern

Components		**Mapping the Example Medical Appointments**
Structures	People Physical space	Mother and father with two kids came to the CPSVH.
	People Physical space Processes	The mother and father sat on the sofa with the infant, and the toddler was playing with the toys in the living room. The social worker, medical student trainee, and physician came out of the clinic room.
Behaviour	Rules of engagement	The physician greeted the toddler and gives her a hug.
Structures	People	Everyone made their way to the clinic room, but the toddler stayed on the sofa in the living room

	Physical space Processes	
Behaviours	Rules of engagement	The physician waited for the family to enter the clinic room first The health professionals waited for the family to be seated at the "kitchen" table and then sat down.
Behaviours	Collaboration	The physician introduced the other health professionals at the table. The infant's health was discussed.
Structures	People Physical space Processes	The physician examined the infant in the clinic room.
Behaviours	Rule of engagement	At the end of the appointment, the health professionals followed the family out of the clinic room and into the living room.
Behaviours	Social interaction	The physician sat with the family on the sofa and chatted informally.
Social support	Instrumental support	The mother was going through boxes of children's clothing provided to her by the receptionist.
Behaviours	Collaboration	The health professionals debriefed in the clinic room before the next appointment.

In the social space medical appointment pattern, the people were the health professionals (i.e., social worker, medical student trainee, and physician), the receptionist, the mother, the father, and the two children. The living room, the clinic room, the hall, and the storage room were the physical spaces that were visited by the family. As the family entered the CPSVH, they went directly to the sofa and the toddler went straight for the toys. This emerged as an informal process and was common among families. The health professionals greeted the family in the living room, the physician gave the toddler a hug, and then the health professionals followed the family down the hall to the clinic room, while the toddler stayed behind on the sofa. The physician greeting the family and giving the toddler a hug is an example of an individual behaviour

that helps drive sociality at the CPSVH. The physician waited for the family to enter the clinic room before entering, and for them to be seated at the "kitchen" table before sitting down and talking – an example of a rule of engagement. The "kitchen" table supports the horizontal power structure and approach to communication in the social pediatrics approach. The infant was examined and when the appointment was over the health professionals followed the family out. This is a formal process at the CPSVH for medical appointments that is shaped by the social pediatrics approach and the emerging rules of engagement (e.g., the physician hugging the toddler, following the family in and out of the clinic room).

In the living room, the physician joined the family on the sofa and informally spoke with them while the mother was going through boxes of clothes provided to her by the receptionist. This illustrates an informal social interaction between the family and the physician. The provision of clothes in boxes for the family to choose from and take home is an example for instrumental support. The physician returned to the clinic room and debriefed the case with the other health professionals before the next patient's appointment exemplifying formal collaboration.

Recognizing the interconnectedness of the different components and the overlay of the social space at the micro-level, the following sections describe each component of figure 6 – structures, behaviours, and social support – based on the results of the study. The social pediatrics approach and the UN Convention on the Rights of the Child are discussed in alignment with the results of the study – an overview for each is provided below:

Social pediatrics is an approach to address the health and social needs of children who are vulnerable due to material and social conditions (Clément, Berube, & Moreau, 2016; Connors et al., 2022; Esposito, Roy, Chabot, & Trocme, 2017; Wong et al., 2012). It is a child-centered approach to health care delivery for vulnerable children that leverages the UN Convention on the Rights of the Child, and that is designed to mitigate social and structural barriers to care while also considering the child's social context and ecosystem (Julien, 2004). Social pediatrics has three core premises - empowerment, networks and partnership. See section 2.3 for additional information.

The UN Convention on the Rights of the Child affirms the equal rights and needs of the child without distinction. The Convention is a historic commitment made by world leaders in 1989 to protect and fulfill the rights of every child (UNICEF, n.d.). This international legal framework has since become the most accepted human rights treaty and contains core rights including, protection, provision, participation, and specific protections and provisions for vulnerable populations (UNICEF, n.d).

4.3.2 Structures

The structures at the CPSVH include physical spaces, people, and processes. These structures are a social triad at the micro level that are brokered by emotions, such as happiness, pleasure, a sense of belonging, and feelings of safety and security (even during some of the most difficult times in their lives).

4.3.2.1 Physical Spaces.

The CPSVH is in the heart of Vieux-Hull within close geographical proximity to the families it supports, aligning with the social pediatrics approach. Given their proximity, community parks, pools and other community driven organizations (e.g.,

LAB: art studio for recovering drug addicts) make-up the CPSVH. These spaces within the community setting are often visited during their activities (e.g., swimming at the pool, yoga in the park): for example, the LAB is a creative and lived space used for painting, sculpting, and other art-related activities (e.g., theatre) (see figure 10). It provides the children with an opportunity for self-expression and inspiration through art and a chance to spend time with other children from the community. One child described her experiences as, *"J'étais avec plein de personnes que je connaissais, puis c'était cool" (Child)*

Figure 10: LAB Art Studio

The CPSVH was conceived as a clinic that provides a range of medical and social services. It was built from the bottom up by community donations and volunteers. Unlike the more traditional model of medical clinics, the CPSVH was designed to be more home-like and was described by the children and parents as a house, better yet a home-away-from-home. Many children compared their home to the CPSVH and described it as their second (or in some cases third) home. *" Ma maison est plus petite, mais cette*

maison-là c'est comme ma deuxième maison." (Child)

As you walk into the CPSVH, there is a receptionist that greets you. The space is large and open, and often smells of fresh-baked cookies, muffins, and/or coffee. In the living room, there is a large sectional, toys for children to play with (that are often all over the floor), and a library full of books that can be taken home. There is a large window that brightens up the space with light and pictures of the CPSVH families are on the walls and bookshelves (see figure 11). This space was identified by most of the children and parents as a place of comfort with many memorable memories. Children were drawn to that space because of the toys which symbolized fun and play. One mother described a difficult time where, *"I did a lot of crying in this room and the couch itself was where I'd sit with (names of social workers). But the sun coming in the window. I could feel it on my face, and that's just comforting. Sitting on the couch. It's like having a big warm hug when the sun is coming in." (Parent)*

Figure 11: View from the kitchen of the living room

Next to the living room is the kitchen. The kitchen was described as, *"c'est le cœur [of the CPSVH] qui attire les enfants et les parents."(Health Professional)* It is open and large with two fridges (one for the staff and the other for the families), cabinetry (in wood, and colours white and green), a stove, a dishwasher, a microwave, a coffee maker, and a sink. A breakfast bar with stools looks out on to the living room (see figure 12). As part of the kitchen is a wood table with benches where many of the children, parents, and health professionals chat and eat. Health professionals also provide clinical support to parents at the table. The children identified the kitchen as one of their favourite spaces at the CPSVH because it is where they eat good meals, snacks and candy, and socialize with friends informally or during planned activities (e.g., board games, art). There is also a door to the storage room where the donations (e.g., clothes, toys, diapers) are kept.

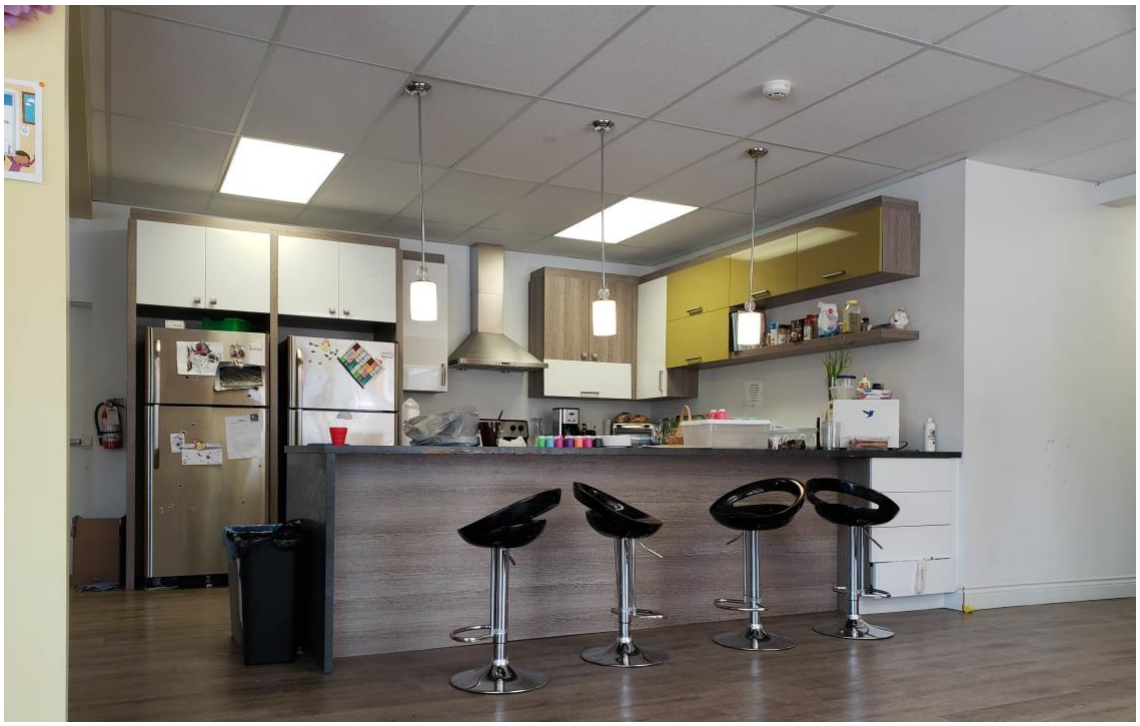

Figure 12: Open concept kitchen

A hallway lined with pictures of the families leads to the bathrooms, the multi-purpose room and the health professionals' office. The multi-purpose room is a space with a large rectangular table and chairs. There is a black board and a bookshelf with art supplies and other resources. In this space, children participate in activities like art or play games. It is also a space where CPSVH staff meetings and other more formal interactions are held, such as art therapy. The children have many fond memories doing art and socializing in this room (see figure 13). The health professionals' office, although meant to be a private space, is often visited by the children and parents. The office is an open-concept workspace with desks arranged in a way to facilitate communication and collaboration among the health professionals. The placement of the desks evolves over time, as their needs change and group dynamic shifts. There are white boards, papers and drawings on the walls, and with a door that leads towards the back of the centre. As described by one child, the office is "*tranquille. C'est comme un coin que tu peux parler aussi, tranquille faque j'aime ça." (Child)*

Figure 13: Multipurpose room

Continuing down the hall and through a door is the clinic and two activity/observational rooms. The clinic, unlike most medical clinics, is an open space with a large oval kitchen table and a big one-way window that brightens the room, but still allows for confidentiality and is a reminder of the community (see figure 14). Often discussions at the table can be difficult and then, *"il y a quelqu'un qui arrive, ce sont des miroirs à l'extérieur, faque il se peigne les cheveux puis ça fait ce que tu fais, tout le monde se met à rire." (Health Professional)* There is a half wall that separates the space to allow for privacy in the examination area, but yet still open. *"Les parents n'ont pas*

l'impression qu'on va se cacher avec l'enfant puis qu'on va se dire des secrets. C'est important pour la confiance." (Health Professional) In this area, there is an examination table and cupboards for the medical supplies. There is also a small kids table with chairs, toys and colouring supplies for the children.

Figure 14: Clinic room

The observational/activity rooms are spaces where activities are held, from yoga or music to chess clubs and educational type classes (e.g., learning about colours and shapes, the UN Convention on the Rights of the Child). One of the two rooms has a piano, drum set and guitar. There are tables and chairs for children and a furry rug and pillows. The items in this space evolve over time and are tailored to the activities. One child described many happy memories doing activities with her friends, *"on a fait le droit*

des enfants et je niaisais avec mes amis et Dr Zen, puis là ça m'a bien relaxé." (Child) The other room has a one-way window that allows parents to observe their children during activities or therapy sessions, along with a carpet and a table and chairs.

In sum, the physical spaces at the CPSVH create for a warm, welcoming, comforting and safe environment for families. As described by one child *"feels like a place where I'm in heaven, I'm not here, I'm up here. I'm in heaven."(Child)*

4.3.2.2 People.

The CPSVH is made up of a multi-disciplinary team of health professionals that support families, where care is centred on the child and their specific needs. The team includes physicians, educators, social workers, therapists and a receptionist who interact with the families regularly during their visits to the centre. As such, relationships develop between the families (the child and their social circle) and the health professionals. Proximity facilitates the establishment of the relationships and shapes the interactions. "*La proximité de recevoir un parent, puis de lui faire un câlin puis un bisou. Et les enfants, pareil. C'est cette proximité qui fait qu'on a un impact pour ces parents, ces enfants qui ont des vécus qui ne sont pas faciles." (Health Professional)* When the children were asked to describe the health professionals at the centre, they used words like gentle, honest, caring, respectful, lovable, perfect, exceptional, and attentive. Many of the children also described feeling listened to when they shared aspects of their lives or experiences with them. Also, most of the parents mentioned not feeling judged, enabling them to openly talk with the health professionals, facilitating information exchange and the provision of care. One mother described the health professionals as being there to encourage not judge, *"ils ne sont pas là pour te juger, ils sont là pour t'encourager, c'est*

le fun pour ça. Ce sont des personnes assez confiantes que tu peux parler. Ils ne sont pas sauvages du tout, ils sont très souriants, on est toujours bien reçu." (Parent)

Volunteers also have an important role at the CPSVH in in providing supports and services to the health professionals and families, such as the preparation of food, handy-man work, and folding and organizing clothes.

4.3.2.3 Processes.

Formal processes, such as medical appointments and activities, and informal processes, such as hang outs or drop-ins to the centre, occur at the CPSVH. These processes are interconnected and shaped by the home-like physical environment, relationships (with the health professionals and families), and emotions (e.g., comfort, safety, security). The formal processes are informed by the governance structure at the centre, whereas the informal processes are unique to each family (often with overlapping similarities).

