

Health information needs for initial assessments of children-in-care

by

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B.A, University of Victoria, 1995
B.Sc., University of Victoria, 2005

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of

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Abstract

Children and youth in state or statutory care (children-in-care) are at a higher risk of not having their health needs met than the general pediatric population. A literature review found a paucity of evidence on the health information needed for initial assessments of children-in-care in health record information systems in Canada, particularly when compared with information collected in the comparator countries the United States, United Kingdom, and Australia. This qualitative research reviewed six forms currently used in British Columbia (BC) for assessing the health needs of children-in-care, and for planning future health care delivery for these children. The forms were reviewed with social workers, foster parents, and medical care providers to understand how the forms met their needs for health information for initial assessments when a child first enters care. One researcher conducted 31 interviews with 37 participants—a mixture of social workers, foster parents, and medical care providers allowed for source triangulation—in urban and rural communities using a 19-question, nonvalidated interview tool. NVivo-10 was used to inductively encode participant interviews relying on Pava’s 9-step, nonlinear sociotechnical systems approach to identify themes and concepts raised by the interviews. The researcher conducted an informal review of relevant Ministry of Children and Family Development (MCFD) organization documents and method triangulated the results to the interview findings to identify similarities, differences, and gaps. Findings from these two analyses were compared with the literature review findings. The six forms were found to document most of the required information for typical children-in-care provided the forms were available to the care team and completed in full prior to the initial assessment. Additional forms were used for children-in-care with complex health needs. Key health information included parents’ relevant health and social information, prenatal and birth records, medical and social history of the child, immunization record, whether the child had experienced adverse childhood events, and anything that might remind the child of a stressful situation and cause the child an adverse mental or physical outcome. Complexity in acquiring the needed health information comes from a variety of circumstances. For example, the child may transition in and out of care, parents may be unavailable, and social workers, foster parents, and medical care providers may each change while the child is in care. To overcome information-sharing challenges and barriers, research participants recommended several improvements including funding changes

to support medical care provider participation, an information-sharing framework, and electronic options such as a centralized child-in-care record with secure email capability. Introducing some practices from other jurisdictions, notably a senior medical advisor role and a medical assessment model, might help address process challenges when health information is missing during the initial medical assessment. These resources would help round out MCFD's existing conceptual child-in-care health-care framework. Together these changes may support social workers, foster parents, and medical care providers to provide care to and plan for children-in-care.

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Inscription

From a study asking foster children about the experience of coming into care, an 8 or 9-year-old male child comments:

“Moving into care ‘is scary’”

(foster child, Mitchell, Kuczynski, Tubbs, & Ross, 2010, p. 179).

“What these kids need are a medical home and somebody who cares for them, somebody who truly will love them. In other words, someone who will look to their physical, mental, emotional and spiritual health, right. That’s what they need over a long period of time”

(Participant #1, medical care provider).

“I think that electronic medical records are the way of the future, but it is hard work that is what you should know. It is hard work. The work plays hard on the physicians and [electronic medical records] are not as durable as the paper thing because as soon as the computer crashes everything is gone. And that happens very often and your clinic grinds to a halt”

(Participant #2, medical care provider).

Chapter 1 – Introduction

This chapter contains the background for the thesis research and report organization.

1.1 Background

Children and youth are considered vulnerable populations whose health needs differ from those of adults and also change as they age (Stanton & Behrman, 2016). Children and youth in statutory or state¹ care (children-in-care)² are considered even more vulnerable. They have more acute health needs and their risk of not having their health needs met is greater than the general pediatric population's (Ponti, 2008). Thus, recording and sharing health information is an important aspect of case management for these children-in-care.

In 2008, the Province of British Columbia (BC) introduced a computer system to replace the legacy social sector case management system. The project was a 5-year, social care initiative to tailor a commercial off-the-shelf computer system into a social care case management record. The case management record was for joint use by the Ministry of Social Development & Social Innovation (SDSI) and the Ministry of Children and Family Development (MCFD), and was developed in partnership with the Ministry of Citizen Services and Technology (CITS),³ together with a contracted system integrator and application vendors. The project scope included replacing technology for MCFD's child and family services business.⁴

This social care project provided an opportunity for this thesis research. The purpose of this thesis research was to review the current process of collecting health information for children-in-care used by professionals who provide care to and plan for children-in-care. The scope of the research was limited to health information needs for the initial assessment undertaken the first time a child enters state care. This thesis research also assessed gaps and issues, including challenges and barriers, in the process used to collect health information, and asked participants for their opinions on how these might be overcome. The research focused on requirements,

¹ When the government removes a child from his or her parent and brings the child into care this is termed *statutory* or *state care*. In Canada, the term used for children removed and brought into care is *child-in-care* or *children-in-care*. Children- and youth-in-care are individuals 18 years of age and under who are in the government's care.

² For the purposes of this thesis research, the term children-in-care denotes child-, children-, and youth-in-care.

³ The British Columbia Ministry of Citizens' Services and Technology (CITS) was called the Ministry of Technology, Innovation & Citizens' Services (MTICS) in 2016.

⁴ BC Gov News. Factsheet: Integrated Case Management project. May 8, 2015. Accessed April 22, 2016. Available from <https://news.gov.bc.ca/factsheets/factsheet-integrated-case-management-project>

including process analysis, in order to understand the business context for the social care project from both technical and social aspects. This research will contribute to the requirements gathering for software design of a child-in-care record.

1.2 Thesis report organization

The thesis report is organized into eight chapters, references, and appendices. Chapters 1-7 end with a summary of key messages.

Chapter 1 is the introduction providing background for the thesis research and laying out the thesis report structure.

Chapter 2 contains the literature review and summarizes the results from environmental scans of three main topics (1) health-care needs and assessments for children-in-care, (2) child-in-care information systems with a focus on health records, and (3) sociotechnical system (STS) approaches, going in-depth on Pava's STS approach.

Chapter 3 is the overall study approach. This chapter states the scope, research question, and sub-questions, and describes the method, study sites, participants and recruitment, data sources, and data analysis.

Chapters 4, 5, and 6 report the thesis research findings: research details and initial assessment context, participant interviews, and form usage and analysis. Triangulation is incorporated into the findings.

Chapter 7 discusses the research findings, including implications, key messages, and how the research question has been answered. It provides a conceptual child-in-care health-care framework and suggests actions for MCFD. This chapter also includes the research limitations, contributions to the body of knowledge, and opportunities for future research.

Chapter 8 concludes the thesis report with a summary of the key messages.

Chapter 1 Key Messages

Children- and youth-in-care are individuals 18 years of age and under who are in state's or the government's care.

Children-in-care are more vulnerable than the general pediatric population, have more acute health needs, and are at a higher risk of not having their health needs met.

From 2008 to 2014, the Government of BC was replacing its social care case management system, which provided the opportunity for this research.

This thesis asks for the health information needed for initial assessments undertaken the first time a child enters care, including challenges and barriers to documenting this information and ways these hurdles might be overcome.

Chapter 2 – Literature review

This chapter reviews three key topics to identify current evidence, trends, and knowledge gaps in order to justify this thesis research. The three topics are (1) initial assessments and health-care⁵ needs for children-in-care, (2) health records for children-in-care, and (3) STS approaches. The review of initial child-in-care assessments, health-care needs, and health records is based on academic and grey literature, whereas the review of STS approaches relies solely on academic literature.

2.1 Health-care needs, assessments, and roles

The literature was reviewed to understand the health needs of children-in-care and to understand the current state of assessments, including roles.

2.1.1 Child-in-care health-care needs

Children are considered a vulnerable population and children-in-care are one of the most vulnerable populations (Simkiss, Stallard, & Thorogood, 2012). Contributing to this vulnerability is children's reliance on others to advocate on their behalf, and the fact their health needs change as they age (Stanton & Behrman, 2016). There have been changes in how children are viewed with an increasing focus on child health beginning at pregnancy and proceeding through birth and early years, and addressing parenting, abuse, and neglect (Stanton & Behrman, 2016).

The United Nations formally declared, in 1989, that children have a right to have their fundamental needs met, including health care.⁶ In BC, the government has long held that it has a responsibility to safeguard vulnerable children. It meets this obligation through child welfare agencies that intervene in families by providing services or by removing a child where there is suspected child abuse and/or neglect, collectively referred to as “child maltreatment” (Szilagyi, 2012, p. 498). Alternatively, parents may voluntarily ask a child welfare agency to take their child into care if they are unable to adequately care for their child (Szilagyi, 2012).

Children and youth entering or in state care are more likely to have health needs beyond those of the general pediatric population (Oswald, Heil, & Goldbeck, 2010; Ponti, 2008; Steele & Buchi,

⁵ For the purposes of this thesis research, *health-care needs* include medical, health, and well-being concepts.

⁶ United Nations Convention on the Rights of the Child, November 1989. Accessed April 29, 2016. Available from <http://www.ohchr.org/en/professionalinterest/pages/crc.aspx>

2008) and are at higher risk of not having their health-care needs met (New South Wales [NSW], 2013; Oswald et al., 2010). According to Szilagyi (2016), children in state care may be defined as a population with special health-care needs due to their history:

Multiple childhood adversities and the receipt of fragmented and inadequate health services before placement into foster care mean that children enter foster care with a high prevalence of chronic medical, mental health, developmental, dental, and educational problems... and so are defined as children with special healthcare needs (p. 228).

An environmental scan was conducted to explore current evidence on the health needs of children-in-care in Canada, the United States of America (USA), United Kingdom (UK), and Australia. The health needs of children in statutory or state care⁷ have been documented for 20 years and are found to be “internationally consistent” between countries (NSW, 2013, p. 40). There is conflicting evidence in the literature as to whether being in care improves health for some children (Forrester, Goodman, Cocker, Binnie, & Jensch, 2009; Szilagyi, 2012).

It is important to understand the larger ecology where children live and grow (Waddell, 2004, p.287) to understand why a child may enter care, including the parents’ ability to parent, as that may have a bearing on the child’s health needs (Simkiss et al., 2012). It is also important to understand the health needs of children as they enter state care in order to place children in foster homes that are able to meet the children’s health needs and, thereby, reduce the risk of placement change to another foster home. Changing placements decreases stability for the children which, in turn, may exacerbate their existing health issues (Rock, Michelson, Thomson, & Day, 2015; Sellick, 2006). For example, a child’s mental health was noted to be strongly associated with placement change (Rock et al., 2015).

The risk factors identified from the literature are consolidated in Table 2-1. Table 2-2 summarizes common health issues for children-in-care and is replicated from Table 38-1 in the Nelson Textbook of Pediatrics (Szilagyi, 2016, p. 228).

⁷ The term *statutory care* is shortened to *state care* and used interchangeably with *children-in-care* especially when used in a Canadian context.

Table 2-1. Summary of risk factors for health and health-care for children-in-care

Risk Factors	Factors	Publications
Past history	Multiple childhood adversities, fragmented and inadequate health service prior to entering care	Szilagyi, 2016
Parental	Socio-economic status, family breakdown, single parent, education level, family size, domestic violence, ethnicity (including Aboriginal), age, disability, smoking during pregnancy, mental illness, alcohol misuse, learning difficulties, involvement in crime, residential moves, substance abuse, adverse childhood experiences, ability to parent, teenage or unmarried mothers, no prenatal care	Oswald et al., 2010; Simkiss et al., 2012
Child	premature birth, low birthweight, prematurity, disability, injuries, emergency room visits, parent of a child, homelessness or past homelessness	Oswald et al., 2010; Simkiss et al., 2012; Svoboda, Shaw, Barth, & Bright, 2012; Zlotnik, Tam, & Zerger, 2012
Impact of adversity	Genetic and neurological impact from trauma, ⁸ impact of parental substance abuse	Szilagyi, 2016
Environment	Removal from parent, being in care	Szilagyi, 2016
Risks	Multiple placement changes, fragmented record, fragmented immunization record, increased instability, insufficient record access, lack of communication between providers including between providers and social workers, lack of medical examinations, limitations of quality of life	Anderson, Vostanis, & Spencer, 2004; NSW, 2013
Funding	Funding challenges	American Academy of Pediatrics Committee on Early Childhood, Adoption, and Dependent Care [AAP CECA], 2002; Zlotnik, Wilson, Scribano, Wood, & Noonan, 2015; Szilagyi, 2016

Table 2-2. Common health issues of children in foster care

Issue	Description
Chronic medical problems	Affect 40-60% of children Asthma, dermatologic, neurologic, obesity, growth failure, hearing, and vision problems are the most common
Abuse and neglect	Over 70% of children have a history of abuse and neglect at entry into foster care Monitor at all health visits for abuse or neglect

⁸ A. Winter's slides depicted that stress, exercise, and diet as well as trauma *in utero* or during childhood can impact neurological and biological development by altering methylation of deoxyribonucleic acid (DNA), which changes gene transcription and, therefore, protein expression. This points to the importance of safe, nurturing homes for children (Genome BC, personal communication, May 6, 2016).

Issue	Description
Complex chronic medical problems	Involves 10% of children in foster care Children may be dependent on medical technologies or have multiple disabilities
Mental health concerns	Affects 80% of children over 4 years of age Result of childhood trauma and adversity Most common diagnoses are adjustment disorder, posttraumatic stress disorder, attention-deficit/hyperactivity disorder, oppositional defiant disorder, and conduct disorder Externalizing problems are more likely to result in therapy
Developmental problems	60% of children under 5 years of age have at least 1 documented delay Commonly affect communication, cognition, problem-solving, and personal-social domains
Dental problems	35% of children have significant dental disease
Adolescent health issues	High rates of sexually transmitted infections, high-risk behaviours, and substance abuse
Educational problems	Half of special education placements relate to behavioural or emotional issues, not cognitive Only 32% of adolescents eventually graduate from high school; 32% obtain a General Equivalency Diploma
Family relationship problems	100% of children have family relationship problems

Replicated from Szilagyi (2016, p. 228, Table 38-1).

The top three health issues for children-in-care are “mental health as the single most important need” followed by developmental delays and behavioural, emotional, or cognitive problems affecting education (Szilagyi, 2012, pp. 505-506). Szilagyi (2016) also states “[t]he greatest single healthcare need of [children-in-care] is for high-quality, evidence-based mental health services to address the impacts of prior and ongoing trauma, loss, and unpredictability” (p. 228). For children with special needs, typical guidelines for a child that age should be followed with specific guidelines added according to the child’s special needs with additional screening for abuse. Children with a medical or behavioural issue “require typical prevention, as well as more specific counseling related to their disability” (Turk, 2016, p. 3413). Szilagyi’s Chapter 38, Foster and Kinship Care, also includes tables describing medical homes for children-in-care (p. 229, Table 38-2) and anticipatory guidelines for foster parents (p.229, Table 38-3).

2.1.2 Children-in-care assessments

This section summarizes the current state of initial assessments for children-in-care. This is followed by a comparison of assessments in Canada with assessments in the USA, UK, and Australia.

The initial assessment of a child brought into state care provides an opportunity to identify and initiate treatment of any unmet health need and to mitigate the impact of any health problems (Webster, Temple-Smith, & Smith, 2012). There are three types of initial assessments for children-in-care (1) assessment whether to bring the child into care, (2) assessment to place the child in an appropriate foster home, and (3) health and medical assessment. Similar to most countries, Canada is a signatory to the United Nations Convention on the Rights of the Child (UN CRC).⁹ Article 24 of the UN CRC states “children have the right to good quality health care—the best health care possible” (United Nations Convention on the Rights of the Child [UN CRC], 1989).

When assessing whether to remove a child from his or her family, in alignment with UN CRC Articles 4, 7(1), 9, 18 and 19, the provincial legislation, the *Child, Family and Community Service Act*, under *Guiding Principles, Section 2(b)* states “a family is the preferred environment for the care and upbringing of children and the responsibility for the protection of children rests primarily with the parents.” Articles 34 and 39 state that children have the right to be protected from and receive help against abuse and neglect. The BC legislation requires that, if a child is in need of protection, the least disruptive measure that is available should be used. That is, removal of a child from his or her parents’ care should always be the last option considered, and any such separation should be as brief as possible. The child welfare agency social worker conducts the assessment of whether to remove and bring a child into care as well as the assessment to decide on the foster care placement.

The BC legislation aligns with additional UN CRC articles. For example, the placement decision process should be as inclusive of the child, biological parents, and collaterals¹⁰ as possible (Articles 12, 13, and 14), and should consider the safety and well-being of the child as well as the child’s unique identity and any complex health-care needs (Articles 8, 20, 21, 23, 24 and 25). UN CRC Article 23(4) speaks to “the exchange of appropriate information in the field of preventative health care and of medical, psychological and functional treatment of disabled children.” Article 24(b) states that the States must “ensure the provision of necessary medical

⁹ Canada was a signing party to the United Nations 1989 Convention on the Rights of the Child (UN CRC). Accessed April 18, 2016. Available from: <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx>

¹⁰ The term *collaterals* refers to any persons who may have information about the child and who are not the child’s parents, such as grandparents, aunts, uncles, teachers, friends.

assistance and health care to all children with emphasis on the development of primary health care.” Article 25 states that a child in a placement has a right to have his or her treatment and placement reviewed, and Article 30 states that an indigenous child has a right “to enjoy his or her own culture... religion... and... language.” The MCFD policies support these rights of children for children-in-care.

Children entering state care need to be screened and assessed for medical, psychosocial, and mental health, and for developmental status and dental care needs (AAP CECA, 2002; NSW, 2013; Steele & Buchi, 2008). Depending on the age and gender of the child, the child should also be assessed for pregnancy or, if the child is a parent, for any parenting concerns (Svoboda et al., 2012). These factors might be included in the foster home placement assessment and in the medical assessment to provide recommendations to the social worker and foster parent to meet the child’s needs.

In a Canadian context, neither the Canadian Paediatric Society (CPS) nor the British Columbia Pediatric Society (BCPS) appear to offer a national or provincial assessment framework, respectively, or guidelines on health care for children coming into or already in care (Ponti, 2008). However, the CPS issued a position statement for the health supervision of children-in-care (Ponti, 2008), and publishes a guideline and many practice points on health issues that research shows may affect children-in-care. The CPS takes the position that health records should be maintained in partnership with the child welfare agency (Ponti, 2008).

The CPS’s position statement (Ponti, 2008) describes the first contact a physician has with a child-in-care as an opportunity to identify and address any health needs for the child. The initial medical assessment upon entry into foster care should include a physical examination and screen for acute illness, infection, pregnancy (if appropriate), chronic medical conditions, and medication needs. Screening should also be done for significant developmental delays or mental health disorders, and blood tests ordered as appropriate to screen for such conditions as anemia, lead toxicity, HIV, hepatitis B and C (Ponti, 2008). The initial screen should be followed by a fuller assessment to provide time to review the medical history, immunizations, results of the complete physical and the lab test, and to determine the need for referrals including dental, mental health, developmental, and psychoeducational assessments as appropriate.

The CPS position statement adheres to the American Academy of Pediatrics (AAP) and Child Welfare League of America (CWLA) guidelines recommending that the initial visit—where background information may be missing—focus on screening and treating obvious health conditions. The American guidelines state that a comprehensive medical assessment, including monitoring dental care, should follow within 30 days of the initial screening. Similarly, after the initial screening and follow-up examination of children-in-care, the CPS directs physicians to conduct routine assessments for development, mental health, dental health, and sexually-transmitted infections. A summary of the CPS recommendations is found in Appendix A.

Further, although the CPS offers few assessment guidelines¹¹ for children-in-care, CPS has tagged several practice points as *child maltreatment*. These posts, many of which were reaffirmed February 1, 2016, include:

- fetal alcohol syndrome (Canadian Paediatric Society, First Nations, Inuit and Métis Health Committee, 2002);
- pediatric model for all children and youth (Gauthier, Issenman, & Wilson, 2009);
- shaken baby syndrome (Canadian Paediatric Society, Child and Youth Maltreatment Section, 2001);
- impact from parents' divorce on children's and youth's mental health (Clark, 2013); and
- medical assessment of bruising for maltreatment (Ward, M.G.K., Ornstein, A., Niec, A. & Murray, C.L., 2013).

Ponti (2008) also states that service redesign is needed to better meet the needs of children-in-care, including children with special needs such as those living with HIV or AIDS. The CPS also advocates for dental care and lists child-in-care-specific dental tariffs and coverage (Rowan-Legg, 2013). Canada also has specialized clinics called *suspected child abuse and neglect* (SCAN) clinics that conduct comprehensive assessments for children and youth referred to them by the child welfare agency, family physician, or specialist. The clinics usually conduct a one-time assessment with report and referrals. Coordinating follow-up is delegated to the family

¹¹ CPS has a guideline for shaken baby syndrome: Canadian Pediatric Society. (2007). *Multidisciplinary Guidelines on the Identification, Investigation and Management of Suspected Abuse Head Trauma*. Ottawa, Canada: CPS. Available from: <http://www.cps.ca/en/search-recherche?q=shaken%20baby%20syndrome%20guidelines>

physician, pediatrician, or child welfare agency social worker (Hlady & Allchurch, 2015; The Hospital for Sick Children, 2016).

To compare Canada's assessment approach for children entering and in care with other jurisdictions, an exploratory scan was conducted of the USA, UK, and Australia child welfare systems. These three comparison jurisdictions implemented children-in-state-care assessment structures between 2000 and 2013. From the scan, the approaches to child welfare initial assessments appear to range from being combined with the health or medical assessment provided by a medical care provider to being a distinct process. Further, depending on the jurisdiction, there was either an initial assessment followed by a more comprehensive assessment, or one full assessment. There was also an instance of a jurisdiction changing from two assessments—an initial and then second fuller assessments—to one full assessment. The literature stated some jurisdictions provide financial incentives or special billing rates to encourage medical care providers to take on children-in-care as patients to compensate for assessments that may take longer than for a child living with his or her parents (United States Government Accountability Office [GAO], 2009; Webster, 2012). However, there were insufficient details to include financial incentives in the comparison table.

Table 2-3 summarizes the findings of the environmental scan comparing the three jurisdictions to Canada. It is important to note that all of these jurisdictions operate in a federal arrangement where local, state, provincial, or semi-autonomous areas operate the child welfare systems; therefore, these national comparisons are suggestive rather than exact.

Table 2-3. Status of children in state care assessments for Canada, USA, UK and Australia

Country/ Criteria	Canada	USA	UK ¹²	Australia ¹³ (New South Wales)
Legislation/ National Framework¹⁴	Unknown	State practices rely on American Academy of Pediatrics guidelines and Medicaid requirements ¹⁵	Framework for the Assessment of Children in Need and their Families	National Clinical Framework for Children and Young People in Out-of-Home Care
Implementation Year	Unknown	2009 ¹⁶ (federal legislation)	2000 (national framework)	2011 (national framework)
Governing body	Unknown	Administration for Children and Families (Federal oversight and legislation, with State-level implementation)	Social care group within Department of Health	Commonwealth Department of Health and Ageing
Guidelines	Unknown – Canadian Pediatric Society posts practice point publications, guideline	American Academy of Pediatrics, Medicaid	Framework	Framework, Clinical Practice Guidelines (NSW, 2013)
Basis	Unknown – follows AAP; reported study on Looking After Children Assessment and Action Record (Kufeldt et al., 2006)	American Academy of Pediatrics, Medicaid	Looking After Children Assessment and Action Records	Looking After Children Assessment and Action Records
Terminology (children in state care)	In-care; foster care	Out-of-home care; foster care	Child in need (might not be in state care)	Out-of-home care (includes kinship, residential)
Assessment content	Unknown – Canadian Pediatric Society posts practice point documents, guideline	Medical/health assessments are distinct from social worker assessments	Social worker and health assessments appear combined	Medical/health assessments are distinct from social worker assessments

¹² Pithouse (2009) advises that the Framework is not intended to replace child welfare investigative assessments nor specialist and statutory assessments; it is a shared record for “child’s universal services in health, education, the voluntary and private sectors” (p. 600). The Framework is included for UK as a comparison.

¹³ Australia’s findings are based on North South Wales operationalization of Australia’s National Clinical Assessment Framework for Children and Young People in Out-of-Home-Care (NSW, 2013).

¹⁴ In Canada, child welfare legislation and funding is provincial/territorial. This structure may impact development of a federal or national approach.

¹⁵ American Academy of Pediatrics. Healthy Foster Care America. Fostering Health. Accessed April 26, 2016. Available from <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/healthy-foster-care-america/Pages/Fostering-Health.aspx>.

¹⁶ Federal legislation. Fostering Connections and Promoting Adoptions Act. P.L. 110-351, 2009, as cited in Szilagyi, 2016, Ch.38, p.227.

Country/ Criteria	Canada	USA	UK¹²	Australia¹³ (New South Wales)
Assessments structures	Unknown – follows AAP guidelines; Canadian Pediatric Society has posted many practice points/position statements/guideline Specialized clinics for abuse and neglect with comprehensive assessments, and recommendations; and CPS recommendations (Ponti, 2008)	Two (2) – initial screening within 24 hours to 7 days (optional by state – alternate is to address urgent health needs such as evidence of abuse or neglect while awaiting well-child exam), general physical or well-child exam within 30 days, followed by regular exams as per AAP/State Medicaid schedule	Three (3) – decision (within 1 working day), initial assessment (within 7 working days), optional core assessment (within 35 working days). Each of the four nations (England, Ireland, Scotland, Wales) may implement as they wish. Range from one assessment to two assessments, to continuous assessments * services are put in place while assessments are in progress to avoid wait times	Three (3) – primary health screening within 30 days, comprehensive assessment and create health plan within 90 days, targeted service intervention as needed, then periodic review and assessment (includes routine schedule – every 6 months under 5 years old; annually for 5 and over); specialized clinic with full assessment and referrals
Defines interagency roles	Unknown	Yes	Yes	Yes
Indicators reported at national level	(recommendation for indicators – Canadian Institute for Health Information) ¹⁷	Yes (collected by Administration for Children and Families)	Yes (collected by National Society for the Prevention of Cruelty to Children)	Yes (case file audit data by Children’s Guardian)
Literature	Hlady & Allchurch, 2015; Kufeldt, McGilligan, Klein, & Rideout, 2006; Ponti, 2008. (representative literature)	GAO, 2009.	Gray, 2001; Jutte, et al., 2015; United Kingdom Department of Health [UK DoH], 2000.	Chambers, Saunders, New, Williams, & Stachurska, 2010; Kertesz, 2012; New South Wales Children’s Guardian, ¹⁸ n.d.; NSW, 2013; Webster et al., 2012.

Based on the review of the jurisdictions’ assessment processes, all assessments included a health assessment but, as summarized in Table 2-3, the literature also showed variation. Some jurisdictions appear to have a joint social worker-medical assessment process while others have structured a solely medical assessment process. The latter process provided greater detail on the

¹⁷ Canadian Institute for Health Information [CIHI], 2013.

¹⁸ Australia’s Children’s Guardian is an oversight body for the child welfare agencies and conducts case file audits. Its role is similar to the Office of the Representative for Children and Youth in British Columbia.

initial screening, fuller assessment overall, and follow-up that may include a health-care plan, referrals, and/or routine check-ups. As aforementioned, although there was some indication of incentives and payment schedules in the literature (GAO, 2009; Webster, 2012, [see Appendix B]), there were insufficient details to enable an in-depth understanding of incentives and payments for assessments of children-in-care. Further study comparing incentives for physicians to take on other types of patients with complex care needs is recommended to provide a better understanding of how fee schedules might be structured to factor in workload considerations.

Canada (Ponti, 2008) and the three comparison jurisdictions addressed professional roles in assessment. Professional roles were also described in the literature reviewed. The responsibility for assessments falls between the medical care provider and the child welfare agency social worker; responsibility may also be shared among different health care providers (MacMillan, 2013). Deliberate collaboration is required to improve health for children in state care (Zlotnik et al., 2015). The health care provider should discuss the child-in-care's health care directly with both the social worker and the foster parent (AAP CECA, 2002). For example, AAP notes that "[h]ealth care management is the responsibility of the child welfare agency, but it is a function that requires medical expertise" (American Academy of Pediatrics [AAP], 2005, p.78). Zlotnik (2015) suggests embedding medical directors and nurses in child welfare agencies. A key consideration for the roles involved in managing health care for children-in-care is the blurring of roles between "authority, responsibility, and accountability" (Szilagyi, 2012, p.499) with respect to: biological parents, who retain guardianship until an order of termination of parental rights is granted; foster parents, who parent the child day-to-day; and social workers, who ensure the care of the child. All three roles have a duty to the courts (Szilagyi, 2012).

2.2 Child-in-care health records

The foster care system is a simple concept but complex in practice (Szilagyi, 2012), and technology adds further complexity (Drummond, Ferranti, Lehmann, & Lighter, 2009). Szilagyi (2015) discusses the issues of accessing health information for an assessment when a child enters state care. The issues include incomplete or missing records, inability to obtain information from birth parents, frequent change in health-care providers, little previous contact with the health-care system, and the need for consents to obtain existing information (Szilagyi, Rosen, Rubin, & Zlotnik, 2015). Further, there are gaps in the data available for secondary analysis. Such analysis

might reveal links between health needs, risk factors, and the outcome of interventions, and might provide evidence of effective treatment. These results are needed to inform policy and practice.

AAP (2002, p. 539) states that “computerized health information systems” for foster children are being developed for access by both practitioners and child welfare agencies. Paper, electronic, and hybrid health records tailored to children in state care exist (Thompson & Lau, 2013). Hill et al. (2002) provide a history of assessment tools prior to 1995 at which time the Looking After Children booklets were introduced. Hill et al. describe moving from an annual examination of children-in-care, with the focus on screening for infections to protect the foster families, to the British Association for Adoption and Fostering (BAAF) booklet that introduced a more medical approach to assessments but with limited functional and lifestyle assessments.

An environmental scan was conducted on health records for children-in-care. Table 2-4 lists the records that were reported. The literature also suggested key information in child-in-care health records. These are listed in Table 2-5.

Table 2-4. Paper, electronic, and hybrid children-in-care health records

No.	Record	Country (Author, year)
1	Looking After Children – Assessment and Action Records	Canada, (Kufeldt et al., 2006); UK, (Bundle, 2001; Kerslake, 1998); and Australia, (Champion & Wise, 2009)
2	British Association for Adoption and Fostering (BAAF) Health Record Booklets	UK, (Hunter, McCartney, Fleming, & Guy, 2008)
3	Joint Professional Records	UK, (Knowles et al., 1998)
4	Health and Education Passport for Children in out of home care	United States, (Lindsay, Chadwick, Landsverk, & Pierce, 1993)
5	Child Health System, a social worker system for health information and services	United States, (Smart, Russell, & Custodio, 1998)
6	Blue Book to capture health assessments and treatments for children ages 0 to 5	Australia, (Children’s Guardian, n.d.)
7	medical history profile or passport generated from Medicaid claims and encounter data (no real time data entry)	United States, (Chisolm, Scribano, Purnell, & Kelleher, 2009)

Table 2-5. Key information suggestions for children-in-care health record¹⁹

No.	Data	Literature
1	Medical history profile report generated from Medicaid and encounter data: ambulatory care, diagnoses, providers seen, medications... and inpatient admissions	Chisolm et al., 2009, p. 1
2	Recommended key information types for a medical passport: medical problems, allergies, chronic medications, and immunization data as well as basic social service and family history	AAP CECA, 2002, p.529
3	Genogram – to map out the child’s network, culture	Altshuler, 1999, p.777
4	Passport template (paper based): child demographics and biological parents’ names; emergency contacts; specialists and care providers including agencies; birth information; surgeries, allergies and hospital admissions; chronic problems; chronic medications and other medications; tests and x-rays; visit summary including information on any referral and ending with “my next appointment” date; and immunizations	McDavid, 2015, p.1336-1346
5	Common Assessment Framework (CAF – Signs of Wellbeing) form: ethnicity, identity, how the child feels, overall wellbeing self-rating scale; Appendix 1: includes referrals to services (developmental, mental health, speech and language)	CAF, n.d.
6	Core Functionality in Pediatric Electronic Health Records, Pediatric Health Level (HL) 7 data set, specific considerations for foster children including: identity, vulnerability, privacy and confidentiality, and consent considerations for adolescents.	Dufendach et al., 2015

The data types listed in Table 2-5 do not appear consistent nor do they appear comprehensive when compared to data elements for a child personal health record recommended by Zuckerman & Kim (2009). This lack of consistency suggests more research is needed to confirm the key information types that the care team need when providing care to and planning for children-in-care.

The environmental scan also provided evidence from studies of social care records in Canada and four jurisdictions: USA (California), UK, Australia, and Finland. Each jurisdiction provided an evaluation or described issues with the usage of its children-in-care record detailing how the information system did not fit social work practice. This was despite the fact the initial intent of

¹⁹ For Table 2-5, only a sample of literature was reviewed; therefore, it is likely the list is not exhaustive. For example, from participant interviews, information on pre-existing treatment protocols, equipment, physiotherapy, occupational therapy, and rehabilitation was needed when a child entered care. Further, not all literature classified recommendations as information needs. For example, Williams, Mackintosh, Bateman, Holland, Rushworth, Brooks & Geddes (2014) advocate for including dental screening and any referral as part of the initial medical assessment process.

all the records was to improve outcomes for children-in-care and other children for whom the information systems were used (Huuskonen & Vakkari, 2013; Kufeldt et al, 2006; Mitchell & Sloper, 2008; Pithouse, Hall, Peckover, & White, 2009; Shaw et al., 2009). Many of the issues and concerns noted might be classified as sociotechnical issues, evoking the tension between technical artifacts and social elements, as well as conflicting organizational goals. For example, the systems were found to be too prescriptive, changed the professional working relationship between the social worker and supervisor, and reduced direct time with clients. Some social workers developed workarounds to use the record. The table in Appendix C compares these records by jurisdiction, including strengths, limitations, and whether the literature provided details on initial assessments. However, as Appendix C only provides highlights from the environmental scan, the researcher recommends a systematic review of academic and grey literature to fully itemize and classify requirements, to list design, implementation, and support considerations, and to capture benefits identified in the studies as a first step toward designing a child-in-care electronic health record systems.