When families enter the CPSVH, they are greeted by the receptionist and offered coffee and food; however, many parents described going to the kitchen and making themselves a coffee (and often one for the health professionals or other parents). These parents have been routinely going to the CPSVH; however, parents who are new to the centre are informed of the services, guided through the centre, and introduced to the health professionals. As depicted by one mother, *"the mothers come in and make their own coffee. We stand by the counters in front or behind and socialize" (Parent).* The children described going straight for the toys, chatting with their friends on the sofa or eating in the kitchen as one of the first things they did when entering the CPSVH. The health professionals often come and see the families and talk with them, often more

socially, prior to appointments or when they're at the centre visiting. If a child is hungry, a health professional will make them something to eat, often peanut butter and toast with fruit, as a means of promoting and showing children options for healthy nutrition.

If the family is at the CPSVH for an appointment, the health professionals will greet the family often giving the child(ren) a hug and will follow them to the clinic room. Upon entering the room, the parent(s)/caregiver(s) and child(ren) select their seat at the "kitchen table", which gives them autonomy (see figure 15). There are also toys for the child(ren) to play with and water and snacks on the table for everyone. As described by one health professional, *"C'est toujours dans le même ordre que la rencontre se déroule. Je vais demander d'abord à l'enfant comment ça va. Après ça, je vais demander la permission de parler aux parents. Après ça, je vais avec l'enfant. La travailleuse sociale reste avec les adultes. Après ça, c'est tous les rituels des tâches de base" (Health Professional).* This routine is a formal process aligning with the implementation of the social pediatrics approach and informed by the UN Convention on the Rights of the Child. It also gives the families predictability in terms of what to expect at each appointment. Once the appointment is over, the health professionals follow the families down the hall to the living area. Some families stay to informally socialize or look through the boxes of clothes, while others leave – an example of an informal process.

Figure 15: "Kitchen table" in the clinic room

For activities, the health professionals often picked up the child(ren) from their home or school and bring them to the CPSVH. As described by one health professional, *"peu importe l'activité, on commence tout le temps [dans le salon] puis on finit tout le temps [dans le salon]. Souvent pour un petit moment libre hein, on choisit des jouets, ou parler avec d'autre monde." (Health Professional)* Snacks are also provided before the activities. This is an example of a formal process. During this time the children have the chance to informally socialize with friends (and meet new ones) and play. It is also an opportunity for them to unwind from their day. The children described participating in a variety of activities, such as art and cooking classes, yoga, and chess club, which they very much enjoy and look forward to. At the end of the activity, the health professionals often take the children home, or their parents come pick them up from the centre.

4.3.3 Behaviours

The behaviours include rules of engagement, social interaction and collaboration. These behaviours interact with the structures and social support, shaping the child, and parent and health professional experiences.

4.3.3.1 Rules of engagement.

Rules of engagement, defined as the formal rules and practices that impact interactions and the functioning of the CPSVH, shape the lived experiences of the children, parents and health professionals. Some rules of engagement were implicit and emerged organically at the CPSVH, whereas others were more explicit (e.g., signs on a fridge or office door). The rules of engagement were verbally communicated by the health professionals to the families and by one family to another, or through visual forms, such as signs.

During my time observing the CPSVH, there were several formal rules that were apparent at the centre, and ones that seemed to be set up by the clinical director in collaboration with the health professionals. These rules govern access to areas within the centre, such as the donation room or office, or provide direction or guidance. There were signs on one of the two fridges saying, *"frigo pour les employés et stagiaires"* and one on the office door asking for the door to stay closed. These rules were communicated by the health professionals to the children and families, and reminders were provided on an as needed basis. The health professionals, during the focus group, spoke about the importance of ensuring the confidentiality of individual families during team meetings or on phone calls, illustrating the need to keep the office door closed. As illustrated by two health professionals, *"[…] des fois on a un appel, tu parles avec une famille, c'est*

confidentiel, puis là il y a un autre parent qui rentre. […] C'est pour ça qu'on a mis une pancarte sur notre porte de bureau." (Health Professional) There was also a sign over the sink saying, *"SVP rinser"* to ensure all dishes were washed and rinsed, and finally one next to the microwave saying, *"servez vous".* The sign next to the microwave invited families to help themselves to fruit, baby food or other food items on the counter. Despite the formal signage, children and parents moved freely in the spaces at the CPSVH and the signage did not emerge as a barrier but rather provided direction to the families.

In addition to the explicit formal rules, implicit rules and practices emerged organically at the centre. As stated by one health professional, *"il y a beaucoup de règles qui se sont faites naturellement." (Health Professional)* These rules and practices are also built into the formal and informal processes at the CPSVH (see section 4.3.2.3). The parents and children described the centre as being home-like and *"très chaleureux."* When children and parents walk into the centre, they are greeted by a receptionist and offered coffee and snacks. *"Ce n'est pas dur quand tu rentres. C'est toujours des sourires."(Parent)* Unlike other medical clinics, parents are not *"charger avec 50 mille questions,"* but their approach is rather, *"viens, on va prendre un café et on va trouver des démarches." (Parent)* This is common practice at the CPSVH that contributes to the feelings of comfort and facilitates information sharing. Parents also described going to the centre, despite not having an appointment or planned visit, to hang out and chat with other parents or the health professionals, help at the centre, or just take a break and unwind. Families are always welcome, *"on est toujours là, venez-vous-en." (Health Professional).* This was further elucidated by another health professional, *"on dit aux parents qui sont toujours la bienvenue, t'sais c'est une maison, c'est leur deuxième*

maison, ils peuvent toujours venir puis c'est vrai." (Health Professional)

During the focus group, the children shared many memories at the CPSVH with friends, family and the health professionals that involved food. In fact, the kitchen was, for many, one of their favourite spaces at the centre because of the food and opportunity to socially interact. At the CPSVH, food is made available to them by the health professionals during medical appointments (with a plate of snacks on the table), before, after or during activities or special events (e.g., Christmas celebration), or at just about any time they are hungry and would like a snack with the support of a health professional or parent. As described by one child as she remembers all the things she's eaten at the centre, *"Il y a une fois qu'on a mangé de la lasagne, il y a une fois qu'on a mangé de spaghetti…" (Child)* Another child mentions that *"il y a tout le temps de collation." (Child).* Food is not only just available to children, in fact, parents can also serve themselves and have access to the fridge and other parts of the kitchen. This practice of food provision was interlaced in the formal and informal processes (see section 4.3.2.3) at the CPSVH.

The CPSVH also draws on the UN Convention on the Rights of the Child, a formal model, as a tool which is at the heart of their medical practice – one that is directly centred on the child – and one that informs the rules of engagement. The tool is used at the CPSVH, but in particular in the clinic, to understand the child perspective especially in more challenging clinical situations. It provides a global perspective and enables a tailored approach to health care delivery. A health professional described it as, *" un outil clinique qui est puissant […] qui me permet de prendre la perspective puis dire ok. On est dans une impasse. Et tout le temps, ce qui m'échappe c'est un droit qui n'est pas*

respecté." (Health Professional) Not respecting a child's rights can have a major impact on their life course. Many of the children seemed familiar with their rights, to the extent to which some even participated in a group at the CPSVH on the UN Convention on the Rights of the Child. Their rights are also communicated during medical appointments using laminated cards that describe each right. Most of the children described feeling respected and at ease, and as a result were more willing to open up, especially during more difficult conversations. When comparing their experiences at the CPSVH to other medical settings one child stated that, *"[at the other medical setting] je ne me sens pas bien là-dedans je me sens observé."* Another child said, *"c'est comme une prison".* The feeling of being respected and not observed were also echoed by many of the parents. Further, other practices that emerged that shaped the child and parent experiences included the health professionals being social with the families, saying hi to them and engaging them in conversation informally and giving the children a hug –examples of going above and beyond scope of practice – that inform social interactions.

4.3.3.2 Social Interactions.

Many of the children and parents described the centre as a home-away-from-home or second home – a safe and supportive space. This home-like feeling shapes the social or informal interactions between the children, parents, and health professionals during formal (e.g., during a planned activity) and informal (e.g., a chat between two parents) social gatherings. It also enables the families and health professionals to be "authentic" or themselves. As described by a health professional, *"J'dirais authentiques, autant qu'eux, ils peuvent juste être eux-mêmes. Nous avons senti qu'on peut juste être nous-mêmes aussi."(Health Professional)* This ability to be authentic within the CPSVH

home-like context shapes social interactions, impacting lived experiences and memories for all, but in particular for the children.

The children during the focus groups shared memories with their friends, family and the health professionals, which mainly occurred during activities (e.g., holiday celebrations, chess club, yoga, etc.), in the spaces at the centre (e.g., kitchen, living room, multi-purpose room), and during medical appointments in the clinic room. The activities give them an opportunity to be social and spend time with people who are important to them. This shapes their lived experiences and the meaning they attribute to the spaces. As described by one child, *" j'avais fait [the wings] avec ma mère puis avec (therapist's name) on les avait faites sur la [dining] table, [it was a good memory because] premièrement c'était avec [nom de sa thérapeute], puis ma mère faque on l'a fait comme en famille plus des amies à ma mère puis des cousines." (Child)* This child highlighted the notion of "as a family", which aligns with the description given to the CPSVH by many of the health professionals, children and parents of it being a family. The wings were made for and showcased at the Walk for the Rights for the Child, an annual event that brings together the community-at-large and advocates for the child's rights (see figure 16). In addition to the annual walk, the CPSVH organizes other activities in the community, such as in parks, at the community pool, or at the LAB – an art centre. The children talked about seeing their friends from school or from the community and interacting with them during the activities.

Figure 16: The wings

Similarly, the parents during the interviews also shared memories of socializing with the health professionals, other parents, or the children at the CPSVH. For some parents, the centre was an escape when they had nowhere to go. One mother described going through a challenging time in her life, where she would go to the centre almost every day after dropping of her child off at school. The CPSVH was described as a place where, *"you'd have other parents come in and we could talk about what's been going on in our lives. So, it was a (informal) parent support group, which was great."* (Parent) This is an example of an emergent interaction shaped by the interactions between the parents. Many parents also described going to the centre an hour or two before an appointment to socialize, sometimes resulting in the development of new friendships. The physical and social environment at the centre, from the comfortable couch to the welcoming home-like environment, facilitates these sorts of social interactions – an example of how the structures enable behaviours. The health professionals also described

greeting the families with a hug and socializing with them at the centre, often sharing laughs and information about any number of topics. This was an opportunity for the families and health professionals to learn more about each other, which resulted in the development of trust, confidence and empathy, in a judgement free environment. As described by a health professional, *"souvent, les conversations, ils sont sans filtre […] ça aide au niveau de la confiance et fait qu'on a plus d'impact sur leur vie car ils savent qu'on peut être là pour eux, puis on les juge pas." (Health Professional)*

4.3.3.3 Collaboration.

Collaboration emerged as fundamental to the provision of supports and services at the CPSVH with empowerment, engagement and partnership at its core, echoing the social pediatrics core premises (see section 2.3). Collaboration occurred between the health professionals, and the health professionals and families (i.e., parents and children). The health professionals at the CPSVH described their team as multi-disciplinary and collaborative where knowledge is shared, and decisions are made together as a unit - *"on pense jamais seul" (Health Professional).* The team of health professionals also work closely with the clinical director at the centre, which is important in the provision of care for the families.

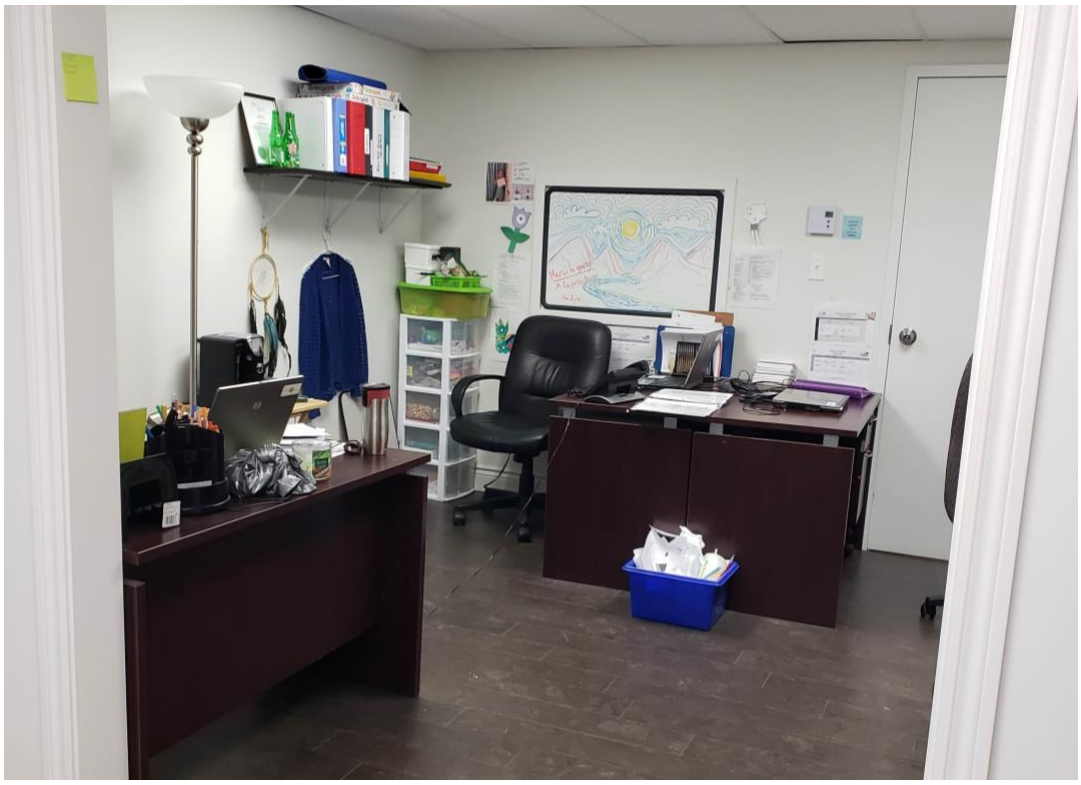

Figure 17: Open concept office (part 1)

The physical space at the CPSVH also helps foster and sustain collaboration between the health professionals. The office is open-concept where desks are facing one another - *"tout le monde ensemble"(Health Professional)* (see figure 17 and 18).