2.3 Sociotechnical systems (STS) approaches

STS approaches have been used for over 65 years (Fox, 1995; Mumford, 2006) with a lapse in the 1970s and 1980s (Mumford, 2006; Pava, 1986). They “reflect[] the goal of integrating the social requirements of people doing the work with the technical requirements needed to keep the work systems viable with regard to their environments” (Fox, 1995, p.92). The technical system includes “the materials, machines, territory, and processes used to convert inputs to outputs” (Fox, 1995, p.93). The social system is the social structure “comprised of organizational roles” (Fox, 1995, p.93). The social and technical systems “must be considered interdependently, because arrangements that are optimal for one may not be optimal for the other, and tradeoffs are often required” (Fox, 1995, p.92). An STS approach enables optimization through trade-offs between the technical and the social systems (Fox, 1995) to ensure that the software meets the end users’ needs while enabling the provision of services that are congruent with the external environment and that offer a competitive advantage (Katsioloudes, 1996; Pava, 1986). Thus, “there is a need for both dual focus and joint optimization” (Fox, 1995, p 91).

Iivari & Hirschheim (1996) list considerations for information systems design following an STS approach:

- the priority of the design has technical and organizational/social systems as equal partners;
- the causes of implementation problems are due to a misfit between the technical and organizational/social subsystems;
- the critical considerations for implementation success include fit between these two systems;
- the developmental strategy looks at technical and social options;
- the implementation strategy is normative-educative;²⁰ and
- the role of the change agent is as a facilitator.

2.3.1 Overview of sociotechnical systems approaches

There are many STS approaches (Aarts & Gorman, 2007). A review of STS studies identified the following themes: general overview, philosophy and style comparisons, approaches, theory, analysis, design principles, system and process design and re-design, modelling, development, policy development, post-implementation analysis, knowledge translation, and benefits realization. The corresponding authors for these STS approaches are listed in Appendix D. Of note, Eason from the Tavistock Institute blends ergonomics and behaviour with an STS approach. Health informaticians focusing on clinical information systems include Aarts, Berg, Coiera, Lau, and Sittig.

In determining the best fit for this thesis research, Keating's (2001) and Sittig's and Singh's (2010) works were considered. While Sittig and Singh have developed an 8-dimension sociotechnical framework for analysis, their framework seemed to go beyond requirements gathering. It was also not detailed enough to provide a framework to gather, organize, and analyze the participants' information needs into requirements. In contrast, although Keating's 2001 paper operationalizes Pava (Pava, 1986), Keating's paper focuses on process re-design. Accordingly, Pava's approach (1986) was found to be the best fit. The concepts and methods in Pava's work were at the right level of detail to enable structuring the research to start at systems

²⁰ *Normative-educative* refers to implementing the system in a way that supports carrying out normal workflow while enabling end users to learn the workflow.

analysis, moving through to gathering and analyzing requirements. Further, Pava’s work, supported by Fok et al.’s (1987) analysis of Pava’s approach, provided sufficient description to enable formulating a framework to organize the research findings. This choice is validated by the use of Pava’s approach in Lau et al. (1998) and Wastell & White (2014a). Pava’s STS approach is discussed in more detail in Section 2.3.2.

2.3.2 Pava’s concepts and methods for STS design

An STS framework enables alignment between the social organization, its technology, and the external environment (Pava, 1986). Figure 2-1 was derived from the description in Pava and updated following the revised literature review and findings analysis to include core business or *context understanding* and *process details*. Figure 2-1 depicts the relationships between the systems in the STS framework, including the external environment. The overall goal is joint optimization between the technical artifacts and social elements²¹ of an organization while the organization continues to meet evolving external demands to stay competitive in its external environment (Fok et al., 1987; Pava, 1986).

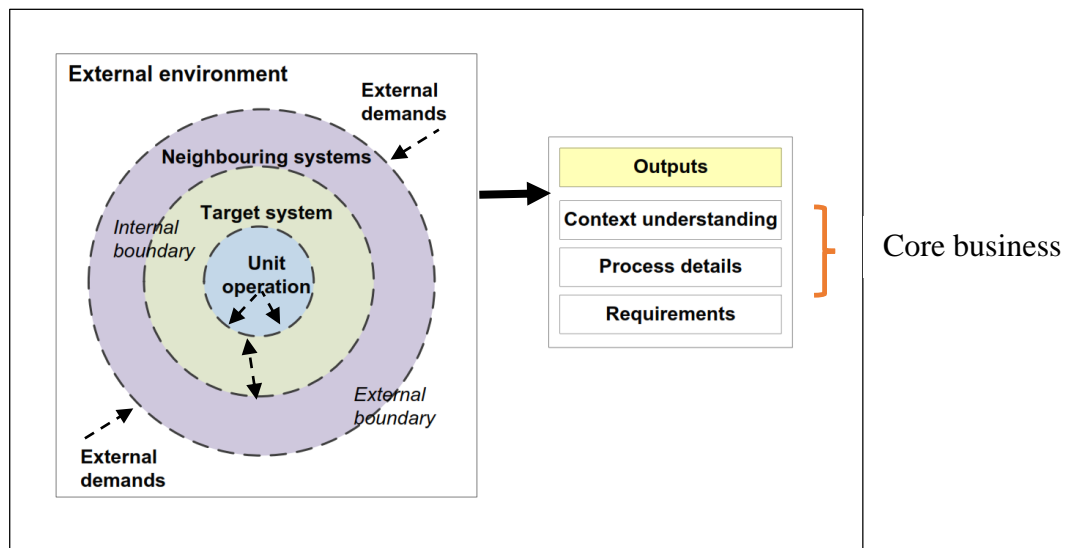


Figure 2-1. Sociotechnical contextual diagram

In Figure 2-1, Pava’s model has been modified; context understanding and process details are included under outputs. These dimensions are included to emphasize that it is essential to have a

²¹ To aid in differentiating between technical and social aspects, the terms *technical artifacts* and *social elements* are used in this research.

clear understanding of the core business as part of gathering requirements. Understanding the business context and articulating the process details are key to ensuring that the requirements fit the core business, that they inform any needed changes to existing processes and roles, and that any tool designed from the requirements fits the business needs.

Fok et al. (1987) describe Pava's (1986) approach, in its details, as being similar to Trist's 9-step approach (Trist, 1971, as cited in Fok et al., 1987). Pava adds three main concepts (1) coalitions and reticular organizations, (2) deliberations versus decisions, and (3) blurring of roles. In addition, Pava provides alternatives for steps 3 and 4 for analyzing nonlinear tasks. The substitution of "variation analysis" with "deliberations and discretionary coalitions" reflects the multiple and complex conversion processes involved and the highly trained workers who carry out the tasks (Fok et al., 1987, p. 327). With the "[information] conversion process nonlinear, complex, uncertain, and disjoint" (Fok et al., 1987, p.327), and the workers all highly trained specialists, the traditional "linear" STS approach does not fit (Pava, 1986, p.203). Variances or differing characteristics are important to identify as they may impact process outcomes (Courtney, Flynn, & Beaupré, 2013).

There are nine steps in the traditional STS model (Fok et al., 1987, p. 324). The nine steps listed below include these traditional steps and Pava's (1986) alternatives (in italics) for Step 3 and Step 4 to enable analysis of nonlinear systems. Combined, these steps form the STS framework (STS approach) for this thesis research. The nine steps are:

1. Identify the target system and its environment
2. Identify unit operations
3. Discover key variances²² and their interrelations (*nonlinear alternate: discover deliberation patterns*)
4. Create a table of variance control (*nonlinear alternate: identify discretionary coalitions*)
5. Investigate social systems members' perceptions of their roles and constraints
6. Consider neighbouring systems
7. Analyze boundary-crossing systems

²² Variances, or different characteristics, include those of system functionality, pathway options, people, places, and things.

8. Place the target system and its immediate neighbours in the general management system of the organization
9. Design proposals for the target or neighbouring systems

In summary, the *unit operation* is the main function under study. The unit operation resides within the *target system*. The *neighbouring systems* are systems that share information with the target system and into which people may blur or be in other roles. The unit operation, target system, and neighbouring systems each have their own *technical artifacts* and *social elements*. Technical artifacts may include governing statutes, authorities, regulations, policies, job descriptions, forms, information systems, deliberations, and decisions (Fok et al., 1987; Fox, 1995; Pava, 1986). Social elements include the people (Fok et al., 1987; Fox, 1995), that is reticular organizations, coalitions, training, education, and blurring of roles (Pava, 1986). Roles as job descriptions are technical; however, an individual's training, education, and community place in society are social. An individual may change roles within a system or when passing between boundaries into another system (e.g., Unit: foster parent, Target: behavioural consultant, Neighbouring: biological and adoptive parent). In Figure 2-1 the *boundaries* are dashed as information may be shared both within a bounded area as well as between bounded areas where the *bounded areas* are the unit operation, target system, neighbouring systems, and external environment. The unit operation is initiated when there is a need for gathering, processing, and transforming information into an output (Fok et al., 1987; Pava, 1986). For nonlinear processes, a *reticular organization*²³ works together in the unit operation. The authority shifts between the roles as the operation is carried out through tasks (Pava, 1986). Key STS terms relied on for this thesis research are defined in Appendix D.

2.4 Literature review summary

Chapter 2 explored the current state of knowledge, assessments, and knowledge gaps about children-in-care health needs in the literature. The risks and health needs for children-in-care were discussed, and the assessment processes, including roles, were compared between Canada and similar jurisdictions. Next, the literature on children-in-care health record systems from different jurisdictions was reviewed to understand the current state—what works and what did

²³ The organization is *reticular* as the roles or personnel are from different formal organizations or agencies and join together for the purpose of carrying out the unit operation.

not work—in order to provide guidance and considerations when gathering requirements. Last, drawing on the literature, an argument for relying on Pava’s STS approach to organize the thesis research findings was made. This choice aligns with work in the UK that advocates for an STS approach and core principles for social care systems design (Gillingham, 2014b; Wastell & White, 2014a; White, Hall, & Peckover, 2009).

2.5 Motivations and rationale for this study

From the literature, there appears to be a paucity of evidence on initial assessment processes for children-in-care in Canada and, specifically, health or medical assessments in children-in-care health record applications. STS approaches have been applied to social care information system development in the UK (Wastell & White, 2014a). From the literature reviewed, it is unknown if STS approaches have been applied to social care information systems in Canada. Academic studies on children-in-care health records pointed towards continued development of children-in-care health records as a tool to improve health outcomes for children-in-care (Thompson & Lau, 2013). Study of this domain is supported by Dufendach et al. (2015) who state that further empirical research in health-care records and foster care “for what works” is warranted (p. 56).

The literature reviewed does not appear to detail the process by which health information is gathered, used, created, and disclosed for initial assessments when a child first enters state care. The literature also suggests a gap between social care information and communication systems and an understanding of what information is needed by social workers, foster parents, and medical care providers to support their workflows in the initial assessments of a child entering state care for the first time. Last, from *Table 2-3 - Status of children in state care assessments for Canada, USA, UK and Australia*, Canada does not appear to have a national or provincial framework for children-in-care medical assessments although there is direction to adhere to the AAP schedule (Ponti, 2008).

This thesis research will study the existing MCFD child-in-care health-care framework to understand the current state, needs, and gaps. The framework will be derived through an informal review of organization documents and substantiated through interviews with participants in three key roles: social workers, foster parents, and medical care providers. The research findings should enable a better understanding of the MCFD conceptual child-in-care health-care framework, together with any challenges, barriers, or gaps and ways these might be

overcome. The technical system and social system might be better understood through this thesis research by explaining the core business for context and processes to develop requirements for a child-in-care health record.

Chapter 2 Key Messages

Based on 20 years of research, the health needs of children-in-care are internationally consistent (NSW, 2013).

The literature identifies the three top health needs for children-in-care as mental health, developmental delays, and behavioural, emotional, or cognitive problems affecting education.

The literature also identifies mental health services as the most important health-care service to help address past trauma and inconsistent care for children-in-care.

The first time a child enters care provides an opportunity to assess the child for any unmet health needs.

The USA, UK, and Australia assessment models reviewed for initial health assessments range from one assessment to three with additional follow-up, and from purely medical to a combination of social work and medical.

Paper, electronic, and hybrid health records tailored to children-in-care exist; however, the data elements identified for a child-in-care health record are not complete.

An STS approach is appropriate for social care systems research. Pava's 9-step sociotechnical model (Figure 2-1), as modified, was found to be the best fit for organizing the findings from this research.

Chapter 3 – Research approach

This chapter states the research question and describes the method, research design, interview sites, participants and recruitment, data sources, and data analysis.

3.1 Research question

This thesis research studied the health information needs of social workers, caregivers,²⁴ and medical care providers for the three initial assessments (1) when a social worker is removing and bringing a child into care, (2) when the social worker, resource worker, and foster parent are deciding on a placement,²⁵ and (3) when the child is taken to the medical care provider for an initial medical assessment. Specifically, the research question asks:

What health information do social workers, foster parents, and medical care providers need to provide care to and plan for a child-in-care during initial assessments? That is:

- What health information is known about the child at the point of initial intake?
- What health information about the child-in-care is required at the initial intake?²⁶
- What health information about the child-in-care is required for assessments?
- Are there key information types?
- How is the information collected, recorded, updated, and maintained?
- Who collects and records each specific piece of information?
- Are there challenges in gathering the information?
- If there are challenges, how could these challenges be overcome?

It is hoped that answering these questions will provide a better understanding of the health information needs for the initial assessments when a child enters state care for the first time.

²⁴ The term *foster parent* will be used in place of *caregiver* from this point forward.

²⁵ The term *placement* refers to the home the child is placed in. There are three types of placements: foster homes, group homes, and residential homes. This thesis research focused only on foster homes as the placement type.

²⁶ The term *intake* is the social worker's process to bring a child into MCFD's care although it may be just the day-to-day care of the child and not include transferring guardianship from the parent to MCFD.

3.2 Method

This thesis research used a qualitative research approach with an STS approach to interpret the findings (Niazkhani, Pirnejad, Aarts, Adams, & Bal, 2011). Denzin & Lincoln (2011) describe qualitative research as:

“turn[ing] the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self [...]. [Q]ualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them” (p. 3).

A qualitative approach was appropriate as the thesis research was exploratory in nature. This thesis research sought to understand the business context and the processes, and challenges and barriers in their current state, both as formally stated in organization documents and as described by the professionals doing the work. The goal was to generate new knowledge. Quantitative or mixed methods would not fit this thesis research as there was no child-in-care health record being implemented as part of this research that would have allowed for pre- and post-intervention data comparison. Further, in-person interviews enabled the researcher to understand the participants and children-in-care in their environment; a survey would not have provided an equivalent richness or depth of understanding.

The STS approach for this thesis research was based on Pava’s 9-step STS approach (1986) reviewed in detail in Chapter 2 - Literature Review, Section 2.3.2. The nine steps are (1) identify the target system and its environment, (2) identify the unit operations, (3) consider differences and how they fit together, and deliberation patterns, (4) create a table of differences and identify teams, (5) ask participants about roles and constraints, (6) consider neighbouring systems, (7) analyze systems that cross boundaries, (8) situate target and neighbouring systems, and (9) design proposals for the target or neighbouring systems. An STS approach identifies the technical artifacts and social elements that work together in a system to provide a defined output. The technical artifacts for this thesis research are legislation, policies, procedures, processes, and tools, including information technology tools. The social elements are brought to the system by people who fill the roles that do the work, or are subjects and benefit from the work. A person may both fill a role and benefit from the work done or information transformed in a system. The unit operation under study is the health information needed for initial assessments of children-in-

care. The technical artifacts are the MCFD organization documents, including the forms used in the study, and other documents and tools identified by the participants. The people or the research participants are professionals who fill three main roles in children-in-care's initial assessments.

3.3 Interview sites

Internal consultation at MCFD was used to identify potential interview sites based on operating MCFD offices.²⁷ MCFD regional guardianship consultant staff and an MCFD lead were consulted as *key informants* who have knowledge of the organization (Bogdan & Taylor, 1990). The MCFD regional guardianship consultant staff were consulted for potential interview sites that would represent the diverse provincial demographics. These consultants were MCFD staff who oversee the office locations in their region and have good knowledge of potential interview sites, participant types, and child-in-care core business. The MCFD lead was also consulted for potential interview sites. Eleven urban and rural communities were identified as interview sites.

3.4 Participants and recruitment

Prior to starting participant recruitment, human ethics approval was sought and obtained from the Human Research Ethics Board, University of Victoria on March 21, 2013 (Appendix E), and research approval was obtained from MCFD.²⁸ Participant recruitment used a snowball approach (Bogdan & Taylor, 1990) relying on the MCFD executive sponsor's invitation letter with the researcher's letter explaining the thesis research in more detail. There were three categories of participants: social workers, foster parents, and medical care providers. The MCFD consultants and MCFD lead emailed study invitations to social worker team leaders to invite members of their social worker team, as they deemed appropriate. The social workers who opted to participate in the research emailed the researcher back directly to arrange an interview time. Foster parents were invited to the research in two ways: a snowball approach through the BC Federation of Foster Parent Association, and directly by either the social workers who opted into the research or the social workers' team leaders. Medical care providers were also recruited in two ways: through a snowball approach through two organizations, the BC Pediatric Society or

²⁷ The MCFD regional front-line offices provide direct care and services to children, youth, and families.