Figure 18: Open concept office (part 2)

Given the collaborative nature, families are shared between the health professionals where they work together and leverage a multi-disciplinary approach, to ensure continuity of care and utmost support. The clinical director provides the team of health professionals with leadership, and there is a shared mental model that shapes communication and the roles and responsibilities of team members, but is one that is adaptable to the needs of the child. The team of health professionals are *"une équipe qui se parle"(Health Professional),* where communication is open and this is known by the families. Moreover, the friendships between the health professionals also helps facilitate and sustain collaboration. *"Je pense que le fait que comme on a développé des amitiés en dehors, c'est sûr que cela aide notre collaboration." (Health Professional)* To illustrate the team's collaborative approach, *"quand il y a des impasses cliniques, on est capable de codévelopper, de les déposer, puis d'avoir un regard de toute l'équipe sur qu'est-ce*

qu'on fait maintenant." (Health Professional) This is an example where the coupling of the skills and expertise of each health professional and open communication were key to resolving the clinical impasse. The team works together to provide support for the child and families.

The health professionals and families at the CPSVH also collaborate in support of the child's health and well-being. This partnership is shaped by the informal social interactions and the safe and non-judgmental environment, which enables the families and health professionals to be themselves. As such, the health professionals see a more positive side to the families. Collaboration and its sustainment are also informed by the horizonal power structure and a horizontal approach to communication which supports *"une relation égalitaire." (Health Professional)* As described by a health professional, *"je trouve que c'est très horizontal dans le sens où ils apprennent de nous et on apprend d'eux, c'est un échange dans la relation." (Health Professional)* This horizontal approach encourages the participation of parents and children through empowerment (a core premise in social pediatrics – see section 2.3) and fosters their relationship with the health professionals. It also supports shared involvement in the decision-making process, where the health professionals provide the medical perspective and the parents provide their experience-based perspective, which is listened to and taken into consideration by the health professionals.

> *"Les médecins, ils sont à l'écoute. (Name of physician) est beaucoup à l'écoute de ma manière de faire avec les enfants. Parce que moi je ne vais pas vers la médication tout de suite, puis elle comprend elle va beaucoup dans le même sens que moi. Elle respecte mes choix, elle respecte ma*

manière de penser." (Parent)

This horizontal approach allows for the full establishment of the partnership and aligns with the social pediatrics premise partnerships (see section 2.3) and with the UN Convention of the Right of the Child, impacting the delivery of care.

Further, the CPSVH is networked in an ecosystem of supports and services aligning with the social pediatrics core premise networks (see section 2.3) and located in the community within proximity to the families' residences. The CPSVH also collaborates and partners with community supports and services, such as the CLSC, to provide medical and social supports to the families to address the associated social determinants of health. This provides the families with access to supports and services, such as professional legal services or basics needs like furniture, from within their ecosystem of supports and services. However, the CPSVH relies on a traditional model (e.g., paper-based records) of documentation that can impact social and medical care transitions. Nonetheless, many parents considered the CPSVH as "un outil" or tool and mentioned calling them up or going in asking for support and being provided with a list of services to call. This is echoed by one mother's experience, *"C'est un outil la pédiatrie. Toutes les ressources sont là. […] Moi, je vais souvent appeler." (Parent).* Another mother discussed the CPSVH's relationship with the schools in the community and how that has supported her child at school. *"Ils sont vraiment présents pour nous aider. Ils ont des liens avec l'école. Quand on fait des rencontres à l'école pour les diagnostics et tout, ils sont présents." (Parent)*

4.3.4 Social Support

The provision of social support, specifically informational, instrumental, appraisal and emotional support, is enabled by the structures and behaviours at the CPSVH. The following details the provision of each type of social support at the CPSVH.

4.3.4.1 Informational Support.

The CPSVH provides families with educational, social and medical information during medical appointments, informal chats, activities, and follow-ups. Confidence (or trust) emerged as a key factor impacting the exchange of information and was fostered by the relationships between the health professionals and families. Families share their lives with the health professionals and described feeling as though they could lean on them for support and information during times of need.

Many parents described having confidence in the CPSVH. This confidence developed over time and played a significant role in information exchange, where parents trusted the information being provided to them and were more willing to share. For one mother, the CPSVH had to prove to her that she could have confidence in them, and then extended it to their affiliated community resources, opening up doors for her *"[…] ils m'ont prouvé que je pouvais avoir confiance en eux et si tu as de la confiance en eux et ils ont de la confiance dans d'autres organismes, tu vas avoir de la confiance en eux aussi." (Parent)* Similarly, the health professionals also described having confidence in the parents, who were portrayed as competent and experts when it comes to their child(ren). This impacted communication and how information was provided by the health professionals (e.g., the health professionals provided information when asked questions on topics such as breast feeding, access to services, or medical conditions),

aligning with the social pediatrics approach. *"On répond aux questions des parents parce que les parents sont des experts. […] Faque je vais répondre à tes questions puis je vais aller t'aider chez vous quand tu as besoin." (Health Professional)* Several parents discussed walking-in or calling up the CPSVH to ask questions or seek advice about various topics, such as access to furniture, legal aid, breastfeeding , sleep, and ADHD, and being provided with a list of resources, with information on the topic, or simplified explanations. No matter the question, most of the parents described feeling reassured knowing that the CPSVH was there to support them and would have a solution. As described by one mother:

> *"I can go into the pediatric centre and (the health professional) will know where to guide me to get help. I know I have that support, so I feel reassured . Whereas if I didn't, I would probably freak out. I would have to Google: What do I do?" (Parent)*

Although the children didn't explicitly mention confidence, several children in the study compared the CPSVH to a mini school where *"on peut rencontrer d'autre monde c'est comme si on commencerait l'école puis vous (the health professionals) vous êtes comme des profs parce que vous essayez de montrer comment être dans comme le comportement ou comment agir devant quelqu'un." (Child)* The CPSVH provides children with information to support their learning, growth, and well-being, which from the children's perspective was often in the form of activities. One child listed many of the activities she has participated in at the centre: *"le théâtre, le Kung Fou, l'art plastique, la cour d'échec, la cour de natation, groupe de techno, le droit des enfants". (Child)* For example, the activity to learn about the UN Convention on the Rights of the Child was

provided to a group of adolescents who through the activity gained an improved understanding of the convention and its applicability to their everyday lives. This had a positive impact on many of the children who participated, and meaning was attributed to physical spaces in the centre.

> *"Um, je faisais le droit des enfants avec les gens. […] tout le monde qui faisait partie du groupe, il y avait mon frère, il y avait moi puis il y avait d'autres personnes. On avait dû spray puis on a mis plein de couleurs. Puis là avec ça on fait le discours, on est parti dans une salle spéciale pour le faire, je me rappelle encore puis là en fait j'ai dit le dernier sketch puis ça m'a vraiment marqué. (Child)*

Further, a few of the children also mentioned how information provided by the health professionals to their parents impacted life at home. One child talked how it resulted in a change in the rules and more rules, *"ma mère a changé les règles. […]que j'ai pas aimé." (Child)* Another child discussed about how they would eat and watch TV, but now *"je vais juste dehors. […] ma mère nous a obligée." (Child)* The child seemed content with their behaviour change as it gave them more of an opportunity to play with their friends in the community. Despite the mixed experiences, the children all seemed to agree that the CPSVH and information provided to them, and their parents supported them to *"mieux comprendre les choses," (Child)* and *"pour nous aider." (Child).*

4.3.4.2 Instrumental Support.

Instrumental support, the provision of non-clinical tangible assistance or goods, is provided by the CPSVH to the families, often to the extent to which the health professionals go beyond their clinical roles in providing this support. In sharing their

experiences, the provision of food by the CPSVH emerged for many of the parents and children. Several children mentioned enjoying the meals that are served and all the candy while hanging out or during activities. *"Il y a toujours une collation." (Child),* said one child. The children described eating all sorts of food, such as lasagna and spaghetti, and shared many laughs as they were reminded of those times. As observed at the CPSVH, the health professionals also prepared snacks or a meal before and/or during activities and offered snacks before and/or during medical appointments. This might include sliced apples, cheese and crackers, toast with peanut butter, and/or bananas.

Moreover, in the kitchen, families can help themselves to food in the fridge, on the counter and in the cupboards. On occasion, fresh baked goods, such as muffins or cookies sitting on the stove, are offered to the families. The CPSVH also provides families with food and other items (e.g., baby formula) to take with them and will deliver it to their homes, if needed. *"Des fois un parent a plus du moutarde pour le lendemain, ben on va lui amener de la moutarde," (Health Professional)* said a health professional reflecting back. Another mother mentioned calling the CPSVH for food on occasion because she was too shy to go to the community food bank, "*ça m'est déjà arrivé, j'ai appelé la pédiatrie pour nous amener de la nourriture parce que j'étais trop gênée d'aller à la Manne de l'Île." (Parent)* This illustrates the sense of comfort families have when it comes to relying on the CPSVH for support.

Also, the CPSVH hosts events where families come together for a meal. For example, the annual holiday celebration where a buffet style meal is served to the families, and often prepared by volunteers. As part of the celebration, gifts such as toys and books are given to the children. A few of the parents also mentioned an annual dinner

at a restaurant in the community, provided by the CPSVH. *"Une fois par an avec la pédiatrie, nous allons dans un restaurant, au buffet des continents, et la pédiatrie paie pour nous pour manger là-bas." (Parent)* At the dinner, the families can socialize with one another while enjoying a meal.

The CPSVH also provides families with books, clothes, and toys from community donations. Before and after medical appointments you'll often see parents (or caregivers) going through bins of clothes while chatting with another parent or a health professional, and then leaving the centre with bags full. Parents will also stop in if they're in the area to go through the bins. During the winter, the walls at the CPSVH are lined with boxes filled with hats, coats, boots, scarves, and mitts for children and adults. *"En hiver, il commence à faire froid, (the CPSVH) commence à se remplir de familles qui sont venues mener leurs vêtements." (Parent)* The CPSVH also has bins of toys and books for the children to choose from and to take home, and this is particularly evident during the holiday season. Books can also be taken from the bookshelf in the living room at any time. Most of the families at the CPSVH rely on the donations of clothes, books, toys and other items throughout the year, as they may not have the means to be able to afford them. *"Pour mes enfants, je n'ai pas l'argent nécessaire" (Parent)* The CPSVH helps

ensure that the families have what they need.

Figure 19: Bins of winter clothing

Further, the CPSVH provides families with direct support as it pertains to medical and social services. The health professionals sit with the parents often at the dining table or on the sofa at the CPSVH and help them complete paperwork for services such as childcare (e.g., daycare). Moreover, the health professionals accompany the families to medical or other appointments (e.g., with the school or daycare). As described by one mother, *"(the social worker) helped me go to appointments with (daughter). She helped me get (daughter's) blood work done, which was not fun. I had a lot of anxiety. She helps me a lot." (Parent)*. Many parents felt relieved to know that the health professionals were

there to accompany them should they feel a sense of discomfort or anxiety. Transportation by car or on foot is also often provided by the health professionals, where they pick up the children from school or home and drop of them off when the activity is over. During the summer, the health professionals planned an afternoon at the community pool. The parents were phoned in advance to notify them, and the health professionals drove to pick up the children from their homes, and dropped them off after. This helps ensure that the children can participate and relieves the parents from having to do the commuting. Finally, the CPSVH provides financial funding to give children the opportunity to participate in activities of interest, such as specialized overnight camps and cooking camps, that they might not otherwise have the opportunity to do. As described by one mother, *"la pédiatrie a envoyé mon fils dans un camp de cuisine payé par le centre. (Parent)*

4.3.4.3 Appraisal Support.

The social pediatrics approach encourages the participation of parents and children and considers the child's social ecosystem and voice in the provision of social and medical care. Similar to collaboration, the horizontal power structure and horizontal approach to communication enables the sharing of information and feedback, and provision of appraisal support. The parent in social pediatrics is considered "*comme étant quelqu'un d'extrêmement compétent puis d'être un expert." (Health Professional)*. This shapes how information is delivered and the types of information provided. Also, the health professionals described the importance of empowerment, and giving parents power, aligning with the core premise empowerment (see section 2.3): *"on le dit, on nomme ça, je vais dire: « tu es une bonne mère, tu es un bon père, je suis impressionné,*

good job » puis de voir des petits yeux se remplir d'eau." (Health Professional) One mother described being told by the health professionals at the CPSVH that, "*[the mother's] une bonne mère, parce que [the mother] est capable*" and how that positive feedback impacted her confidence and feelings toward her ability to be a mother to her child.

Empowerment also emerged with the children at the CPSVH. Reflecting on their experiences, many of the children described feeling a sense growth and self-improvement through feedback and tailored information provided to them during activities, informal social interactions, and medical appointments and follow-ups. As such, many of the children felt respected by the health professionals and more confident. This also supported their improved understanding of right and wrong, of themselves, and aspects of life. One child depicts the positive impacts: "*ça m'a rendu plus forte. Avant, j'avais peur de parler devant des gens, puis j'ai dit bien non avec toutes les affaires qu'on avait placées, alors ça m'a marqué positivement puis ça m'a renforcé."*

4.3.4.4 Emotional Support.

The children and parents discussed feeling emotionally supported by the CPSVH. Words such as, *"amour", "compassion",* and *"à l'écoute"* were used to describe the provision of emotional support. Many of the children discussed the importance of acceptance; being accepted by the health professionals for who and what they are, no matter what. As described by one child: "*(the health professionals) nous accepte comme on est puis n'importe quoi que tu es ils vont juste t'accepter" (Child)* This was also echoed by many of the parents who described not feeling judged by the health professionals and able to be themselves.

Acceptance helped foster a sense proximity (or closeness) between the health professionals and the families. As such, families felt like they could open up to the health professionals about their lives. Parents described sharing intimate details, such as personal mental health issues, family violence, and child upbringing difficulties. Many parents were reassured knowing that the centre was *"just a phone call away" (Parent)* if they needed someone to talk to. The health professionals mentioned occasions where they were there to listen to families, *"(parents) nous appellent quand ils ont juste besoin de parler pendant 15 minutes ou 2 heures." (Health Professional).* A mother shared her experiences going into the centre to talk during a time where she was struggling with her mental health and had family issues. *"Sometimes I would just walk in, and I would see (name of social worker) and just start crying. Just bawling my eyes out and they would give me a hug and tell me it's ok, we have a plan." (Parent)* Several of the children also shared memories where they came to the CPSVH to talk to the health professionals during challenging times in their lives. Examples shared by the children included parental fights at home or injury due to a car accident. One child even compared the health professionals to "extra mothers" who they can lean on for emotional support: "*C'est comme des extra parents, bien des extra mères"(Child).* As such, the parents and children all felt as though the health professionals had confidence in them and were there to support them and help them find solutions, if needed, no matter the situation.

4.4 Mapping the Family Experience using Complex Adaptive Systems at the Macro-Meso and Micro-Levels

In this section, the family experiences are overlayed on to CAS at the macro-meso and micro-levels to describe the CPSVH as a system and the interactions between the

system components, while taking into consideration the social space and its role in shaping the multi-dimensional space configurations.

4.4.1 Mapping at the Macro-Meso Level

Table 5 maps the child and parent experience at CPSVH, using a CAS lens at the macro-meso level (e.g., community organizations, policies, procedures, actors etc.). Given that the CPSVH is seamlessly interconnected with the community, a macro-meso level analysis is appropriate. An example is provided for each tenet at the macro-meso level (see table 5). The following examples describe how CAS shapes the family experiences in the social pediatrics context. Complexities are experienced by the families (children and parents) and health professionals at the centre. Section 4.4.2 provides a micro-level analysis using CAS illustrating the interactions between the system components and the social space.

Table 5. Macro-meso level mapping of the family experience at the social pediatrics centre

Tenets of Complex Adaptive Systems	**Mapping the Child and Parent Experiences in the Social Pediatrics Setting** (see Table 1 for definitions of tenets)
Non-linear processes	Funding availability (e.g., community fundraising) impacts services offered at the centre.
Emergent behaviours	The actors adapt to changes in supports and services being offered by the centre and other community organizations (e.g., the social worker going with a mother for her child's blood test).
Feedback loops	The parents provide information to the health professionals that is then transferred back into the system regarding the health and well-being of the child(ren).

Requisite Variety	Unique attributes of the families (e.g., past experiences, social networks, backgrounds etc.) that influence health care delivery.
Co-evolution	The tailoring of services (e.g., activities for children) to the evolving needs of the families.
Connectivity	The relationship between the CPSVH and other resources or organizations in the legal, medical, educational and psychosocial communities.
Simple rules & non-discrete boundaries	Examples of simple rules and boundaries include, centre protocols, procedures, and polices (e.g., no jumping on the couch). These have often emerged organically.
Self-organization	The health professionals bending protocols or using non-traditional resources with the families.

4.4.2. Mapping at the Micro-Level

Overlaying CAS on to the results of the study – specifically the child, parent and health professional experiences – at the micro-level provides an understanding of the CPSVH as a system, and the interactions between its system components, informing the delivery of social and medical services and the provision of social support to vulnerable families. Below are themes that emerged from this study using the CAS tenets.

1. **Care is tailored to and centered on the child**

In alignment with the UN Convention on the Rights of the Child, the provision of care at the CPSVH is centred on the child. Requisite variety, such as the unique characteristics of the child (for example, a medical condition), requires the health professionals to self-organize, tailoring medical care and services to the child's specific needs. For example, if a child is experiencing challenges in a specific area (e.g., socialization), the health professionals come together to determine the challenge(s) and the necessary supports and services, by leveraging their multi-disciplinary skills and expertise. The health professionals also engage and partner with the parents or guardians

on the provision of care, which results in a feedback loop.

2. Connectivity impacts experiences and emotions

Connectivity, specifically the relationship between health professionals and families, emerged as an important component that shaped experiences and emotions, and the emergent social space at the CPSVH. Relationships between the families (the child and their social circle) and the health professionals, and between families developed. Proximity and the social and physical spaces helped facilitate the establishment of these relationships and shaped interactions – both formal and informal. Many of the children described feeling listened to when they shared aspects of their life or experiences with them. Most of the parents also mentioned not feeling judged allowing them to openly talk with the health professionals, facilitating information exchange, collaboration and the provision of care. The experiences of the children and parents illustrate connectivity.

3. The social space co-evolves

The social space at the CPSVH is influenced by the conceived or physical space (or physical design tailored to the needs of the child) and is shaped by and evolves with the lived experiences and meaning attributed to it by the children, parents and health professionals, and the social interactions within it – both formal and informal. The social space also interconnects the structures, behaviours and social support (as illustrated in figure 6) and evolves to the specific needs of the child. For example, in the living room area, children laugh while playing a board game on the sectional sofa, while parents in that same space on a separate occasion share their lives with the health professionals and seek emotional support. The social space creates a sense of place for the families and the health professionals and evolves as the families' needs change.

4. Rules and boundaries shape behaviours

Rules and boundaries as well as the multi-dimensional spaces informed behaviours - social interactions and collaboration - shaping the families' experiences. For example, a core premise in social pediatrics is partnerships, the one between the families and health professionals. This partnership is fostered by a horizontal power structure and a horizontal approach to communication, which encourages participation and shared involvement in decision-making. The spaces at the CPSVH, in particular its safe and non-judgmental environment, also shaped behaviours enabling the families and health professionals to be themselves and communicate openly (also supporting connectivity). Rules and boundaries (such as the horizontal power structure and approach to communication) shape behaviours between the parents, children and health professionals at the CPSVH, and is key to providing child-centred care.

5. The families' evolving non-linear circumstances result in emergent behaviours

Non-linear processes, such as the families' life circumstances, resulted in emergent behaviours requiring the health professionals and families to adapt or co-evolve. The health professionals at the CPSVH adapt programming and services to the families' evolving life circumstances. The families then provide the health professionals with information regarding their needs, resulting in a feedback loop and the tailoring of programs and services. For example, the health professionals often pick up the child(ren) from their home or school and bring them to the CPSVH for activities, and later drop them back off. This is an emergent behaviour in response to the families non-linear and complex circumstances, resulting in co-evolution and the health professionals going

above and beyond to provide social support to the families.

4.5 Mapping to the UN Convention on the Rights of the Child

The UN Convention on the Rights of the Child (also referred to as the Convention) is the most globally accepted human rights treaty that affirms the equal rights and needs of the child without distinction. It is a historic commitment made by world leaders in 1989 to protect and fulfill the rights of every child (UNICEF, n.d). On December 12, 1991, Canada ratified the Convention resulting in advancements in laws, policies, and practices impacting children (Noël, 2022). The Convention has 4 core rights - protection, provision, participation, and specific protections and provisions for vulnerable populations - and is made up of 54 articles (UNICEF, n.d).

The social pediatrics approach, a socially innovative and child-centered model that fosters accessible and equitable health care delivery, uses the UN Convention on the Rights of the Child in its delivery of care for vulnerable children and families. The CPSVH operationalizes the social pediatrics approach and leverages the Convention in their provision of medical and social supports and services. Specifically, the Convention is used in their clinic when providing care to families (e.g., cards with the rights are displayed for the children to facilitate the discussion), and groups of children and adolescents come together to learn about their rights as an organized activity. This creates an environment that supports the disclosure of information by the children (e.g., about their health, family situation), given their awareness of their rights and the trusting relationships established with the health professionals.

Macro-level initiatives like the Convention provide broad direction which can make implementation at the micro-level more challenging. Table 6 provides a formative

assessment by mapping the family experience at the CPSVH at the micro-level to the Convention at the macro-level, specifically the four core rights and related articles. Given that the CPSVH provides health care delivery to vulnerable children and their families, the fourth right - specific protections and provisions for vulnerable populations – has been excluded, as the other three rights and associated child and parent experiences fall within that context (see table 6 footnote).

Table 6: Mapping the UN Convention on the Rights of the Child to the family experience in a social pediatrics setting

Core Rights from the UN Convention on the Rights of the Child[1]	**Example Articles from the UN Convention on the Rights of the Child** (Child-adapted language)	**Mapping to the Child and Parent Experiences in a Social Pediatrics Setting**
Protection	Article 19: You have the right to protection from being hurt or mistreated, in body or mind. Article 3: When adults make decisions, they should think about how their decisions will affect you. All adults should do what is best for children. Governments should help the people and places responsible for looking after children.	• The tailored approach to health care delivery is centered on the child to ensure decision-making is in their best interest and that they are protected. • The social pediatrics approach creates an environment that supports the disclosure of information by the children (e.g., about their health, family situation), given their awareness of their rights and the trusting relationships with the health professionals.

[1] There is a fourth right called specific protections and provisions for vulnerable populations. This right has been accounted for the protection and provision rights. The CPSVH provides care specifically to vulnerable populations.

Provision	Article 24: You have the right to the best health care possible, clean water to drink, healthy food and a healthy and safe environment to live in. All adults and children should have information about how to stay safe and healthy. Article 27: You have the right to food, clothing, a safe place to live, and opportunities to do what others can. The government should help families and children who cannot afford this.	• Medical and social support and services are tailored to the families, by leveraging a team of health professionals with multi-disciplinary skills and expertise, and intersectoral collaborations in the community to address the social determinants of health. • Food and clothing are provided to the families. Food is provided at the centre (e.g., during appointments or activities) or can be brought home (e.g., baby food). The centre also takes the families to restaurants and provides grocery store gift cards. Clothing, books and toys from community donations are also available for the families.
Participation	Article 12: You have the right to give your opinions freely on issues that affect you. Adults should listen and take your views seriously. Article 13: You have the right to share freely with others what you learn, think, and feel, by talking, drawing, writing or in any other way unless it harms other people. Article 18: You have the right to be raised by your parent(s) or a guardian. All your parents or guardians should always consider what is best for you.	• The children and adolescents described their ability to voice their thoughts and opinions, and speak openly when at the CPSVH, allowing them to be themselves and disclose information about their health and well-being, and ecosystem. • Social pediatrics ensures a horizontal approach to communication and a horizontal power structure which fosters partnerships and encourages the participation of parents and children, fostering involvement, active participation and shared decision-making.

	Governments should help them when needed.	

Also, the child and parent experiences discussed in the table align with the social pediatrics core premises of empowerment, networks, and partnership (see section 2.3). Drawing on the core right provision as an example, the CPSVH provides medical and social supports and services tailored to vulnerable families by leveraging a team of health professionals with multi-disciplinary skills and expertise as well as intersectoral collaborations in the community to address the social determinants of health. This echoes the social pediatrics core premise of networks and partnerships.

Although social pediatrics is an accessible and tailored approach to health care delivery, social pediatric centres, such as the CPSVH, experience challenges with funding for their programs and services, and with access to health human resources impacting sustainability. This can impact their ability to provide tailored medical and social supports and services to families. Also, given the complexity of some family situations, maintaining the child's rights in certain situations may be more challenging given legal or other requirements (e.g., child custody agreements). Nonetheless, the CPSVH self-organizes and finds innovative ways to ensure the continued provision of quality care for the children and families it supports, even despite limited access to resources or other challenges.

CHAPTER 5: DISCUSSION

This thesis set out to answer the overarching question: What are the experiences of children within the space configurations of the CPSVH, and what impact do the space configurations have on the provision of social support? Additional questions included:

1) How can the physical and social space configurations be defined and what do they represent?

2) How do these space configurations at the social pediatrics centre enable the development and sustainment of social interactions and collaboration? b) How do the formal and informal spaces at the centre interplay?

3) How do these space configurations inform broader dynamic health systems transformation, in terms of health system design in a way that better supports vulnerable populations?

These research questions were answered in the results section (Chapter 4) and were used to inform the development of the Social Space Model of Health Care Delivery (figure 6). This chapter discusses the results of this study and provides recommendations to inform broader health care system transformation. The limitations and strengths of the study and areas for future research are also outlined.

5.1 Discussion of Results

Experts advocate for a shift to child-centred care as it upholds the values of the UN Convention on the Rights of the Child and can improve the experiences of children and adolescents in health care systems (Davison et al., 2021). The CPSVH is a socially innovative empirical social pediatrics centre that operationalizes the social pediatrics model. It draws on the UN Convention on the Rights of the Child which is at the heart of

their medical practice – one that is directly centred on the child – and addresses the social determinants of health.