²⁸ MCFD, personal communication, March 22, 2013.

Doctors of BC, or directly by the social workers who opted into the study or by the social workers' team leaders.

As this study was qualitative, purposive sampling was used to maximize range of diversity with the minimum number of participants (Jackson & Verberg, 2007). The researcher provided noncoercive compensation to participants for their time to participate in the research—a one-time amount of \$60 (CAN) to foster parents and \$100 (CAN) per session to medical care providers. MCFD supported cost-in-kind participation by the social workers during work hours in accordance with standard MCFD research protocol. As part of the consent process, participants were informed that they were able to decline and/or withdraw from the research at any point without fear of reprisal. This reflects the potential for harm from the workplace to the participants, including foster parents under contract to MCFD. Further, if a participant chose to withdraw from the research, his or her data would be removed from the findings to the degree this removal was reasonably possible.

3.5 Data sources

There were two data sources, organization documents and participant interviews. The organization documents were provided by MCFD. These organization documents are listed in Section 3.6.1. The second data source was the participant interviews. Interviews were held with participants to gather empirical evidence. One researcher conducted the initial and any follow-up interviews. The interviews were conducted on site where possible, and relied on a nonvalidated, 19-question interview tool developed specifically for this thesis research (Appendix F). There were three parts to the tool. Part 1 asked for participant characteristics. Part 2 asked participants about using the six forms identified as the child-in-care health record,²⁹ and about the forms' comprehensiveness and how the forms worked for them. Part 3 contained 11 questions that asked the participants about workflow such as how they meet the children, how they gather and share information, if there are any challenges or barriers, and who is responsible for the overall health care of children-in-care.

The interview tool used semi-structured questions in everyday English. The interview questions were piloted with a nonparticipant MCFD social worker to test the questions and timing. The overall approach, including the six forms, was tested with an MCFD lead for feedback. There

²⁹ The six forms were provided to the researcher by the MCFD executive clinical sponsor and were understood to comprise MCFD's current child-in-care health record.

was time allotted at the end of each participant interview session for debriefing to address any participant questions and describe the next steps of the research. The interview steps in Kvale (2008) were followed to confirm rigour of data collected through interviews with the participants. Where appropriate, the researcher asked probing questions and asked for clarification of meanings as a step toward preliminary coding (Kvale, 2008). The research focus was on Form 1 - Child's Permanent Medical Record that contains the physical medical examination. The forms are shown in Figure 3-1 in the order they were presented for the interviews.

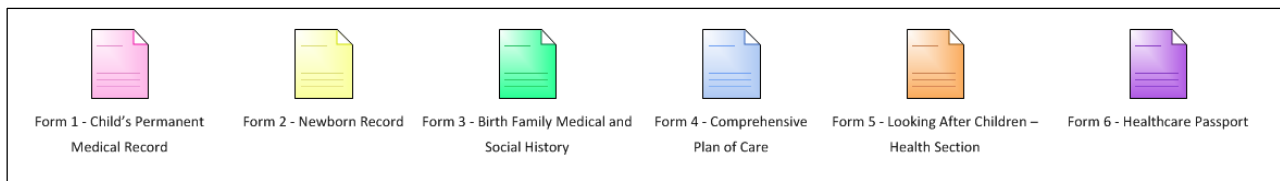


Figure 3-1. Presentation order of forms at interviews

3.6 Data analysis

The MCFD organization documents and participant interview transcripts were analysed. To source triangulate participants' comments, an in-depth analysis of the six forms as technical artifacts was done after analysing the participant interview transcripts.

3.6.1 MCFD organization document analysis

Document analysis was carried out before and after the participant interview analysis. The organization documents of policy, procedures, and standards were provided by MCFD, and the documents granting authority and other relevant documents were retrieved from the Internet to provide context for the organization documents. Table 3-2 lists these organization and authority-granting documents.

Table 3-1. Organization and authority-granting documents

Document	Short title	Description	Availability
1	Ch.3 Training Manual	Integrated Case Management Phase 2 Training Manual, including Chapter 3 Policies and Procedures. Provided September 2012.	Upon request from MCFD

Document	Short title	Description	Availability
2	MCFD Ch.3 Policies	Ministry of Children and Family Development. Child Safety and Family Support Policies. Chapter 3: Child Protection Response. Standards 1-25. April 2, 2012. Accessed May 2014.	Upon request from MCFD
3	(Included in “MCFD Ch.3 Policies”)	Ministry of Children and Family Development. Child Safety and Family Support Policies. Ministry of Children and Family Development Child Protection Response Model. April 2, 2012. Accessed May 2014.	Upon request from MCFD
4	(Included in “MCFD Ch.3 Policies”)	Ministry of Children and Family Development. Child Safety and Family Support Policies. British Columbia Ministry of Children and Family Development. Guardianship for Minor Children in BC. Revised April 6, 2010. (matrix of guardianship types and roles such as advocacy, authority for providing consents). April 2, 2012. Accessed May 2014.	Upon request from MCFD
5	MCFD CIC Standards	Ministry of Children and Family Development. Child Safety and Family Support Policies. Ministry of Children in Care Service Standards. Standards 1-16. July 12, 2004. Accessed May 2014.	Upon request from MCFD
6	UN CRC, 1989	United Nations Human Rights: Convention on the Rights of the Child	From Internet
7	CFCSA, 1996	<i>Child, Family and Community Service Act</i>	From Internet

To prepare for field data collection, the researcher attended the MCFD social worker train-the-trainer training session on September 14 to 16, 2012. The course facilitators covered Document 1 - Ch. 3 Training Manual in the course. At the course, the researcher confirmed that the process for initial medical assessment was not detailed in the process mapping, justifying continuation of this thesis research.

Next, concepts that emerged from analyzing the participant interviews were compared against the provincial legislation and the Articles and concepts in Document 6 - the UN CRC (1989). Document 7 - the *Child, Family and Community Service Act* [CFCSA] (1996) and UN CRC were reviewed in detail and compared to the thesis findings with respect to the authority and responsibility for health care for children-in-care and for the health-care rights of children-in-care.

The researcher then informally reviewed the remaining organization documents (Documents 2-5) in detail, noting the health and health-related concepts as brought forward in participant interviews. Terms that appeared more frequently, or in combination, were noted. The document

glossaries were also reviewed to confirm whether the terms were listed as separate concepts and, if listed, whether the terms were listed with definitions. The workflow processes directed by the standard procedures were also noted. As part of the organization document analysis, the six forms reviewed by participants as part of this research were read through in detail with a focus on process suggested by the forms and for health and health-related concepts defined in the forms.

Last, the researcher returned to Document 1 – Ch.3 Training Manual to identify health and health-related concepts and supporting tools in the social worker initial assessment of whether to remove and bring a child into care. The findings from the organization document review have been incorporated into the appropriate form or thesis section.

3.6.2 Participant interview analysis

All transcripts were audio recorded, transcribed, proofed, and corrected as accurately as possible. The transcripts were then returned to participants through email or registered mail for their records and to provide an opportunity for any changes to ensure transparency in the study. Any corrections were made, and the transcripts were then uploaded into NVivo-10 QSR (NVivo) for encoding.³⁰ The transcripts were inductively rather than deductively encoded to enable concepts and themes to emerge, and then grouped by the STS framework. As the transcripts were encoded, nodes were grouped by category into second and third level nodes. A constant comparative approach was used to identify frequency and like codes, and to ensure the groupings were coherent. New nodes were created for concepts when groupings did not seem coherent. The groupings were then synthesized and incorporated into the thesis research report.

Last, adhering to the qualitative research process, “the literature review [is] carried out after the research has been conducted and the data analyzed” (Jackson & Verberg, 2007, p. 150).

Accordingly, a more in-depth review of the literature was then done to augment the findings from the preliminary scan of the literature. Figure 3-2 maps the research process.

³⁰ NVivo is a current version of NUD*IST and is used to organize qualitative data such as transcripts (Zamawe, 2015).

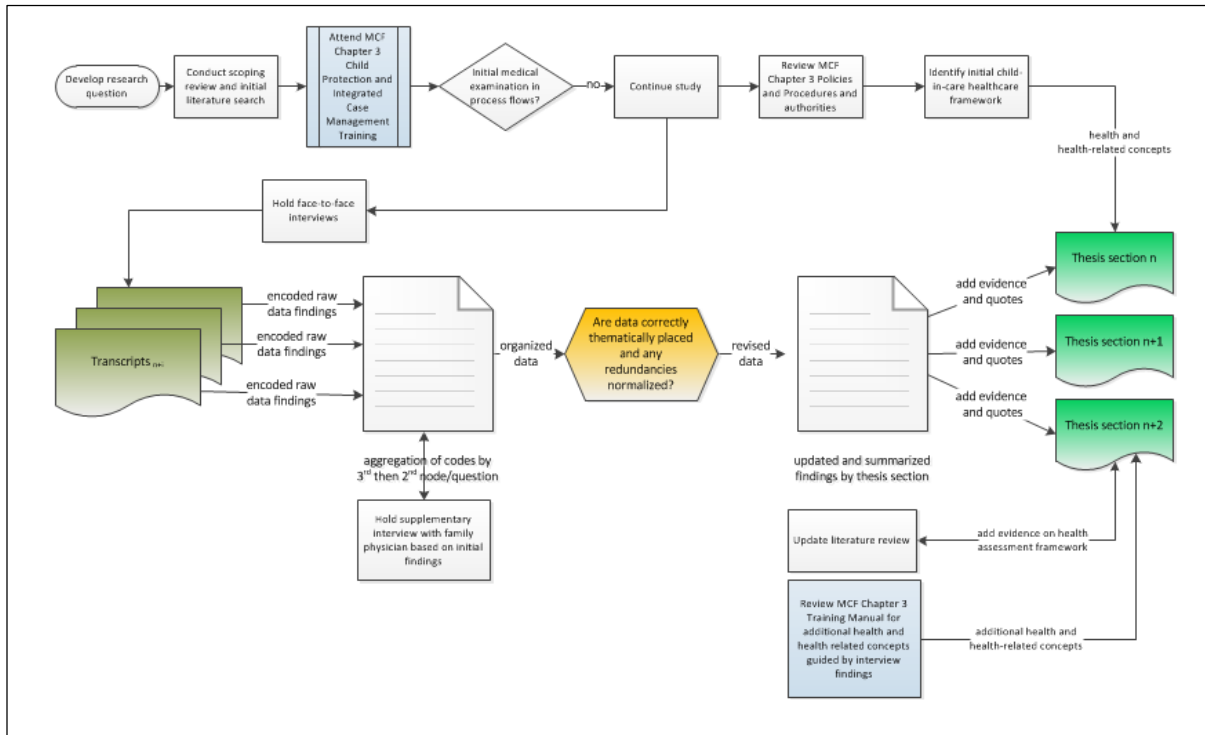


Figure 3-2. Research process

As a last step, the thesis was sent to participants by email or registered mail, depending on the participants' communication preference, for closure and to obtain any feedback. This step adheres to the sixth step of analysis of interview data by extending the findings to the participants as new knowledge and for transparency (Kvale, 2008).

3.6.3 Forms 1-6 analysis

The participant interview analysis included reviewing participants' professional opinions on each of the six forms for how the forms work for them i.e., general usability comments, as well as for fields not needed, missing fields, and general comments. Based on participants' professional opinions, a more in-depth analysis was done of the six forms, including whether the participants had seen and/or use the forms, fields the participants fill out, and if the forms were helpful to the participant in his or her role during the initial assessments. An analysis of duplicate fields and labels between Form 1 and the other five forms was also done as many participants commented that there was much duplication or repetition between forms.

3.6.4 Triangulation

Triangulation compares multiple data sources to provide a rich explanation of the same phenomenon. Source and method triangulations were used in this thesis research.³¹ Findings from the organization documents analysis and the participant interview analysis were triangulated to compare and contrast technical artifacts with the social elements. Responses from the three types of participants were compared to each other, and then compared to the organization documents (source triangulation), and then to the literature (method triangulation). The findings aligned. Gaps were identified through analysis of responses to the Part 3 interview questions that included workflow or processes. The updated literature review findings of health needs and assessments for children-in-care were also triangulated with the MCFD conceptual child-in-care health-care framework derived by comparing the organization document analysis and participant interviews analysis. Triangulation has been incorporated into Chapters 4 to 6 Findings.

Chapter 3 Key Messages

The qualitative research relied on Pava's 9-step STS approach to organize the research data, namely participant interviews and relevant MCFD organization documents (Table 3-2, pp. 28-9).

A 19-question interview tool was developed for the interviews (Appendix F). Part 2 of the tool asked participants to review six forms comprising MCFD's child-in-care health record.

NVivo 10 QSR was used to analyze participant interviews and an informal review was done of the relevant MCFD organization documents. Source triangulation was used to compare the data.

The results from Chapter 2 – Literature Review were method triangulated with the data.

³¹ Denzin (1978) and Patton (1999) identify four types of triangulation (1) methods triangulation, (2) triangulation of sources, (3) analyst triangulation, and (4) theory/perspective triangulation. Retrieved September 6, 2016, from <http://www.qualres.org/HomeTria-3692.html>

Chapter 4 – Findings Part 1 – Research details and initial assessment context

This chapter describes the interview sites, participant characteristics, and findings from the organization document analysis. The target system, unit operation, and the MCFD conceptual child-in-care health-care framework were derived from the organization document analysis.

4.1 Interviews and study sites

Interviews were conducted from November 2013 to November 2014 by one researcher. There were three types of participants: social workers, foster parents, and medical care providers. Thirty-three interviews were held with 39 participants in total; however, one participant did not provide a signed consent and one participant withdrew during the data analysis phase. The interview for which there was no signed consent was not transcribed, and all reasonable efforts were made to exclude the data of the participant who withdrew from this thesis report. Excluding these two participants, there were 31 eligible interviews with 37 participants: 12 social workers, 15 foster parents, and 10 medical care providers.

Twenty-eight interviews were held either at the participant's workplace or at the local MCFD office. Three interviews were conducted by telephone with the research materials emailed in advance. The follow-up to one in-person interview was also conducted by telephone. On two occasions, three participants were interviewed together, two interviews were conducted with two participants together, and the remaining 27 interviews were conducted with one participant at a time. There were 11 interview sites. Of the 11 interview sites, two locations were classified³² as *urban* and the remaining nine classified as *rural*. Table 4-1 breaks down the participants (interviews) by type, and Table 4-2 breaks down the participants (interviews) by type and urban or rural site.

³² The classification of urban and rural communities is defined by Doctors of BC, 2015.

Table 4-1. Breakdown of participants (interviews) by region

Region	Social workers (Interviews)	Foster Parents (Interviews)	Medical Care Providers (Interviews)	Total Participants (Interviews)
Region 1	2 (2)	3 (3)	4 (4)	9 (9)
Region 2	8 (6)	8 (6)	5 (5)	21 (17)
Region 3	2 (2)	4 (2)	1 (1)	7 (5)
Region 4	0	0	0	0 (0)
Total Participants (Interviews)	12 (10)	15 (11)	10 (10)	37 (31)

Table 4-2. Breakdown of participants (interviews) by urban or rural site

Community type*	Social workers (Interviews)	Foster Parents (Interviews)	Medical Care Providers (Interviews)	Total Participants (Interviews)
Urban	5(3)	5(3)	2(2)	12(8)
Rural	7(7)	10(8)	8(8)	25(23)
Total Participants (Interviews)	12(10)	15(11)	10(10)	37(31)

* adheres to the categorizations in Doctors of BC, 2015.

As part of their role, at least two participants provided services in more than one community where the one-way travel distance exceeded a 1-hour drive. This finding is important as travel time, especially driving in winter weather conditions, adds to workload.

4.2 Participant characteristics

Three types of participants were interviewed: social workers,³³ foster parents, and medical care providers. The participants ranged in years of work experience from less than one year to over 30 years. A common theme across participants was the more experience of, and training in, caring for children-in-care, the more readily participants knew what types of health needs to expect. There were also instances where the foster parent had adopted a child-in-care or had had a child-in-care's guardianship transferred to them. Sections 4.2.1 to 4.2.3 describe the participants in further detail.

4.2.1 Social workers

Roles of the 12 social workers included intake workers, family service workers, child protection workers, guardianship workers, child and youth special needs workers, child service workers,

³³ Unless otherwise indicated, a *social worker(s)* is an MCFD social worker.

After Hours workers, resource workers,³⁴ adoption workers, youth workers, and MCFD health care consultants. Workers' length of time at MCFD was an average of 11.0 years, with a range of 1 day to 23 years. At least six social workers had changed social worker roles and at least one social worker had worked in a different community. Further, some social workers had held positions as team leaders and supervisors, and at least one social worker had worked at a Delegated Aboriginal Agency.³⁵

4.2.2 Foster parents

Foster parents are residential caregivers under contract to MCFD and are (with some exceptions) managed by MCFD resource social workers. The 15 foster parents who participated in the study cared for newborns, infants, children, and youth. At least two foster parents were also caring for, or had cared for, adults with special needs. Some foster parents stated they had formal health education such as nurses, behavioural specialists, and adult care aids. MCFD assesses and approves foster homes as being leveled indicating the foster parent's ability to care for children with complex health needs.³⁶ There were also foster parents who provided care to children of Aboriginal Peoples, and foster parents who provided care to children with more common needs but who might still be complex to care for. The length of time as a foster parent ranged from 3 months to 39 years with an average of 17.8 years. At least four foster parents had been foster parents in two or more communities.

4.2.3 Medical care providers

The 10 medical care providers included pediatricians, family physicians, and allied health professionals at specialized clinics. The specialized clinic provided comprehensive assessment and referral services for children where there was concern of abuse and/or neglect. The length of time as a medical care provider ranged from 2 years to 38 years with an average of 14.3 years.³⁷

³⁴ Resource workers manage MCFD contracts with foster parents, and work with social workers to find foster home placements for children-in-care.

³⁵ Delegated aboriginal agencies are delegated child welfare authority by the Provincial MCFD Director and provide care to First Nation and Aboriginal children in place of MCFD in accordance with their delegation level.

³⁶ There are five levels of foster parent homes to meet child-in-care health needs ranging from a typical child to a child with complex medical needs such as tube-fed and nonambulatory. There is a different pay rate associated with each level.

³⁷ The average of 14.3 years may be a low estimate as two physicians were recorded as having 10+ years experience.

At least two medical care providers had previously been medical care providers in two or more communities.

4.3 MCFD children-in-care policies and standards

This section summarizes the findings from the organization document analysis and includes guiding principles, health and health-related concepts, and procedure.

4.3.1 Summary of guiding principles for children-in-care

MCFD standards, policies, and procedures documents were informally reviewed for health and health-related terms for all three initial assessments: social worker's initial assessment whether to remove and bring a child into care, foster parent placement assessment, and medical examination. MCFD policies and standards derive their authority to protect a child from the provincial statute *Child, Family and Community Service Act* ([CFSCA], 1996, c.46). S.2(a) states under *Guiding principles* " [t]his Act must be interpreted and administered so that the safety and well-being of children are the paramount considerations and in accordance with the following principles: (a) children are entitled to be protected from abuse, neglect and harm or threat of harm."

When a child enters care, the *CFCSA* s.70 (g) states that: "[c]hildren in care have the following rights... g) to receive medical and dental care when required." Further, under *Part 1 Definitions and interpretation*, the *CFCSA* defines *health care* as

anything that is done for a therapeutic, preventive, palliative, diagnostic, cosmetic or other health related purpose, and includes a course of health care" and *health care provider* as including "a person licensed, certified or registered in British Columbia or in another province or state to provide health care. (1996)

MCFD policies and standards operationalize this legislation, providing direction to respond to a child protection concern, acknowledging that the goal is to keep the child within his or her family if possible, and include the following considerations of the child's health:

[i]f there are reasonable grounds to believe that the child/youth needs protection and (a) his/her health or safety is in immediate danger or (b) no other available, less disruptive

measure is adequate to protect him/her, removing the child/youth under Section 30 of the CFCSA and authorizing medical examination. (MCFD Chapter 3 Policies, p.3-49)

This section is relevant as it grants a delegated social worker the authority to assess and remove a child he or she judges is in an unsafe environment, and to have the child taken for an initial medical examination to assess the child for any injury or health concern.³⁸

4.3.2 Summary of health-related concepts in MCFD policies and standards and tools

This section defines the health-related concepts identified from a review of the organization documents. First, the procedure for deciding whether a child needs a medical examination is embedded in other steps as part of other decision-making standards. Further, the policies and procedures' and standard's tables of content do not itemize the *initial medical examination*. For example, while health does not appear to be defined in MCFD policies and standards, the term *health* appears as part of the planning. However, the policies and standards do define *assessment* as “the process of collecting information on children and families in order to make informed decisions. Different supports, programs and services may be chosen depending on the outcome of the assessment(s)” (MCFD Chapter 3 Policies, p.3-136). The policies and standards define *special needs* as “a child with special needs has documented significant impairments associated with an ongoing physical, cognitive, communicative and/or emotional/behavioural condition that requires specialized care and support. One criterion for making a special needs agreement (SNA) is that the child has special needs” (MCFD Ch3 Policies, p.3-139). Further, MCFD policies and standards indices (MCFD CIC Standards, pp.134-143) reference health-related concepts such as *emotional well-being, safety, resiliency, need for stability, immediate risk of harm, consent to medical treatment, and consent to health care*; however, these terms are not defined. *Health, medical, dental, optical (or vision), hearing, well-being and safety* are neither listed as individual concepts in the index nor defined in the glossary or within the body of the policies and procedures. Further, the specific reference to “health care needs met including medical, dental, optical, and hearing” is qualified by *examination* and falls under developing the plan of care (MCFD CIC Standards, p.117). Last, although there are references to guidelines and supporting documents for the social worker's assessment of safety and for the family development response

³⁸ If a child remains in care for 30 days or more, MCFD policy directs a full assessment of the child. This second assessment was not interpreted as being part of the initial medical assessment for this research.

and vulnerability and reunification assessments, no reference is made to health guidelines or supporting documents for assessing an appropriate foster placement or medical assessment or examination.

In MCFD policies and standards, health was mentioned as part of the rights of children-in-care to “[e]nsure that a child in care: is provided with medical and dental care when required” (MCFD CIC Standards, p.102). The wording pertaining to a *medical examination* is under the Investigation policy and procedure: “[a]rrange for a medical examination of the child/youth if it is required by the child/youth’s circumstance (e.g. if the child/youth has been physically harmed or sexually abused, or if the child/youth has a medical condition that needs treatment)” (MCFD Chapter 3 Policies, p.3-48).

The procedures direct the social worker to obtain the parent’s consent if possible (p. 3-49) and to document the results of the medical examination (p. 3-49). The wording seems to indicate that the social worker relies on his or her judgement, with the support of the supervisor and expert clinical advice, as required, to determine whether the child has been physically harmed, sexually abused, or has medical needs that require treatment. There was no detailed procedure stating who takes children-in-care to the medical care provider for the initial medical assessment although, based on participant interviews, foster parents commonly took the children to the initial medical assessment.³⁹

Document 1 - Ch. 3 Training Manual, under structured decision making, instructs social workers to “collect... information from immediate and extended family members, Aboriginal organizations, collaterals, MIS [information system], and other available records and through direct observation” (Family and Child Strengths and Needs Assessment Tool Guide, p. 65). Although the guide directs social workers to gather information from the biological parents, health-care providers (such as a family physician) are not explicitly listed. Also, the manual offers descriptors for health and health-related concepts to support assessing whether removal is the appropriate decision. For the children, these descriptors include health concepts such as emotional/behavioural, medical/physical health, child development, and substance abuse

³⁹ The processes for taking children-in-care for hearing, vision, and dental assessments are not detailed in the organization documents. For the purposes of this research, it is assumed that the hearing and vision assessments would be referrals from the initial medical examination.

problems. For the parent, the health descriptors include whether a parent has a history of abuse or neglect as a child, a substance abuse problem, poor parenting skills and actions, mental ill health/poor coping skills, and physical health concerns. Page 74 of Document 1 asks the social worker to determine the child’s medical/physical health rating on a four-point scale. The lowest risk rating is “preventative health care is practiced” where the “[c]hild receives routine preventative and medical, dental and/or vision care and immunizations” to the highest risk rating of “medical needs severely impair functioning.” There are descriptors for each rating (p.74, CSN3 Medical/Physical). The manual also contains a developmental milestones checklist sourced from Bright Futures. Last, the Training Manual includes descriptors for safety and domestic violence (Safety Assessment Tool Guide, pp.31-43) and descriptors for abuse and neglect (Safety Assessment Tool Guide, pp.31-43; Vulnerability Assessment Tool Guide, pp.51-58).⁴⁰

4.4 Target system, unit operations and health-related concepts

As stated in Section 1.1, the scope of this thesis research is limited to the first time a child enters state care. Three assessments comprise the overall target system: the initial social worker assessment whether to remove and bring a child into care;⁴¹ the assessment to place the child in a foster home that has the capacity to meet the child’s health needs; and the initial medical assessment or examination.⁴² The unit operation focuses specifically on the health information needed for these three initial assessments. Figure 4-1 illustrates the three stages of the target system.

⁴⁰ Vulnerability Assessment Tool Guide includes a Neglect Index and an Abuse Index.

⁴¹ Following the guidelines for Family Development Response and least disruptive child protection approach, if a close relative or friend to the child is willing, the child may be placed with the individual as an out-of-home placement under court order instead.

⁴² The procedure for children-in-care to be taken for the initial medical assessment was derived solely from participant interview analysis.

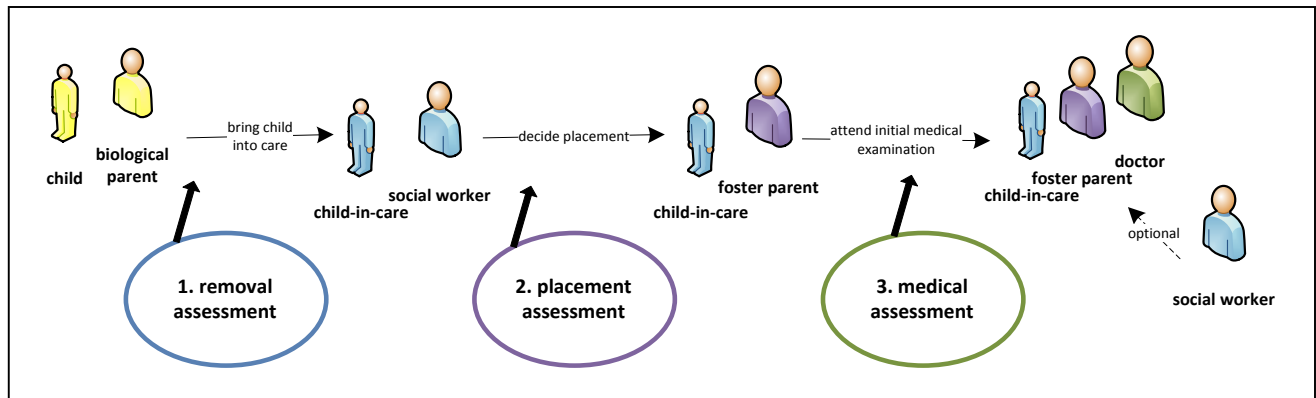


Figure 4-1. Target system: initial removal, placement, and medical assessments

Although, in some cases, the social worker might take the child directly for a medical assessment after removing the child, the more common process is that the social worker removes the child, the social worker and foster parent decide to place the child with the foster parent, and the foster parent takes the child to the medical care provider for the medical examination. Sections 4.4.1 to 4.4.3 will discuss these three stages in more detail.

4.4.1 Initial social worker assessment for bringing a child into care

A child may enter care under three circumstances (1) under a child protection concern, (2) under a special needs agreement, and (3) under a voluntary care agreement. Circumstance 1, a child protection concern, arises when the environment the child lives in poses potential harm to the child, the child is not thriving, and/or the child’s health needs are not being met and, in addition, the parents are not willing or able to work with MCFD to ensure the safety and well-being of the child. MCFD may already be involved with the family, providing services to the family as a whole, not to just the child. The information to assess whether to remove the child considers the overall safety and well-being of the child, any existing injury, urgent unmet health needs, risk of harm, and whether the child has any special health needs that are not being met. The assessment also includes the child’s developmental level, degree of vulnerability, and future reunification.⁴³ The home is assessed for “safety” including materials, tools, risk of harm from people and parents’ mental health. The social worker is expected to exercise his or her judgement, with the

⁴³ A condition for this thesis research is that the child is going to be, or has been, removed from his or her parent and enters care. Review of the forms the social workers complete as part of their initial assessment to remove the child is outside the scope of this thesis research.

help of the team leader and/or health-care consultant and various structured decision-making tools, in assessing and deciding what, if any, support and/or protection is needed by the child and family (MCFD Ch3 Policies).

Circumstance 2 occurs when a child has complex medical needs or behaviours and a parent voluntarily enters into a special needs agreement (SNA) with MCFD.⁴⁴ The child is placed in an alternate care arrangement, such as with a foster parent, and the biological parent provides health information to the social worker. The parent also decides what guardianship role and involvement he or she will have in their child's daily life and health care. The parent may change his or her level of involvement; however, the child and youth special needs worker must always be granted authorization to make health-care decisions for the child if the parent is unavailable. This agreement may be renewed annually and may stay in effect until the child ages out of care at age 19.

Finally, Circumstance 3 is when a parent requests temporary respite and enters into a voluntary care agreement (VCA) with MCFD. Again, the child is removed from the parent's home and placed in a foster home or residential care facility for up to 3 months at a time for children under 5 years, and up to 6 months at a time for older children. The parent retains guardianship and health-care decision-making.

MCFD policies and standards also list tools such as genograms and eco-maps⁴⁵ (MCFD Ch.3 Policies, p. 3-34, p. 3-93) that are available to the social worker to support his or her assessment. Further, the policies and standards emphasize that social workers use the least disruptive approach when responding to a child protection concern in order to minimize trauma to the child, such as separation from a parent.

4.4.2 Initial foster parent placement assessment

Between the social worker's initial assessment and the initial medical assessment or examination is the initial foster parent assessment. There are two considerations (1) placing the child in a

⁴⁴ Child and youth special needs (CYSN) social workers are workers who have children with complex medical needs or behaviours on their caseload. The child may reside with his or her family and receive At Home and/or Medical Benefits, or be in care more commonly under a special needs agreement than as a result of a child protection concern. The same CYSN social worker might or might not also be the guardianship worker for the child if the child is in care.

⁴⁵ Genograms map out the child's genetic relationships and eco-maps map out the child's social relationships.

foster home able to meet the child's care needs, and (2) sharing the information needed for the child's day-to-day care with the foster parent.

Again, MCFD policies, procedures, and standards provide direction to the social worker (MCFD Ch.3 Policies). The goal is to place the child in an appropriate foster home in order to reduce the risk of future placement changes. The social worker assesses the child's identity and care needs to match the child to a pre-assessed foster home. If the first placement is an emergency placement, the plan may be to subsequently move the child to a more suitable foster home. Placement considerations include a previous foster parent, health-care needs, culture (such as Aboriginal), accessibility to biological family and friends, attending the same school, and co-placement or accessibility to siblings.

Foster homes are pre-assessed at one of five levels of care⁴⁶ ranging from a restricted foster home who knows the child well, to a foster home able to care for children previously unknown to the foster parent but who require extensive daily care such as tube feeding and/or who are nonambulatory. Some foster homes also provide temporary relief or respite care. MCFD has a Relief Care Provider Information Sharing form (CF2610 (14/05)) to support respite care. Policy and procedures direct the social worker to keep the biological family involved in planning and staying in contact with the child if possible.

As part of the placement assessment, once the social worker, resource worker, and foster parent have agreed on the placement, the foster parent needs all relevant health information about the child's needs in order to provide appropriate care. MCFD Ch.3 Policies and MCFD CIC Standards direct the social worker to "[p]rovide a caregiver with information at the time of placement and as information becomes available... [including] any information relating to safety risks posed to the caregiver or the caregiver's family" (MCFD CIC Standards, p.122). The social worker is directed, therefore, to provide health information, including communicable conditions, to the foster parent for both the child's safety and care and the foster parent's and his or her family's safety and health.

In the cases of special needs agreements and voluntary care agreements, because the child is removed and enters care at the request of the child's parent, typically, the child's parent and

⁴⁶ Foster Care Payments in BC. Retrieved July 28, 2016, from <http://www.mcf.gov.bc.ca/foster/levels.htm>.

social worker work closely together to share necessary health information and to identify an appropriate foster home for the child.

4.4.3 Initial medical assessment or examination

An initial medical assessment or examination is primarily carried out as part of a child protection investigation to decide whether to remove a child and bring the child into care. The policy appears to assume the child has a regular family physician. There is no direction or procedure on how to address a child without a regular family physician (MCFD Ch3 Policies, p. 3-48). Further, the documents do not specifically direct the assessing physician to use Form 1 – Child’s Permanent Medical Record for the initial medical assessment. The medical examination required depends on the child’s circumstances—that is, has the child been physically harmed, sexually abused, or has a medical condition that needs treatment (MCFD Ch3 Policies, p. 3-48). The social worker makes this judgment, usually in consultation with their supervisor and/or clinical experts. The parent’s consent for the medical examination should be obtained, if possible. The policies also state to document the results of the medical examination (MCFD Ch3 2012, p. 3-48 – 3-49).