The results from this study provide an understanding of how a child interacts with the multi-dimensional space configurations at the CPSVH, and the extent to which the unique design is socially supportive from the child's perspective. The extent to which the CPSVH spaces are socially supportive can directly impact the health and well-being of vulnerable children and their families, aligning with the United Nations' Sustainable Development Goals (SDGs): i.e., SDG 3 which is to ensure the health and well-being for all (United Nations, n.d.).

The Social Space Model of Health Care Delivery presented in this thesis (see figure 6) provides a means to understand the multi-dimensional space configurations at the CPSVH and how they interact to influence the provision of social support. This model provides language for modelling and understanding space configurations in complex health care delivery contexts, and in the delivery of child-centred care (e.g., social pediatrics). It considers the social pediatrics centre's unique features and social nature – often a challenge with social innovations (Milley et al., 2018). The model provides insights from a systems perspective, using CAS, into the social pediatrics operations, in particular the system components, their interconnectedness (e.g., connectivity) and evolution over time (see section 4.4). Enabled by the Social Space Model of Health Care Delivery, a key finding of this study is the emergence of the social space. The social space emerged as a concept that interconnects the structures, behaviours and social support. The social space also evolves to meet the child's needs. Guided by the Social Space Model of Health Care Delivery, the following discussion focuses on the

structures, behaviours, and social support at the CPSVH and their interconnectedness. This refers to the results of this study and discusses their importance in the provision of child-centred care for vulnerable children and their families.

5.1.1 Structures

The CPSVH is an empirical social pediatrics centre located in the heart of Vieux-Hull (in Quebec). It was conceived as a clinic that provides a range of medical and social services to families. Social pediatric centres are located in disadvantaged communities within proximity to the families it serves and community services, mitigating barriers to care (Clément, Berube, & Moreau, 2016). The structures at the CPSVH identified in the Social Space Model of Health Care Delivery include physical spaces, people, and processes. These structures are an interconnected social triad brokered by emotions influencing the child's experiences and the provision of social support.

The physical spaces at the CPSVH are unique to the CPSVH; however, there are other social pediatric centres under the Foundation Dr. Julien (e.g., in Quebec) with similar physical features. Unlike the more traditional model of medical clinics, the physical spaces, with involvement from the community, were designed to be home-like and centred on the children it serves, aligning with the UN Convention on the Rights of the Child (see section 4.5). Based on the results of this study, this ensured that the physical spaces were child-friendly and tailored to meet and evolve with their specific needs. The CPSVH was considered a home-away-from-home for many parents and children in this study, and a second home for many. The home-like physical spaces such as the open living room area with large windows, bright painted walls with artwork, and a comfy sectional sofa with walls lined with books and toys was as a place of comfort for

most of the children in this study. Research illustrates that pediatric health care environments, such as hospitals and clinics, that are child-friendly and include colour, artwork and playing space are more desired by children (Nasab, Azeri & Mirbazel, 2019; Water et al., 2017). This illustrates the importance of creating health care environments tailored to the population it serves, particularly for vulnerable populations, as it shapes experiences and impacts the delivery of care.

Another space at the CPSVH that is also unique is the clinic room which is unlike most medical clinic spaces with its large oval "kitchen" table, a big one-way window that brightens the room, and a half wall that allows for privacy during medical exams but is still open. The findings from this study showed that this space serves as a catalyst for interactions enhancing the opportunity for participation and collaboration, while also supporting a horizontal approach to communication. This aligns with the social pediatrics approach and the UN Convention on the Rights of the Child (see section 4.5). It also illustrates the interaction between the social, conceptual, and physical spaces (see section 4.2.1). Moreover, the office space at the CPSVH was intentionally designed as an open-concept workspace with desks arranged in a way that fosters communication and collaboration among the health professionals. This finding is consistent with the findings of Lyson et al. (2019) who found that open shared workspaces facilitate structured and unstructured communication and collaboration enabling the provision of high-quality patient care.

People are part of structures. The CPSVH is made up of a multi-disciplinary team of health professionals that support children and their families. Many of the children described the health professionals as gentle, honest, caring, respectful, and lovable. The

children also described feeling listened to when they shared aspects of their life or experiences with them. This contributed to the development of relationships between the families (the child and their social circle) and the health professionals supporting information exchange and disclosure. Forming trusting relationships or a bond with openness and transparency has been shown in the literature to improve child and adolescent health care experiences resulting in positive emotions (Davison et al., 2021). Volunteers also play an important role at the CPSVH by providing support and services, such as food preparation, handy-man type work, and the organization and folding of clothes. Volunteers are pertinent to sustaining community-based health care services particularly when access to resources are scarce, which is often more of a challenge for developing countries. For example, in Sub-Saharan Africa volunteers in the health care system engage in the provision of health promotion and disease prevention to support the delivery of health care services enabling the health and well-being of the community at large (Leon et al., 2015).

Processes emerged at the CPSVH. The processes were informed by the social pediatrics approach and governance structure at the centre and were also unique to each family and tailored to the child's needs. The physical spaces and people (e.g., the multi-disciplinary team) at the CPSVH also played a significant role in shaping these processes. For example, a process described by many of the children was going straight for the toys, chatting with their friends on the sofa in living room or eating in the kitchen as one of the first things they did at the CPSVH. This illustrates a pattern of movement and social interactions in the space (e.g., kitchen, living room) shaping the child experience (Saidi, de Villiers, & Douglas, 2017). It also illustrates the interaction between the social and

physical spaces. Another finding is the proximity or closeness between the health professionals and families. For example, a process at the CPSVH is the visitation of families and children by the health professionals prior to appointments or during informal, unplanned visits to the centre. The health professionals often greet the families giving the child(ren) and sometimes parents (or grandparents) a hug. Extant literature highlights the importance of a healthy relationship between the health professional and patient given its impact on the provision of high-quality care (Ward, 2018). This closeness helps foster a healthy relationship between the health professionals and families– one grounded in trust and communication. As such, tailoring processes to the needs of the population is an important consideration when providing care, especially for vulnerable hard-to-reach populations.

5.1.2 Behaviours

The behaviours that emerged at the CPSVH included rules of engagement, social interactions, and collaboration. Our results underscore the relationship between structures and behaviours impacting the provision of social support. This relationship is influenced by the social space given the interconnectedness and evolves with and shapes the lived experiences of the children and their families.

Rules of engagement, a behaviour that emerged from the results of this study and at the CPSVH, were implicitly occurring organically as well as explicitly (e.g., signs on a fridge or office door) or more formalized. These rules of engagement were shaped by the social pediatrics approach, which draws on the UN Convention on the Rights of the Child. Many of the rules and practices were integrated into the processes at the CPSVH, illustrating the interaction between structures and behaviours. For example, formal rules

governed access to areas within the centre, such as the donation room or office, or provided direction or guidance.

This study also illustrated the organic development of implicit rules and practices at the CPSVH that evolved to the needs of the child(ren), aligning with a child-centred approach. For example, food is typically provided to the children and their families during medical appointments or activities by the health professionals (and sometimes by volunteers). Food insecurity, an economic and social condition, is common among low-income households, particularly those with children (Marshall et al., 2022). The provision of food at the CPSVH was significant to the children in this study. Many of them shared memories eating food with their friends, families, and the health professionals, so much so that the kitchen was considered one of their favourite spaces at the centre. This illustrates the interaction between structures, behaviours, and social support. Parents also described being able to serve themselves given their access to the fridge and other parts of the kitchen. The health professionals acknowledged the families' social context and were empathetic towards it, seeking to address their specific needs – a trait that is highly valued by society in medical settings (Schwartz et al., 2021). This finding elucidates the importance of a more socially driven approach to health care delivery that considers the social determinants of health, especially for vulnerable populations. This is a shift away from the one-size-fits-all model by considering the patient's social context and specific needs in the delivery of care.

Moreover, parents discussed going to the centre, despite not having an appointment or planned visit, to hang out and chat with other parents or the health professionals, to help at the centre, or to just take a break and unwind. For some parents

in this study the centre was an escape when they had nowhere else to go, while others described going an hour or two before appointments to socialize with the health professionals or other families. This resulted in the development of new friendships and illustrated the interaction between structures and behaviours. This finding aligned with the findings from Clément, Berube, & Moreau (2016) who found that in the social pediatrics setting parents not only developed relationships with the health professionals, but relationships also surfaced between families. This finding is notable as vulnerable hard-to-reach populations typically avoid involvement with health care services and are less engaged due to life complexities (Boag-Munroe & Evangelou, 2012). As such, there is a need to create safe, comfortable, and judgement-free spaces that provide vulnerable populations with the opportunity to interact and develop socially supportive relationships.

The social interactions at the CPSVH were influenced by the structures, such as the home-like physical spaces and people. This shaped the social interactions between the children, parents, and health professionals during formal (e.g., planned activities) and informal social gatherings. Many of the children, parents and health professionals in this study described being able to be "authentic" or themselves. This study affirms the importance of developing trusting relationships, particularly that between the health professionals and families, as it facilitates participation and the disclosure of information. Trusting relationships between health professionals and patients has been identified as key to engaging vulnerable or hard-to-reach populations (Boag-Munroe & Evangelou, 2012). However, traditional social services typically have more difficulty developing this bond with vulnerable families due to a greater fear of judgement (Clément et al., 2015). This illustrates the importance of the social space when delivering care to vulnerable

populations.

The children in this study also shared memories with their friends, families and the health professionals socially interacting during activities (e.g., holiday celebrations, chess club, yoga, etc.) in the spaces at the centre (e.g., kitchen, living room, multi-purpose room) as well as during medical appointments illustrating the interplay between formal and informal spaces. This shaped their lived experiences and the meaning they attributed to the spaces (Merrifield, 2006; Saidi, de Villiers, & Douglas, 2017). The physical and social space at the CPSVH, from the open concept living room with a comfortable couch to the welcoming judgment-free environment, facilitated the development of strong relationships and social interactions. This highlights the importance of spaces that foster social interactions for vulnerable populations.

Moreover, collaboration emerged in this study as a behaviour and fundamental to the provision of supports and services at the CPSVH. The CPSVH, like other social pediatric centres, draws on multi-disciplinary and intersectoral collaborations (e.g., legal, medical, educational, and psychosocial) in the community which provides a more holistic understanding of the child, while also addressing the social determinants of health (Clément et al., 2016; Connors et al., 2022; Julien, 2004). This provided the families in this study with access to supports and services, such as professional legal services or basic needs like furniture. For many, the CPSVH was “a tool” connecting them to the needed supports and services. This aligns with the social pediatrics core premise networks (Julien, 2004) and from a systems perspective it illustrates the interaction between the micro and macro-meso levels as well as the integration of the medical and social systems. This also aligns with Sacks et al. (2019) expansion of the WHO Health

Systems Framework that considers the outcomes related to healthy communities and articulates the need for resources and investment in communities, given its impact on vulnerable populations such as women, children, and families.

At the micro-level, collaboration occurred between the health professionals, and the health professionals and families (i.e., parents and children). The health professionals at the CPSVH described their team as multi-disciplinary and collaborative, where knowledge is shared and decisions are made together as a unit, supporting continuity of care. A team-based approach results in shared responsibility and role fluidity between health professionals fostering a supportive environment and an agile organizational structure (Lyson et al., 2019). The friendships between the health professionals further facilitated collaboration and its sustainment over time. The physical space at the CPSVH also helped foster collaboration between the health professionals. The open concept layout of the CPSVH and office space where desks are facing one another enabled communication and collaboration between the health professionals. The physical space and layout are critical to creating an environment that enables multi-disciplinary collaboration and innovation (Saidi, de Villiers, & Douglas, 2017) as well as team effectiveness (Lyson et al., 2019), and illustrates the interconnectedness between structures and behaviours.

Moreover, a partnership emerged between the health professionals and parents in support of the child's health and well-being. Partnership is a core premise in social pediatrics and denotes a shared involvement in the decision-making process (Julien, 2004). This concept also aligns with the United Nations Conventions on the Rights of the Child (see section 4.5). The emergent partnership was shaped by the informal social

interactions and the safe and non-judgmental environment at the CPSVH, allowing the families and health professionals to be "authentic" or themselves. This also enabled the sustainment of collaboration between the parents and health professionals. Moreover, the physical space fostered this partnership supporting collaboration, particularly the extent to which the space is tailored to the needs of the child and the interplay between the formal and informal spaces. For example, the comfortable sofa in the living room was not only a favourite spot for social interactions, but it was also where formal interactions and conversations sometimes took place.

Further illustrating the nature of this partnership, several parents in this study described having an equal relationship with the health professionals where information and knowledge was shared; the health professionals provide the medical perspective and the parents provide their experience-based perspective, which is taken into consideration and listened to by the health professionals. Our results affirm that a horizontal approach encourages the participation of parents and children supporting shared decision-making and empowering the child and family to be active participants in their health and well-being – another core premise in social pediatrics (Julien, 2004). This is echoed in the design of the physical space at the CPSVH, but in particular the open concept clinic room with the "kitchen" table which enables communication between the people at the table limiting physical barriers. This participatory approach, one that is based on partnership employed at the CPSVH, has been documented in literature to attract vulnerable families more so than the more traditional approach (Lacharité, 2014).

5.1.3 Social Support

The provision of social support emerged in this study and was interconnected to

the structures and behaviours at the CPSVH. This study provides an understanding of how the structures and behaviours interact to influence the provision of social support, while considering the role of the social space. The following details the provision of social support at the CPSVH for each form: informational, emotional, instrumental and appraisal.