In summary, an initial medical examination is required when a child first enters care depending on the social worker’s judgement, to provide evidence for removing the child from his or her parent and bringing the child into care. This initial medical examination is followed by a full assessment should the child remain in care for 30 days or more.⁴⁷ The initial medical examination may be required as part of a child protection investigation and when the child enters care. The medical examination requirement depends on the child’s circumstances, and the results should be documented as per MCFD policy (the policy does not state what information should be recorded). The parent’s consent for the medical examination should be obtained, if possible.

Annual medical physical examinations are required should a child remain in care for over a year. Medical examinations due to placement changes—such as moving from one foster home to another, or returning to parental care from foster care, or re-entering care—are required at the judgement of the social worker, or at the request of the child, or at the request of the parent. Of note, MCFD’s policies and standards appear to be based on the assumption the child has a

⁴⁷ This fuller assessment was determined to be outside the initial medical assessment as the assessment is mentioned as part of the care planning process.

regular family physician and dentist. Further, as noted in Section 4.3.2, the documents provide no direction for dental, vision, or hearing assessments.

Chapter 4 Key Messages

Twenty-eight of the 31 interviews were held on-site with 37 participants in 11 urban and rural communities across British Columbia. Participants included 12 social workers, 15 foster parents, and 10 medical care providers.

Holding interviews on-site provided the researcher with a richer understanding of the care team's and child-in-care's environment, and of the MCFD conceptual child-in-care health-care framework.

There are three circumstances in which a child may enter care (1) under a child protection concern, (2) under a special needs agreement, and (3) under a voluntary care agreement.

The provincial legislation, the *Child, Family and Community Service Act*, grants MCFD the authority to remove a child if the child is in need of protection.

There are three initial assessments (1) social worker assessment whether to remove the child, (2) social worker, resource worker, and foster parent assessment for placement and to provide the foster parent with the child's information, and (3) initial medical assessment.

The medical examinations conducted are determined by the social worker's judgement and are done when a child first enters care.

The MCFD organization documents do not contain detailed procedures for taking a child-in-care for medical, dental, vision, or hearing assessments.

MCFD policy appears to assume that the child has a regular family physician to conduct the initial medical assessment, and that the child has a regular dentist.

The terms *health* and *well-being* do not seem fully defined in the policies.

Chapter 5 – Findings Part 2 – Participant interview analysis

This chapter summarizes participants’ professional opinions from Part 3 - Interview Questions (Appendix F). Participants were asked 11 questions about health information needs for the initial assessments of children-in-care. Questions included how the participants first meet children-in-care, how they gather health information, what health information they rely on during initial assessments, what health information they provide, what health information is commonly missing, and how gaps are overcome. The questions also included whether the participants create and share any health information and, if there are any challenges or barriers in obtaining or sharing this information, how they overcome these challenges and/or suggestions on how these challenges might be overcome.

5.1 Types of care by role

The social worker works with the resource worker⁴⁸ to place the child in a foster home that is able to meet the child’s care needs. The social worker has the authority to consent to information sharing and treatment while the child is in care under a child protection concern, and for special needs and voluntary care agreements if the parent is not available. The social worker asks the foster parent to take the child to the medical care provider for the initial medical examination. The social worker may accompany the child and foster parent to appointments or, in some circumstances, may take the child to appointments. The social worker will also follow up on referrals from a doctor’s order or other specialist’s recommendation, or may make a social worker referral such as for counselling. The social worker, as the legal guardian, has the responsibility for decision-making, planning, and monitoring the day-to-day care of the child.

For foster parents, *parenting* and *advocacy* were identified as the main types of care, with the social worker considered to be the “other parent.” With respect to health and well-being, foster parents care for the child 24/7, may make medical and dental appointments, and take the child-in-care to see the physician or dentist, to specialist appointments, and, in some circumstances, to the emergency department depending on the child’s needs. The foster parent, as a gatekeeper and advocate, communicates the child’s well-being to the social worker daily during the initial placement period. After a length of time, communications are reduced to significant events—

⁴⁸ The resource worker is an MCFD social worker who manages the contracts with, and payments to, foster parents. Resources workers visit foster homes regularly to ensure the foster homes meet standards.

positive events or concerns—especially where the foster parent needs the social worker to make a decision, advocate for care or service on behalf of the child, or fund a service. The foster parent may also raise concerns if a medical care provider recommends treatment that the foster parent does not think would benefit the child.

For example, a foster parent describes the foster parent role as the day-to-day caregiver and the social worker as the decision-maker. Together the two need to jointly parent the child while the child is in care, and involve the biological parent as much as possible:

“I think the relationship with [the foster parent] and the social worker is very important... I want to talk to the social worker... and...have a conversation about how the child’s doing in addition to the resource worker ‘cause the resource worker just looks after the money... [The social worker] is the other parent, same with [the child’s] parents. I’ve even had [the parents] help make decisions...like what would you like to see here.”

(Participant#3, foster parent)

This responsibility as the other parent was echoed by social worker participants who spoke to the responsibility for funding to ensure safe transportation for the child-in-care, including travel to Vancouver to attend regular specialist appointments:

“[I]t was a health and safety risk to the child fixing the lift [in the van] - an immediate health and safety risk... we [the social worker and resource worker]... didn’t get the funding for over 12 months... and quite frankly it’s an embarrassment because any prudent parent would have made sure the transportation was safe for their child but because it’s MCF[D] and it’s a system and it’s so complex... anything that requires funding over and above what a typical child is allotted...”

(Participant#4, social worker)

Similarly, a participant spoke to the impact of funding delays for mobility aids on a child-in-care’s quality of life:

“[The youth] needs a new wheelchair. His one wheelchair constantly broke broke broke until the motor just quit. [The youth] couldn’t go forward. These are [the youth’s] legs. [The youth] could only go backwards.”

(Participant#5, social worker)

The role of MCFD employees as parents was further supported by a medical care provider. From the perspective of the participant, the expectation was that the MCFD employee care for the child as if the child were his or her own:

‘I think of...the social worker and [MCFD] as being in the role of the parent. The expectation I have of them is that I would expect [them] to be a good parent for this kid. Not just the bare minimum. Not just making sure [the kids are] alive at the end of the day but actually thinking about trying to make [the kids’] lives good which I don’t necessarily think always happens. I think sometimes it’s ‘Are they still alive at the end of the day?’”

(Participant #6, medical care provider)

The medical care provider’s role is to assess the child’s health and well-being, make clinical judgements, and make treatment recommendations, if needed. The medical care provider will also make referrals if the child has a medical condition beyond that medical care provider’s expertise. Some assessments are one-offs while other assessments may be more routine, such as annual physical examinations.

Some participants also opined they have multiple or blurred roles depending on their community’s resources and/or the participant’s own skill set and education. For example, some foster parents were found to have blurring roles where, in addition to being a foster parent, they held positions at hospitals as nurses or were former residential care staff or former adult care aides. Some social workers had had, or were in, more than one role depending on their expertise, office workload, and community. Several MCFD offices were co-located with other services such as child and youth mental health services and/or pediatricians.

Medical care providers also reported blurring of roles with many working at *neighbouring systems* in addition to their own medical clinics. As listed in Section 5.7 Referrals, such neighbouring systems included infant or child development centres, specialized clinics, travelling medical teams, and hospitals. Further, mental health was noted as a domain with blurring roles. Depending on community resources, a family physician might take on assessments a pediatrician would conduct in one community and, in a different community, a pediatrician might take on assessments a child psychiatrist would conduct. Some medical care providers said they had worked as medical care providers in different jurisdictions.

5.2 First contact with children-in-care

Depending on the social worker's role, the social worker may meet the child when investigating a child protection report⁴⁹ or when the family voluntarily contacts MCFD for support in caring for their child. In some instances, the social worker may meet the child while the child is co-located in a foster home with a child on the social worker's caseload.⁵⁰ Resource workers may meet the child through the social worker or during a foster home visit. Consultant social workers might never meet the child and only provide health-care advice to the social worker.

The foster parent's first contact with children-in-care is through the social worker. The social worker calls the foster parent, provides information, and the foster parent decides whether he or she is able to care for the child. When a child is removed as a newborn, the foster parent might meet the social worker and child at the hospital. In an emergency removal, the child might arrive at the foster parent's home with no transition time, sparse information, and only the clothes he or she is wearing.

For medical care providers, the child entering care may be an existing patient, or the medical care provider might meet the child at a walk-in clinic, in the emergency department, or as a child for whom the foster parent is caring where the foster parent is the medical care provider's patient. One community had a health-care home⁵¹ to which a child without a regular family physician could be referred. Specialists, such as pediatricians, meet the child as a referral from

⁴⁹ Child protection concerns may come from family members, friends, and neighbours as well as from professionals such as physicians, police, Royal Canadian Mounted Police, and teachers.

⁵⁰ Children from different biological families who live together at a foster parent's home sometimes refer to each other as "foster siblings."

⁵¹ The health-care home is a primary-care home staffed by family physicians, nurse practitioners, a mental health clinician, and a social worker.

another physician. If a pediatrician is already caring for a child who has complex health or behavioural needs at the time the child enters care, the pediatrician might be asked to complete the initial medical examination; however, generally, a family physician completes the initial medical examination.

5.3 Gathering health information prior to the visit or meeting

The social worker gathers information from the biological parents when a child enters care as part of writing the special needs or voluntary care agreement. In contrast, when a child enters care due to a child protection concern, the social worker first gathers information from the biological parents and collaterals; however, the biological parent may be unwilling, absent, or emotionally unavailable to provide information. If MCFD had prior involvement with the family and child, there may be information in existing MCFD files that the social worker is able to access as part of the prior contact check (PCC).⁵² For the child's immunizations, the social worker requests the child's immunization records from the health authority's public health unit.

The social worker provides the foster parent with relevant information for the care of the child. Critical information is provided for the placement decision. Remaining information is shared if the child is placed with that foster parent with additional information provided as it becomes available to the social worker. However, depending on the community, the foster parent may already know the child and family and may be able to gather information from the parents and collaterals directly. The child may also provide information directly to the foster parent or to other children in the home who then relay the information to the foster parent. The foster parent would provide this information to the social worker. The foster parent may request the child's immunization records if the social worker has not.

Medical care providers will have information about the child if the child is already their patient. If the biological parent is a patient of the medical care provider, the physician will have the parent's history, prenatal history, and Form 2-Newborn Record for the birth record information. The challenge is if both the child and the biological parents are unknown to the medical care provider. As one medical care provider expressed:

⁵² When starting involvement with a child or family, the social worker conducts a "prior contact check" to search for, retrieve and review any existing information MCFD may have on prior involvements with the child or family. This check includes reviewing paper, electronic and archived records.

“[I]t’s not the form itself. I think it’s the whole process [of] bringing a child in with a form in hand to a doctor who’s never seen them who doesn’t have their detailed history and say please do an exam.”

(Participant #7, medical care provider)

Another medical care provider expressed frustration at being asked to examine children-in-care whom they had never met and about whom they had no information:

“So I have no information before today and I’m asked to fill [Form 1 – Child’s Permanent Medical Record] out please. They would like me to fill out as much as possible, you know, entirely, the whole form if you could... using clairvoyance of some kind I guess.”

(Participant #6, medical care provider)

Another medical care provider described the process with and without having the child’s medical records in advance:

“[I]deally you’d love to have as much information as possible before you see the child... [M]ore often than not though it ends up being the social worker and the foster parent and myself spending 30 minutes trying to piece together history with no information basically and then examining the child.”

(Participant #8, medical care provider)

To further complicate the process, a child may have multiple social workers while receiving care from MCFD, or the child may have changed foster home placements multiple times and be coming to the medical appointment with a new foster parent. Even if the physician examining the child is the foster parent’s family physician, the physician and foster parent may have little or no background health-care information on the child at the time of the medical appointment.

Participants reported that most information was collected verbally, in person or by telephone, and then recorded. Information may be recorded on paper forms or in electronic information

systems such as the Integrated Case Management system (ICM), Management Information System (MIS), and/or physician electronic medical records. Further, at least two foster parents had forms on their personal computers to record information. Voice mail was also relied on to convey information; however, email between social workers, foster parents, and medical care providers was discouraged as the emails did not travel through a secure server. The situation of being in care and information about the children are considered highly confidential. The primary concern in using emails was the risk of interception and disclosure of information about a child. Although a work-around was to describe the child in a way that the social worker familiar with the foster home would recognize—for example, as the middle child—using email as a means of communication was still strongly discouraged. As a result, verbal communication was more common between the foster parent and social worker, with the social worker taking notes and then scanning and attaching their notes or typing the information into the computer system.

5.4 Gathering children-in-care’s health history

The health history (such as recurrent infections, hospitalizations, and allergies) is gathered from the biological parents. If the biological parents are not available, and the medical care provider is not the child’s regular family physician, the social worker will request hospital records, including Form 2 – Newborn Record, through Section 96 requests, and medical care provider records through personally-addressed consents. Most commonly, the social worker requests the child’s immunization records from the health authority public health unit, although the foster parent might request those records. Some communities had a formal letter the social worker would fax to the public health unit.

As a medical care provider expressed, they would expect the MCFD social worker to provide them with the child’s medical records as that is what would be expected of the child’s biological parents. This view was echoed by another medical care provider who “welcome[s] the information but please send it to me” (Participant #9, medical care provider). A medical care provider may also request records from other medical specialists.

5.5 Information easy or difficult to obtain and share, and any challenges or barriers

Participants spoke to information being easy or difficult to obtain, and challenges and barriers to obtaining or sharing information. Records such as medical records and school reports, once requested, are easy to obtain. Further, foster parents commented that there has been a shift

toward increased information sharing by the social worker with the foster parent over the past 20 years. Some information, such as if a child has had a recent abortion or was hepatitis C or HIV positive, is critical so that the foster parent can take extra precautions for the child's and the foster family's health.

Social workers commented it could be difficult, even when MCFD has guardianship, to obtain specialists reports not only from pediatricians, but also tertiary care reports such as reports from Sunny Hill at British Columbia Children's Hospital. Further, a court order may be required to obtain the child's Form 2 – Newborn Record.

Records from other jurisdictions such as neighbouring provinces and territories may be difficult to obtain where the legal authority to request information is different. In such circumstances, MCFD may need to rely on the community health clinic⁵³ to request the records and then forward the records on to MCFD.

A medical care provider commented that the information sharing framework was not clear about what to do if the provider was asked to assess the child but was not provided with any health history on the child. For example, it was noted that a health authority's clinical information system might contain health information about the child. However, without the biological parent's consent, the provider opined they did not have the authority to search the clinical information system for health information on the child.

The size and volume of paper files at MCFD may also make it difficult for a social worker taking over the file to locate all the reports and health information. Further, once the records are obtained, some may be unusable. For example, a copy of the Form 2 - Newborn Record may be faint and illegible.

Funding could be a challenge. It costs medical care providers staff time, equipment, and supplies to copy and send patient records. In BC, there is a medical services plan (MSP) billing code to charge for copying medical records (British Columbia Medical Services Commission Payment Schedule [BC MSP], 2016); however, the process for MCFD to pay this account was not commented on in detail. It is unknown if this challenge includes specialist reports.

⁵³ In this circumstance *health unit* means an organization providing health or medical care, such as a doctor's office or clinic in, or closest to, the child's community, where the child may have received care and might be a patient.

Another challenge noted was if the parent's information was requested. There may be a need to rewrite the information to ensure only the parent's information relevant to the care of the child—and not the parent's entire record—is shared. Relevant information about the parent might include genetic conditions that might be passed onto the child, prenatal care, substance abuse during pregnancy, and any conditions impacting the parent's ability to parent, such as mental health concerns or fetal alcohol syndrome.

If the child has lived in different communities, the child's health history might not have been recorded, it may be spread across different medical care providers' records, or it might not be known where the child has lived. The MCFD process seems to assume the social worker requests the child's health information from the biological parents; however, the parents might be unavailable, unwilling, or fearful to share information that might negatively impact reunification with their child.

Last—but very key—most participants commented that the individuals caring for children-in-care may change while children are in care. For example, a child might be placed on an emergency removal with a foster parent and then moved to a different foster home. The child might not have a regular family physician, but attend clinics. The social worker who initially removes the child might be an After Hours worker and not a case-carrying child protection worker and the child's file might be transferred to another social worker. Staff turnover was also a factor.

Together, these challenges result in carers reviewing fragmented records and create barriers to sharing the child's information. Many of these challenges are echoed in the literature (Szilagyi, 2016).

5.6 Missing information

Missing information poses a risk in caring for and meeting children-in-care's needs. Participants commented on different types of information that might be missing as well as on the circumstances where information might be missing and what steps they take to obtain the missing information.

For obvious missing information, such as prenatal records, parent's relevant medical and social history, child's health history, and the child's immunization records, the social worker, foster

parent, or medical care provider would continue to ask and/or make formal requests. It was also noted that it might only become apparent that information is missing after the child is assessed. For example, the child had previously been misdiagnosed or the chief complaint changed as a result of the initial medical assessment.

When asked what participants do if information is missing, one foster parent stated you “just fly by the seat of your pants if you can’t find it from the community” (Participant #10, foster parent). This sentiment was echoed by another foster parent who stated that, if the information is not available, “you go on a wing and a prayer” (Participant #11, foster parent).