Informational support was provided to the families at the CPSVH during medical appointments, informal chats, activities, and follow-ups. Many parents in this study described walking-in to, or calling up the centre to seek information on topics ranging from access to furniture, to breastfeeding, ADHD, and sleep, and being provided tailored information often with simplified explanations. The children and parents at the CPSVH also shared information about their lives, and sometimes intimate details with the health professionals, and felt as though they could lean on them for information or help. The results from this study illustrate the trusting relationships that formed between the health professionals and families, which were supported by the social space. The social space created a sense of place for the families and health professionals that enabled relationship building through interactions. Trust has been identified as the foundation of the physician-patient relationship that is built over time (Pellegrini, 2017). Our findings echo the findings of Brooks et al. (2017) that found that trust and tailoring information to the patient's unique informational needs is essential, but noted this in the older adult population. The health professionals at the CPSVH also described having confidence in the parents, who were portrayed as competent and experts on their child(ren), aligning with the horizontal power structure in social pediatrics and impacting communication (Julien, 2004). This study affirms the importance of mutual trust between the health

professional and the patient, and the importance of the social space in fostering relationships enabling the provision of informational support in health care settings.

The results from this study demonstrate the provision of instrumental support provided to the families by the CPSVH. The health professionals often went beyond their scope of practice or clinical roles to provide support. The provision of food by the CPSVH emerged as significant to many of the parents and children. For example, the children discussed the meals they enjoyed with their friends and family, while hanging out or during activities at the CPSVH, often prepared for them by the health professionals or volunteers. This example illustrates the interaction between the structures and behaviours influencing the provision of instrumental support. Volunteers play a significant role in the provision of community-based health care services at the CPSVH and in countries with limited resources such as Nepal where female volunteers have contributed to the realization of Nepal's health goals (Kandel & Lamichhane, 2019). The CPSVH also provides families with food or other items (e.g., diapers) to take with them, and will even deliver it to their homes. Dos Santos Interlenghi & Salles-Costa (2015) found that among families living in poverty in Brazil, social support (also including emotional and informational support) may contribute to mitigating household food insecurity. In addition to the provision of food, the CPSVH also provides families with clothes, books, and toys from donations from the community.

Additionally, the CPSVH provides families with direct support with medical and social-related activities, in support of the child's health and well-being. For example, the health professionals' complete paperwork with the parents, while seated at the dining room table, for social and other services such as childcare. This ensures the paperwork is

completed and submitted, and illustrates the interplay between formal and informal spaces at the CPSVH. The health professionals also accompany the families to medical or other appointments and provide transportation to the children to and from activities. It is crucial that supports and services provided to vulnerable populations are responsive and tailored to their specific needs (Boag-Munroe & Evangelou, 2012).

The provision of emotional support at the CPSVH emerged in this study. The children and parents felt like they could communicate honestly with the health professionals and that the health professional would be there to comfort and support them. Many of the children discussed the importance of acceptance (for who and what they are), which was echoed by the parents who described their ability to be themselves without the feeling of being judged – pertinent for vulnerable hard-to-reach populations (Boag-Munroe & Evangelou, 2012). The social pediatrics approach ensures that families are provided with a safe, non-judgmental, flexible, and comfortable space fostering relationships and their perceptions of support (Clément, Berube, & Moreau, 2016; Julien, 2004). Many parents described sharing intimate details, such as personal or mental health issues, family violence, and child upbringing difficulties. Several children also shared memories of going to the CPSVH to talk to the health professionals during challenging times in their lives. This study affirms the importance of the social space in fostering the health professional-patient relationship and the establishment of proximity or closeness to the families. The provision of emotional support is influenced by the interaction between the structures and behaviours.

The provision of appraisal support emerged in this study, but to a lesser extent than the other three types of social support. The horizonal power structure and approach

to communication in social pediatrics (Julien, 2004) informed behaviours such as rules of engagement and social interactions, influencing the provision of information and feedback to the families at the CPSVH by the health professionals (i.e., structures). The health professionals described the importance of empowerment and giving families power which impacted how feedback was provided to them. Empowerment is a multi-dimensional construct that provides patients with control enabling them to meet their specific needs or solve problems (Russo, Moretta Tartaglione, & Cavacece, 2019). Several parents in this study described how the positive feedback provided to them by the health professionals bolstered their confidence in their ability to mother their children. Many of the children also described feeling a sense of growth and self-improvement through feedback and the tailored information provided to them. As such, this illustrates the importance of tailoring the approach to information provision, especially for vulnerable populations and within health care settings.

5.2 Contributions to Knowledge

Social Pediatrics is a socially innovative approach to health care delivery designed for vulnerable children and their families that considers the child's social context and ecosystem. The CPSVH is a social pediatrics centre situated within the community and was considered a home-away-from-home for the children and their parents. This study provides an understanding of how children interact with the multi-dimensional space configurations at the CPSVH, and the extent to which the unique design is socially supportive from the child's perspective, coupled with the parent and health professional perspectives. More specifically, this study provides an understanding of spaces (i.e., physical, social, and conceptual) and the extent to which the space

configurations impact the provision of social support (which we specified as informational, appraisal, instrumental, and emotional support). Although specific to the CPSVH, this understanding of spaces is relevant for other social pediatric centres. This study examines social pediatrics using a social design lens and systems approach by combining the theories of Production of Space and Complex Adaptive Systems. It also illustrates that CAS and systems thinking are not synonymous despite their similarities and explores the evolution of CAS in the social pediatrics context. This study also applied CAS using a rigorous approach to understand the system operations, in particular the components and the interactions, in a social pediatrics setting – at the CPSVH.

Further, the Social Space Model of Health Care Delivery provides language and terminology for modelling and understanding space configurations and the social space in complex health care delivery contexts, such as social pediatrics. This understanding can help us design space configurations and the interconnectedness across spaces to enable tailored socially supportive patient-centred care. It can also provide us with the ability to economically examine the delivery of social pediatrics care and its associated costs. Although specific to social pediatrics, the model and understanding of space configurations can be applied to other health care contexts to improve health care delivery for vulnerable populations, while also supporting broader health system transformation.

5.3 Recommendations for a Broader Health System Transformation

The Canadian health care system is challenged in its ability to meet the health care needs of the population is serves. Primary health care plays a central role in creating a sustainable health care system that delivers high quality, person-centred care. However,

access to care continues to be a challenge, especially to underserved and rural populations. The COVID-19 pandemic also shed light on gaps in the health care system and its need to be agile to dynamic situations. As such, health care transformation is very much top of mind. The federal, provincial/territorial, and municipal governments continue to support initiatives tailored to primary health care transformation, recognizing its importance in system performance and health care delivery.

As we think about health care transformation, we can learn from the social pediatrics approach to shape reform efforts. In particular, the multi-disciplinary, participatory and community situated and child-centred approach to medical and social supports and services for vulnerable hard-to-reach populations, who may not be otherwise reached by more traditional services. The Social Space Model of Health Care Delivery presented in this thesis provides language for modelling and understanding space configurations in complex health care delivery contexts, and in the delivery of child-centred care (e.g., social pediatrics). This model can be applied more broadly to other health care settings and vulnerable populations, as we recognize the role of the social space, the interplay between the social and physical space and its impact on experiences and the delivery of socially supportive patient-centered care. For example, the model could be applied to the health care delivery for an aging population where space configurations (e.g., social and physical spaces) in health care settings are tailored to their specific needs and limitations (e.g., challenges with mobility), mitigating barriers to access. The recommendations discussed below are based on the results of this study (see Chapter 4 for results):

1. *Fostering social spaces in health care settings*

The recommendation to foster social spaces in health care settings aligns with the discussion on social spaces in section 4.3.1. The social space emerged at the CPSVH and interconnected behaviours, structures, and social space. More specifically, the social space was influenced by the physical space (tailored to the needs of the child) and was shaped by and evolved with the lived experiences and meaning attributed to it by the children, families, and health professionals, as well as the social interactions within it– both formal and informal in nature. The social space created a sense of place for the families and the health professionals, given the multi-dimensional space configurations. Health care delivery can be better tailored to meet the needs of the patient population in health care settings by fostering the social space given the extent to which it is overlayed onto and interconnects the structures, behaviours, and social support. The social space also evolves with and is dynamic to changes in health care settings.

2. *Situating care within proximity to the community it serves*

The recommendation to situate care within proximity to the community it serves is consistent with the discussion on structures in section 4.3.2 and social support in section 4.3.4. The CPSVH is a social pediatrics centre located in the disadvantaged community of View-Hull. This aligns with the social pediatrics approach to situate centres in disadvantaged communities and within proximity to the families it serves as well as community supports and services, mitigating barriers to accessing care, and supporting care continuity and the provision of social support. Access to care within proximity to the community is serves supports the provision of comprehensive care and social support, in the forms of instrumental, emotional, informational and appraisal

support. Proximity also facilitates collaboration with other community supports and services (e.g., the education sector) to ensure the patient's medical and social needs are being met, while fostering the integration of the health and social systems.

3. *Implementing an integrated and multi-disciplinary team-based approach*

The recommendation to implement an integrated and multi-disciplinary team-based approach in health care settings, particularly in those that provide care to vulnerable populations aligns with the discussion on structures in section 4.3.2 and behaviours in section 4.3.3. Social pediatric centres like the CPSVH are made up of multi-disciplinary teams including physicians, social workers, therapists, and educators. Given the multi-disciplinary team-based approach to care delivery, the health professionals work together, share their perspectives and knowledge, and support one another to ensure continuity of care. The implementation of this approach in the broader health care system would help ensure that patients' needs, especially those who are vulnerable with complex needs are being met and that care is tailored and being provided continuously. Also, it would facilitate the provision of comprehensive care ensuring that the patient's medical and social needs are considered in care approaches.

4. *Tailoring the design of the physical space to the needs of the population being served*

The recommendation to tailor the design of the physical space to the needs of the population being served is consistent with the section on structures in section 4.3.2. The CPSVH's physical space was tailored to the population it serves – vulnerable children and their families. From the bright coloured walls covered in pictures of the families to the big comfortable sofa surrounded by toys and books for children to play with, the

CPSVH was designed to meet the children's needs and provide a child friendly environment. Many of the children and parents in the study considered the CPSVH a home-away-from-home. By tailoring the design of the physical space to the needs of the population it serves ensures a sense of comfort in the space impacting experiences and resulting in positive emotions. For example, a health care centre that provides care to Indigenous peoples may consider integrating cultural aspects (e.g., artwork, colours) into the design of the physical space.

5.4 Summary

This study provides an understanding of how children interact with the multi-dimensional space configurations at the CPSVH, and the extent to which the unique design is socially supportive from the child's perspective. More specifically, this study provides an understanding of spaces and their interconnectedness, and the extent to which the space configurations impact the provision of social support. The Social Space Model of Health Care Delivery (figure 6), driven by the results of this study, draws on Complex Adaptive Systems and the Production of Space to visualize the spaces at the CPSVH and their interconnectedness. In the model, the social space emerged as a concept that interconnects the structures, behaviours, and social support. As such, the Social Space Model of Health Care Delivery provides language and terminology for modelling and understanding space configurations in complex health care delivery contexts, such as social pediatrics, that provide care to vulnerable populations. This understanding can help us design and manage space configurations and the interconnectedness across spaces to support the delivery of tailored socially supportive patient-centred care.

CHAPTER 6: CONCLUSION

This study provides an understanding of how children interact with the multi-dimensional space configurations at the CPSVH, and the extent to which the unique design is socially supportive. It provides a theoretical contribution to literature by combining a design and systems lens using the theories of Complex Adaptive Systems and the Production of Space. The study informs how to optimize the design of the current model and implementation of social pediatrics in other settings, with the goal of mitigating barriers to care and ultimately maximizing care benefits for vulnerable families. The findings from this study also help inform broader health care transformation by gaining a better understanding of the multi-dimensional spaces within a socially innovative health care setting.

There are several limitations in this study that need to be acknowledged. The first limitation is participant recruitment. Participant recruitment was conducted at the CPSVH using convenience sampling. This method of sampling limits the generalizability of the study's research findings. The second limitation is that only mothers participated in the interviews which is a less varied perspective. Also, 6 of the 7 mothers were of English or French nationality. The third limitation is that 3 of the 20 children who participated in the study had language disorders. This could impact their ability to communicate and share their experiences. Also, engaging children and having them reflect on their experiences can be challenging impacting data collection. The fourth limitation is that the health professionals who participated in the study were all women which is a less varied perspective. The fifth limitation is that the findings of this study may have been influenced by the cultural features of the francophone community impacting its

generalizability to other cultures. Finally, the last limitation is the lack of non-verbal cues during the phone interviews with the parents which limits the contextual and non-verbal data.

Future research could examine the impacts of the COVID-19 pandemic on the social pediatrics approach and the delivery of care for families – with an emphasis on the multi-dimensional space configurations. A longitudinal study could be conducted to examine perceived impacts and experiences over the life course of the child and coupled with the parent or caregiver perspectives. Follow-up action could also be to get the reaction of other social pediatric centres on the Social Space Model of Health Care Delivery**.** Future research could also empirically test and validate the Social Space Model of Health Care Delivery in other health care contexts where care is being provided to vulnerable populations, such as the aging population. Variations of the Social Space Model of Health Care Delivery could also be examined in other health care environments. With that, the model could be leveraged to support the implementation and evaluation of health care delivery beyond the social pediatrics context.

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APPENDIX A

Themes	Summary of Existing Literature	Gaps in Literature
The health care system in Canada is complex.	Care is provided by various health professionals across multiple health care settings over time, while often transitioning between acute (e.g., hospital) and non-acute care settings (e.g., nursing home) (Edgren & Barnard, 2012). Complex Adaptive Systems provides a lens to understand the complexity and whole-system engagement. It also provides a means to understand the dynamic and non-linear nature of the health care system, and its evolution over time (Sturmberg, O'Halloran, & Martin, 2012).	1. Few studies have examined the design and evaluation of socially innovative methods of health care design: in particular, its conceptualization and evolution over time. 2. Few studies have examined the social pediatrics approach, and their evaluations were not centered on the child and their specific experiences, in deference to the United Nations Convention on the Rights of the Child 3. No studies have examined social pediatrics using a social design lens and systems approach - specifically combining the theories of Production of Space and Complex Adaptive Systems. 4. There is limited empirical research on socially innovative spaces
The emergence of social innovations in health care delivery.	Social innovations in health-care delivery emerged due to failures in the health care system to meet the needs of the population it serves (van Niekerk et al., 2017). Social innovation provides a lens to understand and approach the transformation of health care delivery. One way in which it is transforming the health care landscape is by integrating external actors (e.g., patients) into health care research (Bullinger et al. 2012) to enhance quality of care.	
Space is a social product.	Space is socially transformed and experienced in a specific context impacting social processes (Saidi, de Villiers, & Douglas, 2017). Henri Lefebvre proposed that space is social and is socially produced. His “spatial triad” is widely used in literature (for example: Nkooe, 2018; Skår Nordh, & Swensen, 2018; Meer & Müller, 2017; Jeyasingham, 2014)	

	to understand how space is lived, and elucidates the relationship between being and space (Merrifield, 2006; Lefebvre & Nicholson-Smith, 1991)	
Social pediatrics is a socially innovative approach to health care delivery that supports vulnerable families due to material and social conditions.	Social pediatrics is founded on the overarching principle that all children have the right to be healthy and excel to their utmost potential, despite social and economic inequalities (Esposito, Roy, Chabot, & Trocme, 2017). Social pediatrics is a multi-disciplinary approach that integrates the legal, medical, educational and psychosocial communities to gain a more holistic understanding of the child – not only meeting the child's health needs, but also addressing the social determinants of health (Clément et al., 2015; Julien, 2004).	
The importance of social support in health care delivery	Social support (i.e., emotional, instrumental, appraisal, and informational) has been widely examined in the context of health care. Themes in the literature include the importance of social support for patients with chronic conditions (Ginter & Braun, 2019; Kim, Johnston & Sawatzky, 2019; Henry et al., 2019); the provision of social support by health professionals to families (Franklin, Arber, Reed & Ream, 2019; Fearnley & Boland, 2017); and information technology as a source of social support (Lal, Nguyen & Theriault, 2018; Vosbergen et al., 2015; Bernstein et al., 2012)	

APPENDIX B

Script for the Health Professionals

Hello (name),

A research team from the University of Ottawa is conducting a research study on the design of the Centre de Pédiatrie Sociale du Vieux-Hull and the way it supports families. You are eligible to participate. Would you be interested in finding out more information about the study?

(If no) Thank you for your time.

(If yes) Would it be ok if I provide the researcher with your contact information?

(If yes, the social work will provide the parent with the Consent Release of Contact Information Form to sign). They will be in touch with you in the next couple of days. Thank you for your interest in the study.

(If no) Thank you for your time.

Thank you again.

Goodbye.

APPENDIX C

Telephone Script to Recruit Families

Hello (name),

My name is Andrea Ghazzawi, and I am a Doctoral student at the University of Ottawa. For my thesis, I am studying the design of the Centre de Pédiatrie Sociale du Vieux-Hull and the way it socially supports families.

I was provided your contact information by (name) at the Centre de Pédiatrie Sociale du Vieux-Hull.

Thank you very much for your interest in our study.

We are recruiting parents and children between the ages of 8-12 years of age to participate in the study.

If you would like, I can provide you with some information about our research study…

(If yes) – We are recruiting parents and children (8-12 years of age) to participate in focus groups in order to understand how the design of the Centre de Pédiatrie Sociale du Vieux-Hull is supportive to families. One focus group of about 60 minutes in length will be conducted. Parent and child focus groups will be conducted separately.

If you choose to participate in this study, your confidentiality and anonymity are our priority. We take this very seriously and ensure that all information you provide is kept in a secure location and is only available to our research team. Also – when we report this research, we do not use your name or any identifying information in any of our reports. We also emphasize that all participants have the right to withdraw from the study at any time. We cannot guarantee your identity as focus groups will be used as the method of data collection. Participation is completely voluntary.

Do you have any questions that I can help clarify for you?

(If yes) – answer questions.

Are you still interested in participating in the study?

(If yes)- Could I please provide you with the forms?
Should you have any questions please do not hesitate to contact me by phone at (number) or by e-mail at (e-mail address).

Once again, thank you for your interest in this study!

Good-bye!

(If no) – Thank you so much for your time.

Good bye!

APPENDIX D

Principal Investigator Script to Recruit Health Professionals

Hello (name),

My name is Andrea Ghazzawi, and I am a Doctoral student at the University of Ottawa. For my thesis, I am studying the design of the Centre de Pédiatrie Sociale du Vieux-Hull and the way it socially supports families.

We are recruiting health professionals at the Centre de Pédiatrie Sociale du Vieux-Hull to participate in the study. Your participation will include 1 focus group about 60 minutes in length.

If you choose to participate in this study, your confidentiality and anonymity are our priority. We take this very seriously and ensure that all information you provide is kept in a secure location and is only available to our research team.

Also – when we report this research, we do not use your name or any identifying information in any of our reports. We also emphasize that all participants have the right to withdraw from the study at any time. We cannot guarantee your identity as focus groups will be used as the method of data collection. Participation is completely voluntary.

Do you have any questions that I can help clarify for you?

(If yes) – answer questions.

Are you still interested in participating in the study?

(If yes)- Could I please provide you with the forms?

Should you have any questions please do not hesitate to contact me by phone at (number) or by e-mail at (e-mail address).

Once again, thank you for your interest in this study!

Good-bye!
(If no) – Thank you so much for your time.

Good bye!

APPENDIX E

Consent Release of Contact Information

I _____, give my permission to _____ to forward my contact information (name, phone number and e-mail) to the research team (Ms. Andrea Ghazzawi, Dr. Craig Kuziemsky & Dre. Anne-Marie Bureau) that is conducting a research study on the design of the Centre de Pédiatrie Sociale du Vieux-Hull and the way it socially supports families.

APPENDIX F

Permission for Child Participation

Permission for Child Participation in a Research Study

This form is to ask your permission to have your child participate in a research study.

Project Title:

Multi-Dimensional Space Configurations for Social Pediatrics Health Care Delivery

Purpose:
The purpose of this research study is to examine the design of the Centre de Pédiatrie Sociale du Vieux-Hull and the extent to which the spaces at the center are supportive to families.

What are the risks?
There are no foreseeable risks to participating in this study. If your child feels upset during the focus group, they can leave and a social worker will be there to talk to them.

What are the benefits?
It is not likely that you will notice immediate direct benefits of your participation in this study, the future benefit is the contribution of your shared experience about how we can design social pediatric centers to better support families, but in particular children.

Is participation required?
Participating in this study is voluntary, so your child does not have to participate. Your child can choose not to participate or to withdraw at any time. This will not affect your relationship with the health professionals at the Centre de Pédiatrie Sociale du Vieux-Hull. You can also agree to allow your child to participate now and decide later to withdraw them.

What if my child does not want to participate?
Your child must also agree to participate in the study.
If your child agrees to be in the study they can change their mind later.

Compensation
A $20 gift card per family will be provided for participating in the study.

Privacy and Confidentiality:

To protect your child's identity, your name will not be used on stored recordings and documents. There will be no use of personal identifiers in the study's research reports, and quotations will not contain identifying information. In addition, to ensure confidentiality, the list of participants will be kept in a secure area, separate from the interview material and will be accessible only to the research team (Ms. Andrea Ghazzawi, Dr. Craig Kuziemsky).

All paper data will be kept in a locked filing cabinet in the research office of Dr. Craig Kuziemsky at the University of Ottawa. Electronic data files will be kept in a password-protected directory and only members of the research team will have access to the data.

In the event that your child's participation in the study ends, the information collected up to that point will not be removed from the analyses, as it already will have been used.

Signature

You are making a decision about allowing your child to participate in this study. Your signature below indicates that you have read the information and have decided to allow your child to participate. You may discontinue his or her participation in the study at any time.

_____
Printed Name of Child

_____ _____
Signature of Parent(s) or Legal Guardian Date

_____ _____
Signature of Investigator Date

APPENDIX G

Health Professional Consent Form

École de gestion TELFER School of Management

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CONSENT FORM

Project Title:
Multi-Dimensional Space Configurations for Social Pediatrics Health Care Delivery

Investigators:
Andrea Ghazzawi, University of Ottawa, Principal Investigator
Craig Kuziemsky, University of Ottawa, Thesis Supervisor
55 Laurier Ave East, Room 6116
Ottawa ON, K1N 6N5

PURPOSE

The purpose of this research study is to examine the design of the Centre de Pédiatrie Sociale du Vieux-Hull and the extent to which the spaces at the center are supportive to families.

YOUR PARTICIPATION

You are being invited to participate in this study. Your participation in this study will include 1 focus group (about 60 minutes in length). The focus groups will take place at the Centre de Pédiatrie Sociale du Vieux-Hull.

During the focus group, you will be asked to discuss your experiences at the Centre de Pédiatrie Sociale du Vieux-Hull as it relates to design and support. Pictures of the spaces at the center will be used during the focus groups to help facilitate the discussion.

All focus groups will be audio-recorded with your permission, and all audio recordings will be transcribed (typewritten) and analyzed. We will also be asking you some background questions (for example, your age, the type of work you do). All information collected is completely confidential and your identity will be kept completely anonymous in all publications/ reports coming from this study.

BENEFITS

While it is not likely that you will notice immediate direct benefits of your participation in this study, the future benefit is the contribution of your shared experience about how we can design social pediatric centers to better support families, but in particular children. This contribution to knowledge could also help inform boarder health care transformation initiatives.

RISKS

While participating in this study, it is possible that you may experience emotional discomfort. Please note that you may refuse to answer any questions that you do not wish to answer, and that you have the right to withdraw from the focus group any time you want. Please also note that the focus group will involve interaction with other participants, so complete anonymity is not guaranteed. Should you decide to withdraw from the focus group the information collected will have already been used and cannot be removed from the rest of the data, given the interdependence of the information collected. The removal of some information could render others not useful. It is also difficult to identify the information shared by each participant in a focus group.

ANONYMITY AND CONFIDENTIALITY

To protect your identity, your name will not be used on stored recordings and documents. Your anonymity and the anonymity of people you discuss will be protected. This anonymity will be maintained by entering a false name (a pseudonym) instead of your actual names. There will be no use of personal identifiers in the study's research reports, and quotations will not contain identifying information. In addition, to ensure confidentiality, the list of participants will be kept in a secure area, separate from the interview material and will be accessible only to the research team (Ms. Andrea Ghazzawi, Dr. Craig Kuziemsky). Given that focus groups will be used, there are some limits to the anonymity and confidentiality. As such, we would appreciate it if you could keep confidential what is shared in the focus group.

All paper data will be kept in a locked filing cabinet in the research office of Dr. Craig Kuziemsky at the University of Ottawa. Electronic data files will be kept in a password-protected directory and only members of the research team will have access to the data. Information gathered for this study will be stored for 5 years after which time all paper and electronic materials, including the list of participants and contact details, will be destroyed. In the event that you wish to end your participation in the study, the information collected up to that point will not be removed from the analyses, given the interdependence of the information collected and the level of difficulty in identifying individual information.

COMPENSATION

Compensation of a $20 gift card will be provided to the study participant.

SIGNATURES

Your participation is voluntary and you are free to withdraw from the study at any time. Your signature on this form indicates you understand the information regarding your participation in the research project and agree to participate as a subject.

If you have further questions concerning matters related to this research study, please contact Andrea Ghazzawi. If you have any questions concerning your rights as a participant in this research, please contact the University of Ottawa Office of Research Ethics and Integrity
550 Cumberland St, Room 154
Ottawa, ON, K1N 6N5
Tel.: 613-562-5387
Fax.: 613-562-5338

École de gestion TELFER School of Management

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ethics@uottawa.ca

☐ I agree to participate in this research study.

☐ If required, I agree to participate in a follow-up interview conducted by Ms. Andrea Ghazzawi.

There are two copies of the consent form, one of which is mine to keep

Participant name (please print): _____

Participant signature: _____

Date: _____

Investigator signature (please print): _____

Investigator signature: _____ Date: _____

APPENDIX H

Parent Consent Form

CONSENT FORM

Project Title:
Multi-Dimensional Space Configurations for Social Pediatrics Health Care Delivery

Investigators:
Andrea Ghazzawi, University of Ottawa, Principal Investigator
Craig Kuziemsky, University of Ottawa, Thesis Supervisor
55 Laurier Ave East, Room 6116
Ottawa ON, K1N 6N5

PURPOSE

The purpose of this research study is to examine the design of the Centre de Pédiatrie Sociale du Vieux-Hull and the extent to which the spaces at the center are supportive to families.

YOUR PARTICIPATION

You are being invited to participate in this study. Your participation in this study will include 1 interview (about 60 minutes in length each). The interview will take place at the Centre de Pédiatrie Sociale du Vieux-Hull or by phone.

During the interview, you will be asked to discuss your experiences at the Centre de Pédiatrie Sociale du Vieux-Hull as it relates to design and support.

All interviews will be audio-recorded with your permission, and all audio recordings will be transcribed (typewritten) and analyzed. We will also be asking you some background questions (for example, your age, the type of work you do). All information collected is completely confidential and your identity will be kept completely anonymous in all publications/ reports coming from this study.

BENEFITS

While it is not likely that you will notice immediate direct benefits of your participation in this study, the future benefit is the contribution of your shared experience about how we can design social pediatric centers to better support families, but in particular children. This contribution to knowledge could also help inform boarder health care transformation initiatives.