If information is missing when completing a form, the field would be left blank. For example, when filling out Form 1 – Child’s Permanent Medical Record, the field would be left blank if the information were missing.

Other types of information identified as missing were educational materials for foster parents, such as how to care for children-in-care with special needs such as HIV, deafness, or tube-feeding. It was noted that the option of attending self-paced education sessions online is needed for foster parents in level 3 homes. Further, a medical care provider commented that medical information changes so quickly compared to when they attended medical school that they rely on the computer for information searches to stay current with medical conditions before assessing a child. Medical information “has a half-life of about six months” (Participant #1, medical care provider).

5.7 Referrals

Participants spoke to the types of referrals they make following the initial assessment. Social workers may make formal referrals using their judgement for services such as counselling and child and youth mental health services.⁵⁴

While foster parents do not make formal referrals, they may advocate on behalf of children-in-care to the social worker⁵⁵ or locate a health care professional who does not require a formal referral, such as a dental hygienist good with children.

⁵⁴ Although, for this community, there was organizational knowledge about referral organizations, it is unknown if other communities have formal tools guiding where to refer the child and/or family.

⁵⁵ Any service requiring funding needs to go through the social worker for approval and payment.

Medical care providers make referrals to other medical professionals and specialists, such as a family physician to a pediatrician, or a pediatrician to a sub-specialty pediatrician or to an infant development centre or for an autism assessment.^{56,57} Similar to social workers, medical care providers may also refer a child to child and youth mental health services.

Social workers, medical care providers, and police may refer a child to one of the five specialized BC Suspected Child Abuse and Neglect (SCAN) clinics whose mandate is to conduct a comprehensive assessment of the child. Depending on the referrer, this assessment might be the initial medical assessment children-in-care receive; however, a Form 1 – Child’s Permanent Medical Record might be completed by another medical care provider first if there were a need for urgency and there was a wait time for the clinic.

5.8 Information sharing after meeting with children-in-care

Foster parents provide the social worker and/or resource worker with monthly reports as well as maintain a daily logbook and Form 6 – Healthcare Passport. Communication may be in person, by phone, or on forms. If email were used, the child would not be named in the email.⁵⁸ The foster parent will share information gathered from the child, the child’s biological parents and family, and medical care providers with the social worker and vice versa. The foster parent and social worker would also provide the medical care provider and school with relevant information about the child. If the biological parent were involved in the child’s care, information would be shared with them as well.

Medical care providers supply written information to the social worker and will share information verbally with the foster parent and social worker if they are present during the assessment of the child. It is important for social workers to have an accurate understanding of the child’s state of health upon entering care in order to identify whether any harm occurred prior to or after the child’s entry into care, and to ensure that the child is provided with any necessary treatments. There was varied practice among the social workers regarding sharing Form 1 – Child’s Permanent Medical Record and/or assessment information with foster parents; foster

⁵⁶ Interior Health Children’s Assessment Network (ICAN) is a travelling, interdisciplinary team who assesses older children for autism and complex behaviours.

⁵⁷ As part of the sociotechnical approach, the target system’s initial medical examination may result in referrals to neighbouring systems such as infant or child development centres or ICAN.

⁵⁸ Foster parent-social worker email is discouraged as the email traffic does not flow through a secure server.

parents, however, indicated this information is important for them to care for the child. The social worker provides the child's school with information relevant to the child's education and care at school. With respect to mental health care, while the social worker might ask for and share whether a child attended an appointment, any discussion between the child and mental health professional is privileged. Detailed information could only be shared with the child's consent, unless there was risk to the child or another person. The mental health professional was authorized to provide information on how to care for the child to the social worker who might, in turn, share this information with the foster parent.

5.9 Meeting health needs for children-in-care

To meet the health needs for children-in-care, foster parents take the children to medical, specialist, dental, vision, and hearing appointments and record information, as needed, onto Form 6 – Healthcare Passport. The foster parent would raise any concerns to the social worker, including advocating on a child's behalf. Foster parents also work to create and maintain positive relationships with care providers and with the child's biological parents.

Social workers, when they have guardianship and/or authority, make decisions to consent to treatments for the child, gather background records, and involve the child in planning and decision making. The social worker or resource worker might also accompany the child to appointments with, or in place of, the foster parent.

Medical care providers assess and recommend treatments for the child, make referrals and, where possible and needed, make follow-up appointments. One medical care provider commented that they are not able to meet the health needs of the child if no one brings the child back to see them, illustrating why follow-up is so important. "My biggest problem is if no one brings the kids back. It's almost impossible for me to ensure the healthcare needs are being met" (Participant #9, medical care provider).

Further, another medical care provider commented that they need to know about changes in the child's life, such as if the child moves between foster homes or returns home, in order to communicate the child's health information to the appropriate person:

"One day I will have a child with this foster mom. A month later there's a different foster mom and I won't even know it. Or I see the child with the biological mom now and a

month later with the foster mom and [no one has] even contacted my office or asked my opinion about what's going on so I find that frustrating sometimes.”

(Participant #12, medical care provider)

5.10 Responsibility for the overall health care of children-in-care

The MCFD guardianship social worker is legally responsible for the overall health care of children-in-care except when a child is in care by agreement and the parent retains guardianship. The reality is that the foster parent has the day-to-day care of the child, and the medical care provider assesses the child and recommends treatment. So it is a team effort. Further, the biological parents might have retained guardianship, share guardianship, or stay actively involved in the child's care. The child, depending on age and capability, also has a voice in his or her care and may have full authority to consent to, or refuse, treatment. Clarity in authority, responsibility, and accountability for each role is critical for ensuring the initial assessments and follow-up on any concerns.

5.11 Other comments

The participants were asked for any other comments they would like to provide. These comments are grouped into themes below. Many participants suggested solutions, including comprehensive assessments, children-at-risk clinics, and electronic solutions as ways to overcome information-sharing challenges and barriers to meeting children-in-care's health-care needs. Participants' suggestions for electronic solutions are summarized in Section 6.3 - Electronic options.

Relationships, roles, and people:

- *Trust* Relationships and relationship-building were noted as key to facilitate sharing information, obtaining reports, and caring for children-in-care.
- *Finding a family physician* It can be difficult to find a family physician for children-in-care. As the initial medical examination needs to be timely, the usual practice involves having the assessment completed by a medical home, a family physician colleague, the foster parent's family physician, emergency department physician, or walk-in clinic physician. One medical care provider participant suggested dedicated children-at-risk clinics that could be responsible for gathering all the child's family and personal health history, conducting

comprehensive assessments, providing ongoing care, and monitoring follow-ups until a regular family physician was found for the child-in-care. The suggestion included that physicians running the clinic be paid on a sessional basis to compensate their time in case few or no children attended the clinic on a given day.⁵⁹

- *Foster parents as professionals* Over the past 8 to 10 years the view of foster parents as professionals who are part of the child's care team has increased. Further, at least three foster parent participants reported an increase in information-sharing over the past 20 years, which might be a result of this increased acknowledgement of foster parents as professionals in the child-in-care's care team.
- *Caseloads for social workers* Some communities were reported to be understaffed. Coupled with the high resourcing needs for children-in-care who have complex care needs, large case loads increase the risk that the children will fall through the cracks. Further, changes in caseload and emergency removals may limit the time the social worker has to fully review the file to be aware of any prior incidents or allegations of neglect or abuse and to review assessments already on file.
- *Health-care advocate* To provide support to foster parents and ensure health meetings are effective, some participants suggested a health-care advocate position such as a nurse, contracted by MCFD but independent, to assist foster parents. Responsibilities of this position might include helping to interpret medical documents such as Form 2 – Newborn Record, providing foster parents with advice during a medical crisis, and helping to advocate to meet the child's health needs in a timely manner. The role might also help gather records for the child.
- *Carer consistency and updates* Medical care providers may be unaware if a child-in-care has been transferred to a new social worker's caseload, transferred to a new placement, returned home to parents, moved to another province, or other events. Medical care providers should be notified if there is such a change to ensure (1) they provide information about the child to the appropriate individual, and (2) they can respond appropriately if the change has an impact on the child and his or her behaviour. Medical care providers also found that there is

⁵⁹ A participant also spoke to the challenge of finding a dental hygienist who was good with kids. It is assumed that finding a dentist for a child who does not have a family dentist upon entry into care might also be a challenge, potentially exacerbated by the lower insurance rates of pay for child-in-care dental care (Rowan-Legg, 2013).

variation in the involvement of the social worker in the children's health care ranging from active involvement to none.

- *Out-of-community care* Some communities did not have medical specialists or counselling services in the community. Foster parents and social workers commented on the costs and lack of infrastructure to travel with children-in-care, especially for medically fragile children. Another concern was assessing and treating a child outside the child's day-to-day environment as that may change the stressors and the child's behaviour, impacting the assessment findings and treatment recommendations. The travelling medical and assessment teams were reportedly very helpful; however, there were still 2 to 3 year wait-lists. As one participant commented "three years to a child is a lifetime and you miss the opportunity to intervene" (Participant #1, medical care provider) suggesting increased frequency of assessment team visits would help meet needs.

Fragmentation of information

- *Information about children-in-care* Participants described that incomplete knowledge of a child-in-care's history and unavailable information when assessing a child-in-care were putting the child at risk because the team did not have a good understanding of the child's health. This fragmentation may arise from a child-in-care moving between home, out-of-home care,⁶⁰ and state care. While a health authority's clinical information system might capture information about a child-in-care, it was commented that, without the parent's consent, the medical care provider did not have authorization to look up the child's record even if accessing the information was in the best interest of the child and the purpose was to assess the child.
- *Medications* A child-in-care may arrive at a foster home with medications but without information on why or for how long the child should take the medications.
- *Abuse and neglect* Participants commented that it was critical for the medical care provider doing the initial medical assessment to know any history of abuse or neglect as this factor guided the assessment.

⁶⁰ In BC, *out-of-home care* refers to placing the child with another family member or with a close family friend well-known to the child who agrees to take the child into their home and care for the child instead of having the child enter state care.

- *Comprehensive health assessment process* It was suggested to model MCFD’s health assessment process after that of a specialized clinic and to conduct a comprehensive assessment, especially if the child-in-care had experienced physical or sexual abuse.
- *Paperwork* Participants observed there are already many forms and, if more forms are added, these new forms need to align with existing paperwork. A social worker commented that an intake can take two hours so aligning tools is a key consideration to make workflow more efficient.

Health-care system

- *Health-care system for children-in-care* One foster parent commented that children-in-care’s health care is good in that “it’s fast tracked and there’s money for assessments ... same with dental work that needs to be done” (Participant #13, foster parent). A medical care provider also commented that good health care needs to be nimble and flexible, and the health-care system needs to promote health and wellness rather than being reactive and treating unwellness (Participant #1, medical care provider).
- *Mental health* A foster parent commented that “we don’t do enough information transfer or information checking on mental health issues with our kids” and that “the whole system misses [mental health] at a good enough level” (Participant #14, foster parent). The participant goes on to explain that the assessments, threshold criteria, and treatment can vary depending on the assessor and community. The participant felt that children were not assessed in enough detail on the forms, or frequently enough, and that costs might be a barrier to such assessments. The participant also spoke to the need for mental health assessments, especially when children-in-care are in teen years.
- *Family history* In addition to parental mental health diagnosis and treatment, foster parents find it helpful to have the child’s family history, including any genetic conditions the child may have inherited, trauma during birth, and family trees to see the child’s network and possible abuse history.

Funding

- Funding was a considered to be a key enabler in meeting children-in-care’s health needs. As stated by a medical care provider: “we can pretend that money doesn’t matter but that’s silly

‘cause money matters a lot in terms of providing... like you can’t get services without funding” (Participant #6, medical care provider).

- *Examples of funding:*
 - Funding for initial medical examination—as the medical examination is mandatory to provide health information for decision making, there was a question whether the funding should be a standing approved item
 - Funding for records/reliability of the reporter—medical care providers need to recuperate their expenses incurred from copying records. While MSP has a billing code, it was unknown whether this item was listed by MCFD. The child’s and parent’s relevant social and medical records are critical to the initial medical examination of the child, especially if the biological parents are unavailable or unwilling to share the child’s health information
 - Funding for foster parents—the pay rate for foster parents has not increased in many years. A corresponding concern was that the time the foster parent spends to complete forms takes away from the time available to spend with the child.
 - Funding for assessments—assessments such as psychosocial assessments have a health and well-being objective when requested by MCFD, which is different from the educational objective of assessments requested by schools. Relying on assessments from schools to save money does not provide the complete information social workers need for decision-making e.g., assessing the child’s emotions related to entering care.

Chapter 5 Key Messages

This chapter summarized the interview tool Part 3 questions 1-11.

Participants may meet the child in the community, if the child’s family was previously involved with MCFD for family services, or when the child enters cares, or when the child is brought for assessment.

The social workers' role is making decisions, such as health-care decisions, obtaining funding for children, and overseeing and co-parenting with the foster parent. The foster parent's role is parenting. The medical care provider assesses the child and provides health-care recommendations. All three roles may advocate for the child-in-care.

The social worker makes nonmedical referrals and may also refer children for mental health assessments and counselling. Medical care providers make referrals to medical professionals, including for mental health.

Reliable, complete information is needed for accurate assessments. For obvious missing information, such as child's health history and immunization records, participants will request it from the appropriate source, starting with the biological parents. A medical care provider commented that it might only become apparent what information is missing after the child is assessed.

The social worker is legally responsible for the overall health care of the child-in-care, but the reality is that it is team effort.

The family physician might not know the child and/or have the child's health history at the time of assessment posing a process challenge.

Providing health care to children-in-care is complex. The child may transition into and out of MCFD's care, the social worker, foster parent or medical care provider may change while the child is in care, and the biological parents may be unavailable.

Participants spoke to several important issues involving relationships, roles, and people. These included the importance of trust and relationship-building, referrals and follow-ups, the difficulty finding a family physician for children-in-care, and fragmented information about the child. Participants also identified shortcomings in care coordination through the health-care system, particularly in relation to mental health, and instances where funding is lacking or not aligned with assessment needs.

Chapter 6 – Findings Part 3 - Forms usage and analysis

This chapter provides the findings and analysis from Part 2 of the interview questions (Appendix F). Part 2 asked participants to review each form and provide their opinions on whether they had seen, used, and/or filled out the form, and if they found or would find the form helpful. In addition, participants were asked for any information the forms collect that is not needed, and for information they need but the forms but do not collect. Participants were also asked to comment generally on the forms and the processes in which the forms were used. Section 6.2.6 identifies duplication of fields between the main form, Form 1 – Child’s Permanent Medical Record, and the other five forms to validate participants’ comments that several sections were duplicated across forms. Section 6.2.7 summarizes the helpfulness of the forms. Last, many participants expressed interest in electronic options for forms. These electronic options or solutions are summarized in Section 6.3. A limitation to the forms review was that some participants had not seen all the forms or had not thought about changing the forms. To mitigate this limitation, participants were encouraged to provide feedback to the researcher after the interview if they thought of any further changes to the forms.

6.1 Overall comments on forms

As part of the interview, participants were asked to review six forms: Form 1 – Child’s Permanent Medical Record, Form 2 – Newborn Record, Form 3 – Birth Family Medical and Social History, Form 4 – Comprehensive Plan of Care, Form 5 – Looking After Children Assessment and Action Record – Health section, and Form 6 – Healthcare Passport. Participants identified Form 1 – Child’s Permanent Medical Record as the form used in the initial medical assessment or examination and reported Form 5 - Looking After Children booklets were no longer in use at the time of the interviews. Participants reviewed each form and provided their professional opinions, including if they had seen, completed, and/or used the form, if they found the form helpful, and if there was any information not needed on or missing from the form.

Overall, participants reported that the forms were generally “good” that is comprehensive and useful for typical children-in-care if completed and available to the care team. Some sections were redundant between forms. Further, some forms were redundant to other forms used specifically for children and youth with special needs or, alternatively, were not helpful for, or applicable to, these children. Further, some participants felt there was too much paperwork.

Foster parents commented that once a child has lived with them for a certain period of time, only changes in the child’s health or care need to be recorded. Since the first form contains the historical information, it is redundant to copy information into the new form from the previous form each time a new blank form is started.

Participants consistently commented on their preferred order for using the forms. Specifically, that it would be helpful to have Form 2 – Newborn Record available and Form 3 – Birth Family Medical and Social History completed as early as possible while MCFD was in contact with the biological parents in case a biological parent was not available later. Figure 6-1 shows the preferred order of the forms.

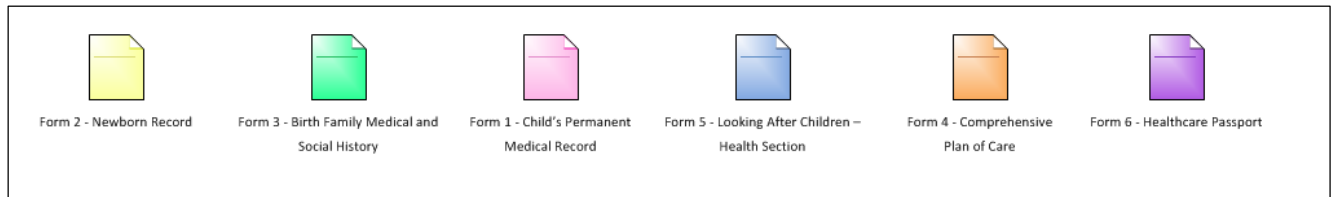


Figure 6-1. Preferred order of forms

6.2 In-depth analysis of the six forms

Building on participants’ opinions, a more in-depth analysis was conducted of the six forms. First, the role(s) responsible for filling in each form was identified. Then each of the six forms was reviewed in detail, followed by an in-depth comparison of the six forms in terms of key information types, duplication between forms, usage, and helpfulness.