École de gestion TELFER School of Management

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RISKS

While participating in this study, it is possible that you may experience emotional discomfort. Please note that you may refuse to answer any questions that you do not wish to answer, and that you have the right to withdraw from the study any time you want. In the event that you wish to end your participation in the study, the information collected will be removed from the analyses.

ANONYMITY AND CONFIDENTIALITY

To protect your identity, your name will not be used on stored recordings and documents. Your anonymity and the anonymity of people you discuss will be protected. This anonymity will be maintained by entering a false name (a pseudonym) instead of your actual names. There will be no use of personal identifiers in the study's research reports, and quotations will not contain identifying information. In addition, to ensure confidentiality, the list of participants will be kept in a secure area, separate from the interview material and will be accessible only to the research team (Ms. Andrea Ghazzawi, Dr. Craig Kuziemsky).

All paper data will be kept in a locked filing cabinet in the research office of Dr. Craig Kuziemsky at the University of Ottawa. Electronic data files will be kept in a password-protected directory and only members of the research team will have access to the data. Information gathered for this study will be stored for 5 years after which time all paper and electronic materials, including the list of participants and contact details, will be destroyed. In the event that you wish to end your participation in the study, the information collected up to that point will not be removed from the analyses, given the interdependence of the information collected and the level of difficulty in identifying individual information.

COMPENSATION

Compensation of a $20 gift card will be provided to the study participant.

SIGNATURES

Your participation is voluntary and you are free to withdraw from the study at any time. Your signature on this form indicates you understand the information regarding your participation in the research project and agree to participate as a subject.

If you have further questions concerning matters related to this research study, please contact Andrea Ghazzawi. If you have any questions concerning your rights as a participant in this research, please contact the University of Ottawa Office of Research Ethics and Integrity
550 Cumberland St, Room 154
Ottawa, ON, K1N 6N5
Tel.: 613-562-5387
Fax.: 613-562-5338
ethics@uottawa.ca

There are two copies of the consent form, one of which is mine to keep

☐ I agree to participate in this research study.

☐ If required, I agree to participate in a follow-up interview conducted by Ms. Andrea Ghazzawi.

Participant name (please print): _____

Participant signature: _____

Date: _____

Investigator signature (please print): _____

Investigator signature: _____ Date: _____

APPENDIX I

Child Assent Form

ASSENT FORM

Project Title: Multi-Dimensional Space Configurations for Social Pediatrics Health Care Delivery

Research Team: Andrea Ghazzawi, Craig Kuziemsky, Anne-Marie Bureau

Why is this study being done?
We would like to invite you to be part of a research study. Research is a way to test new ideas to see if we can do things better.

In our study, we want to understand how the design of the Centre de Pédiatrie Sociale du Vieux-Hull affects you.

Who will take part?
Children between the ages of 8-12 years old who are seen at the Centre de Pédiatrie Sociale du Vieux-Hull are being asked to join this study. We expect to have 20 children join the study over the next 6 months.

What will happen during the study?
The focus groups will be about 60 minutes in length, and will be audio-recorded. About 5 children will be in each focus group. During the focus group, we will talk about how the design of the Centre de Pédiatrie Sociale du Vieux-Hull affects you. We will use pictures of the center as we talk about the design of the center.

Are there good things that can happen from this study?
Sometimes good things can happen to people when they are in a study. These good things are called "benefits." This study will help us better understand children like you, and how we can design social pediatric centers that you will like. That is a benefit.

Are there bad things that can happen from this study?
We do not think that anything bad would happen if you decide to join this study. If you feel upset during the focus group, you can leave and a social worker will be there to talk to you.

Is this private?
We will keep your information private whether you decide to join this study or not.

Can I say no?
You can choose to be a part of this study or not. You can also decide to stop being in this study at any time once you start. Talk to your parents if you want to stop being in

Adapted from the CHEO REB Assent Form Version 2.0

the study, and they will tell the researchers. No one will be mad at you if you choose not to take part

What if I have questions?
Please ask us and we will do anything we can to answer your questions.

Assent form Signatures
If you agree to participate in this research study, please sign the form. I understand the information that was explained to me and I can ask any question that I like about the study.

Signature of Participant	Name of Participant	Date
Printed Name of Person Who Conducted Assent Discussion	Signature of Person Who Conducted Assent Discussion	Date

Adapted from the CHEO REB Assent Form Version 2.0

APPENDIX J

Demographic Information Sheet

Age:

a) 15-24
b) 25-34
c) 35-44
d) 45-54
e) 55-64
f) 65-74
g) 75 years and over

Gender: _____

Ethnicity: _____

Occupation: _____

Marital Status: _____

Number of children: _____

APPENDIX K

Focus Group & Interview Questions

Questions for everyone:

1. When you think of the Centre de Pédiatrie Sociale du Vieux-Hull what is the first word that comes to mind?
    a. Why did you select that word to describe the centre?
    b. What does the centre mean to you?

2. a. How would you describe the CPSVH?
   b. How would you describe the physical space (or environment) at the Centre de Pédiatrie Sociale du Vieux-Hull?

3. Please select a picture from this pile (on the table).
    a. Why did you choose it?
    b. What do you do there?
    c. What does that picture (or space in the picture) mean to you (or make you think of)?
    d. Who do you see (or talk to) there?
    e. What do you like about the picture? Why?
    f. What do you dislike about the picture? Why?

4. Is there something you would change about the Centre de Pédiatrie Sociale du Vieux-Hull?

Additional Questions for Parents and Children:

5. Could you describe the people who work at the centre?

6. Where do you typically talk (or interact) with other people at the centre *(e.g., children, parents, health professionals)*?

7. What role does the centre play in your life?

Additional Questions for Health Professionals:

8. How would you describe your interaction with the families at the centre?

9. What factors support collaboration at the centre?

10. What might be barriers to the provision of care for the families at the centre?

11. How is care for the families supported at the centre?

12. How is this centre different from other pediatric health care centres in Gatineau?

13. Can the overarching social pediatrics model be applied to other settings in the health care system?

    a) If so, how? If not, why not?

14. How can the socially innovative social pediatrics model inform broader health care transformation?

APPENDIX L

Observation Template

Date:_____

Time:_____

Structures (e.g., people, space, processes)	**Behaviours** (e.g., social interaction, collaboration)	**Social Support** (e.g., information, emotional)	**Notes**

APPENDIX M

Demographics

Parent Demographics:

Age	Gender	Ethnicity	Occupation	Marital Status	# of children
26-30	F	Francophone	Stay at home	Single	2
>40	F	Anglophone	Stay at home – former PSW	Single	2
30-35	F	Francophone	Stay at home - Nurse	Single (living with her bf)	7 – 5 hers, 2 his (and she is pregnant)
30-35	F	First Nations	Educator – Daycare provider	Divorced	2
36-40	F	Francophone	Stay at home	Common-law (21 years)	5
36-40	F	Francophone	Stay at home	Single	3 – 1 at home
30-35	F	Anglophone	Stay at home	Common-law	2 – 1 at home

Child Demographics*:

Age	Number of children	Sex	Diagnosis
7 years old	1	8 boys 12 girls	10 children have ADHD (with or without hyperactivity) 3 children have a language disorder
8 years old	5		
9 years old	4		
10 years old	3		
11 years old	4		
12 years old	2		
13 years old	1		

** To note: the child demographics were provided by the CPSVH.*

APPENDIX N

Coding Grid

- Attributes of Health Professionals
- Attributes of Patients
- Emotions & Feelings toward the CPSVH
- Impacts
- Behaviours
    - Collaboration
    - Rules of Engagement
    - Social Interaction
- Physical Space
    - Attributes
    - Interactions in Space
    - Perceived Meaning
- Processes
    - Formal
    - Informal
- Recommendations
- Social Space
- Social Support
    - Appraisal Support
    - Community Building
    - Emotional Support
    - Informational Support
    - Instrumental Support

APPENDIX O

Sample Coding

Parent Node	Child Node	Example Coding
Attributes of the health professionals		• Child Focus Group 1: I: Puis comment tu décries toutes ces personnes-là? C: Gentille, honnête, ils parlent bien. I: Parle bien? C: Vous parlez beaucoup aussi. I: Parle beaucoup? C: Bien pas ça, pas autant, euh ils sont cool, elles nous aident, sont persévérantes.
Emotions and feelings toward the CPSVH		• Parent Interview: P: They were there for me when CAS came. Like they were. I'd like to say a parent almost. They were like my parent or guardian. I don't know, that's how I feel when I go there. I feel like they are going to take care of me. You want a coffee? How's the baby, does the baby need anything? Like, sometimes the secretary will go out in the back and she'll bring out three Tupperware of clothes. Like here, if you want to go through the clothes for the baby and stuff.
Behaviours	Collaboration	• Health Professional Focus Group: HP 1: J'dirais authentiques, autant qu'eux ils peuvent juste être eux-mêmes. Nous avons senti qu'on peut juste être nous-mêmes aussi. Admettons si j'étais avec une famille puis mon amie [nom] ben je vais être la même personne t'sais partout Parce que, comme les familles comme c'est une relation égalitaire faque t'sais eux ils sentent qu'ils peuvent être eux-mêmes mais nous aussi on sent qu'ont peux être nous-mêmes. Comme les parents souvent nous racontent des histoires ou des anecdotes, comme on sait très bien qu'ils ne raconteraient pas sa a un autre intervenant ou je ne sais pas une TS du CLSC, de la DPG t'sais comme la relation n'est pas pareil Je pense qu'ils savent qu'on ne les juge pas faque ils sont 100% eux-mêmes.

		HP 2: Moi, je trouve que c'est très horizontal dans le sens t'sais ils apprennent de nous t'sais par le temps où mais vice versa aussi t'sais on apprends d'eux, t'sais c'est un échange dans la relation. HP 3: C'est quand même plaisant à vivre ça avec eux. Parce que t'sais on a souvent des fous rires dans le salon avec eux, pour comme juste un sujet qu'on parles. Souvent, les conversations, ils sont sans filtre, puis ils vont nous parler comme si on était leur chum, puis ça l'aide au niveau de confiance puis ça fait qu'on a quand même plus d'impact sur leur vie parce qu'ils savent qu'on peut être là pour eux, puis t'sais ont les juges pas dans tout ce qu'ils nous racontent et ils le récentes j'imagines.
Physical Space	Attributes	• Parent Interview: I: Yeah. And what about its sort of your experience with the table and… P: well here, I get these two, I will talk about the first two if you don't mind first. So, after being in here. This is like very homey. It's very comfortable. Kids of all ages have something to do. I marked this table; I bring the table with this. That's where the older kids and younger kids would sit and do you know , do their activities, do their homework a few times while parents were there . I would sit with the kids and they would be like screaming and yelling. And then I got them to calm down. So, I put like a YouTube video on it and got them singing and tapping on. So, it would calm them down quite a bit. That's what I could remember, that table. And of course, you know, we ate at the Christmas party. We ate there, here. It's wonderful. Like the books that they have is awesome. You know, you can pick a book. You can. Sometimes they give you books. Sometimes, you know, just read a book. They have a bunch of toys.

		Here was like another place where I cried a lot. I did a lot of crying in this room and the couch itself was where I'd sit with either (intervenante) or (intervenante) or a few of them. But it was like just the sudden coming in the window. I could feel it on my face, and that's just comforting. Sitting on the couch . It's like having a big warm hug when the sun is coming in. But then when go to the other side where the table is in the heat side, OMG you feel your clothes it's like super-hot. Well, here, this is where (daughter) gets checked out for her appointments. We sit in the back here. We've done a lot of crying at that table, too. It was hard being not diagnosed or not being on the right medication and the doctor seen a big difference, you know, just like you, you're doing so much better. So, I come in this room as well because there's samples of creams and stuff . The secretary or the (intervenante) would give me for (daughter) because she's got this skin problem and they have good cream for her. So, I don't know why you pick that room , but I guess because that's where the difference. The difference. This was more clinical I: and I guess that's more homey… P: And that was more comforting. So, if they had a room like this compared to this, I know this is less private. They just have something similar. But mind you, it didn't really matter I cried in either or and I was supported in both rooms. It wouldn't really matter.
Processes	Informal	• Observation Notes: A staff member left to go get the adolescents for their art class – at the LAB across the street. The LAB is a space that allows adults (with drug addictions) in the community to be creative with art. They also have evening concerts and other types of events in the space.

		The art class (at the LAB) with the adolescents was scheduled to start around 10am, but they didn't begin until around 11am. The adolescents came into the centre and sat around the kitchen bar area with the staff. They were playing on their phones and eating toast with peanut butter. The two mothers came over to the sofa and began chatting with me. We discussed the hospital wait-times in Gatineau and the health care system (for example: the services available to her and her children). One mother (with 4 kids who were all in school) was telling me about her kids and how 3 of the 4 have a health condition that causes intellectual delays. The other mother (with the 2 kids present) left, and it was just me and the other mother sitting chatting on the sofa. She continued to tell me about her ex (father of her kids) and some of the challenges she has faced as a single mother – for example: learning to let go. She also told me that she has full custody of her kids (court ordered) because her ex has severe delays. 11am – staff and adolescents walked across the street to the LAB 2 pre-adolescents are waiting for us there – a girl brought her friend to join. Some kids (teens) decided to make clay figures and other chose to paint. During this time, the SW brought Pogos and ketchup for everyone to share. A mother was outside and began chatting with one of the staff members – both her kids are in daycare. She decided to join us and sat next to the staff member and continued chatting with her. I was introduced to her – at first it was obvious she didn't trust me but when I explained to her what I was going re my research she opened up to her.