6.2.1 Who fills in the forms

Based on the participants’ opinions, the social worker was responsible for entering data into five of the six forms, the exception being Form 2 – Newborn Record. The foster parent was responsible for filling in and maintaining Form 6 - Healthcare Passport, but might also help fill in Form 1 – Child’s Permanent Medical Record and Form 5 - Looking After Children (when the form was in use) depending on whether they had the information and their community’s practice. In some communities, the foster parent was also asked to fill in Form 3 – Birth Family Medical and Social History depending on the social worker and the foster parent’s knowledge of the child-in-care and relationship with the biological family. For Form 2 – Newborn Record, only

medical care providers completed this form in their role as hospital staff if they were involved in the birth and care of the baby. Although medical care providers might find three other forms helpful—Form 3 – Birth Family Medical and Social History, Form 4 – Comprehensive Plan of Care, Form 5 – Looking After Children—they would never fill in these forms. Rarely, a medical care provider might add information such as a vaccination to Form 6 – Healthcare Passport. A summary of the roles filling out the forms is presented in Table 6-1.

Table 6-1. Role responsible (R) or occasionally responsible (OR) to complete form

Role/ Form	Social worker	Foster Parent	Medical Care Provider
Form 1 - Child’s Permanent Medical Record	R	OR	R
Form 2 - Newborn Record			R
Form 3 - Birth Family Medical and Social History	R	OR	
Form 4 - Comprehensive Plan of Care	R		
Form 5 - Looking After Children Booklet – Health section	R	OR	
Form 6 - Healthcare Passport	R	R	(OR)

6.2.2 Form 1- Child’s Permanent Medical Record (CF 1606 (11/12))

Form 1 – Child’s Permanent Medical Record is the form used for the initial medical assessment or examination⁶¹ by a physician. Appendix G provides an at-a-glance summary of which role completes which section(s). The form is normally completed when a child first enters care. Participants reported the form was also completed whenever the child changes foster care placement, returns home, or moves to out-of-home care. Also, the form would be completed again if the child re-entered care.

To complete the form, typically the social worker starts the form and provides it to the foster parent who takes the form and child-in-care to the medical care provider for the initial medical examination. As shown in Table 6-1, all three roles might fill in information on Form 1 – Child’s Permanent Medical Record. If a child entered care under a special needs agreement or voluntary

⁶¹ The reference to a fuller medical assessment in the organization documents is located within care planning if the child stays in care for 30 days or more, not as part of the initial medical assessment.

care agreement, the child and youth special needs social worker, together with the child's parents, might complete Form 1 – Child's Permanent Medical Record rather than having an assessing physician complete the form. In these cases, the child might already be seeing specialists and much information might already be available.

Social workers were responsible for filling in Section 1 – Family History and Family History of Illness; however, depending on the community, the foster parent might fill in these sections if he or she had the information. Alternatively, the medical care provider might fill in the Family History and the Family History of Illness if the social worker and foster parent had not. If no one had this information and the biological parents and child's records were not available, these sections would be left blank during the assessment.

Some participants commented that a line through a section was ambiguous as to whether the information was missing or the medical care provider had determined the finding was not relevant for the child. The form's instructions were not explicit regarding what to enter if the information was unknown, if the information was not relevant, or if the finding was "no".

The social worker generally completed Section 2- Birth Record if they had the information, although the social worker's information source for this section was not clear from the participant interviews. Possibly, the information was from the biological parent or Form 2 – Newborn Record. Alternatively, the foster parents might fill in the information if they knew it, or the medical care provider would have this information if they delivered the child. Again, if no one had this information during the assessment, the section would be left blank.

Section 3 – Child's Past Medical History would also be filled out by the social worker if they had the information or, alternatively, by the foster parent or medical care provider. The social worker, or sometimes the foster parent, requested the child's immunization record from the health authority public health unit in order to fill in Section 4 – Immunizations.⁶² The social worker was responsible for filling in Section 5 – Medical Consent Information that tells the assessing physician who has guardianship of the child and who is authorizing the physician to assess the child. The social worker is also responsible for the "Please return when complete to"

⁶² Rather than copying the immunization information into Form 1, a participant suggested photocopying and stapling the child's immunization report to the form, reducing duplicate data entry and risk of error.

section on the bottom of the last page. In some instances, the resource worker might complete the “return to” section before providing the form to the foster parent if the social worker had not.

Medical care providers always completed Section 6 – Initial Physical Examination as the family physician or pediatrician assessing or “medicalling” the child-in-care. The physician’s office would also fill in the “Doctor Office Information”, commonly by stamp. As stated by one participant “this is the part [Form 1 – Child’s Permanent Medical Record, Section 6 – Initial Physical Exam] that is always done... that’s the whole point [of the form]” (Participant #15, social worker).

One medical care provider reported that the form is overwhelming except for Section 6 – Initial Physical Examination, which the provider had no problem filling out (Participant #9, medical care provider). The consent section was important to authorize the medical care provider to conduct the medical assessment. Once the medical care provider completed Section 6, they returned the form to MCFD as indicated in the “return to” section.

From the interviews, the form seems to be completed whenever there is a placement change. In contrast, the organization documents state that a medical examination is required at the judgement of the social worker, at the request of the child, or at the request of the biological parents. Further, there appears to be a gap in supporting tools for the decision on when to request the medical examination.⁶³ A participant commented that the form may also be used as part of the evidence in court for child protection concerns. In this situation, the assessment from the physician or emergency department may provide deeper evidence of historical abuse for MCFD to take charge of the child.

Overall, participants considered Form 1 – Child’s Permanent Medical Record to be a useful form for typical children-in-care. For children with complex health and/or behavioural needs, participants noted the form was not that useful and that there were other, more detailed forms available, including forms from specialists and an accredited organization. Participants were not aware of any data on a completed form they would go back and update once the form was filled in. If a subsequent medical examination was requested, information that would not change would

⁶³ Participants advised that an annual physical examination is routinely done if a child resides with a foster parent for a year or longer.

be manually copied to the new blank form; new information would be added according to what had changed.

Some participants reported that there is at least one other version of the form and they referred to this shorter version as the “pink form” or “pink medical form”. A social worker reported that the 5-page version of the form used for this thesis research differed from the pink form—“the pink form is different... it seems shorter and less complicated” (Participant #16, social worker).

Overall, the form did not have enough space to write many details (e.g. for hospitalizations). Participants suggested a number of structural changes to the form and process changes.

Key structural changes to the form include:

1. Clarify whether the physician is able to retain and/or share the form (e.g., as part of a referral).
2. Add a section for “presenting complaint” to guide the physician’s assessment.
3. Add child’s ethnicity to help identify possible race-related conditions for a health prevention approach.
4. Add more detail to abuse/neglect section and include “record history of any alleged or substantiated neglect or abuse” to guide the physician’s assessment.
5. Add space for past medications and details for past and current medications (e.g., start date, end date, dosage, prescribed by, reason/diagnosis for prescription, and interactions).
6. Separate *bruising* and *marks* into sections and provide more space to write.
7. Provide guidelines for *normal* and *abnormal* findings (e.g., general appearance, genitalia for sexual abuse).
8. Incorporate more structure for assessing mental health.⁶⁴
9. Add types of referrals (i.e., to what types of specialists) and follow up confirmation that the visit took place.
10. Add adverse childhood experiences (ACEs) including how many ACEs the child has experienced and how many ACEs each biological parent has experienced. (It is assumed that some detail about the nature of the ACEs might also be helpful.)

⁶⁴ It was noted that social workers need to know if the child and/or family attended the medical health appointment and any information that would help them care for the child; however, any details of what was discussed between the child and the provider was confidential unless the child consented to disclose this information.

Key process changes regarding the form include:

1. Make Form 2 - Newborn Record available.
2. Allow social worker to obtain parents' and child's relevant medical records if the biological parents are unavailable to provide to the physician in advance of the initial medical assessment. A completed Form 3 – Birth Family Medical and Social History was also noted as helpful.
3. Staple the immunizations report to the form rather than copy the information.
4. Attach any lab work to the form before the physician returns it to the social worker.

6.2.3 Comparison table of key features and issues of Forms 2, 3, 4, 5 & 6

Forms 2, 3, 4, 5 and 6 were analyzed in a similar approach to Form 1 – Child's Permanent Medical Record, but in less depth as this thesis research focused on Form 1. The table in Appendix H compares key findings on forms 2, 3, 4, 5 and 6. The least helpful of the forms was found to be Form 6 – Healthcare Passport; it was reported to be highly redundant to forms already used to gather information to care for children with special needs. In contrast, Form 5 – Looking After Children – Health section was found to be useful. A major drawback, however, was the time needed to complete Form 5. Notably, Form 2 – Newborn Record and Form 3 – Birth Family Medical and Social History were very helpful to understand the child's health needs, especially if provided prior to the initial assessments. Form 4 – Comprehensive Plan of Care was also helpful—especially in the newest version, “Plan of Care”, that includes the functionality to note children-in-care who identify as transgender, and the ability to print and share relevant sections. A challenge for Form 4, because the form was electronic, was introducing a computer into the process, which may negatively impact the relationship and communication between the social worker and the foster parent and child.

6.2.4 Key information types across the six forms

Participants were asked to comment on any key information not needed and any key information needed but missing on each of the six forms. Although some participants indicated they would not rely on some of the information on the form, no participant advocated removing any information and the forms, generally, were rated as being good for typical children-in-care. Based on the needs of the child, some participants reported that they would rely more on alternative forms, such as those for children of Aboriginal Peoples or children and youth with

special needs. Further, a limitation of the interviews was that the interview questions and six forms were only provided in advance for the three telephone interviews. Many of the participants did not have time to reflect on how they might change the forms prior to the in-person interviews. This limitation was especially true for participants who had never seen the form before the interview.

6.2.5 Duplication across fields

As this thesis research focused on Form 1 – Child’s Permanent Medical Record used in the initial medical examination, the analysis compared duplicate fields in Form 1 to fields in the other five forms. With the exception of Section 6 – Initial Physical Examination, most fields were traceable to fields on the other five forms. Figure 6-2 shows the potential source documents for the sections of Form 1 – Child’s Permanent Medical Record. There appeared to be some discrepancies in labels, including structure, possibly to enable capturing more specific data. The few fields that were not duplicated on the other five forms seem to be information that would be captured during prenatal care.

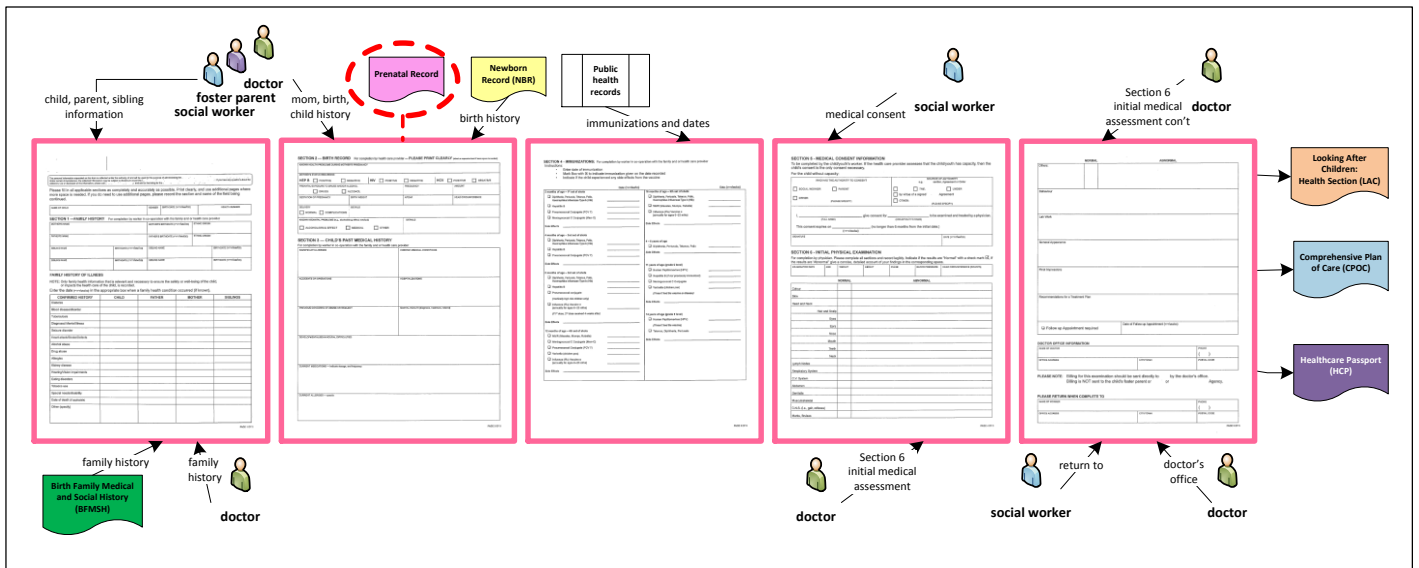


Figure 6-2. Potential data sources for Form 1 – Child’s Permanent Medical Record

Examples of duplicated fields between forms are the child’s demographics for all forms, the immunization section, which was identical between Form 1 – Child’s Permanent Medical Record and the Form 6 – Healthcare Passport, and the family medical history, which was very similar between Form 1 – Child’s Permanent Medical Record, Form 3 – Birth Family Medical and

Social History, and Form 6 – Healthcare Passport. The physical examinations listed similar biological systems on Form 1 – Child’s Permanent Medical Record and Form 2 – Newborn Record, as well as height, weight, and head circumference.

6.2.6 Usage and helpfulness of forms

For each form, participants were asked whether they had seen the form, used the form, entered data into the form, and whether they found or would find the form helpful. Most forms were found to be helpful although not all foster parents and medical care providers had seen all the forms prior to the study. Reportedly, Form 3 - Birth Family Medical and Social History would be helpful if the birth parents and/or medical records were unavailable at the time of medical examination. Further, for children and youth with special needs, the six forms were found to be duplicated by the 30-page priority service tool and by the information from specialists that provided more details than those captured on the forms. The questions on Form 5 – Looking after Children were found to be not fully applicable to children and youth with special needs (e.g., diet questions for children who are tube-fed). Further, foster parents, rather than social workers, were identified as having more information on the day-to-day activities of the children and, therefore, were the more appropriate role to complete Form 5 – Looking after Children. Form 6 – Healthcare Passport was found to be the least helpful form, especially when foster parents had cared for a child over a long period of time. Further, the form might be lost. In some situations, foster parents who cared for children-in-care over a length of time would only document any changes to the child’s regular routine, equipment changes, and significant events on Form 6.

6.3 Electronic options for forms

All of the social workers, a few of the foster parents, and most of the medical care providers were already relying on computers at the time of the interviews. They used computers, including clinical information systems, as part of gathering, reviewing, and recording information during their initial assessments of children-in-care. Most if not all of the records were hybrid—a mix of paper and electronic records—to some degree. Some participants suggested electronic options as a way to overcome information challenges such as limited time, competing priorities, missing information, multiple forms, and inaccessible records.

As one participant described:

“As a guardianship social worker you are constantly dealing with crisis situations. So and so’s just hung themselves so I need to spend you know two days at the hospital and contacting family. At the same time someone else is run away and missing... so... filling out these forms are the absolute bottom of your list so then what happens is you keep collecting information but no one’s putting it all together. There’s just no time for it.”

(Participant #17, social worker)

Similarly, another social worker commented:

“[i]f we had something where it truly was all in on place rather than... see that stack [of forms] you brought.”

(Participant#18, social worker)

Another social worker commented that it seemed:

“[s]ometimes that whole health record of the child it... it is in bits and pieces sometimes.”

(Participant #16, social worker)

The most common suggestions were for one centralized record accessible by the team caring for the child-in-care according to their roles, and the ability to communicate directly with one another in writing (i.e., secure email functionality). The system should capture alleged and substantiated neglect and abuse reports and a failure to thrive diagnosis. It should enable tracking of MCFD involvements, appointments, and follow-ups, and should have the functionality to upload and view assessments. A role for a public health nurse who could access medical history was also raised. For example, such a role might gather the child-in-care’s health history from different information systems to provide to the care team as appropriate for initial assessments. The main concerns with electronic options were about appropriate information-sharing and the impact of system downtime on workflow. Participants noted that some professionals do not use electronic records and a paper alternative should be made available. If electronic forms are introduced, duplicate sections should automatically update.

6.4 Other forms and tools used in initial assessments

Part 2 question 6 asked participants for other tools they rely on to provide health care to children-in-care. Key forms and tools mentioned by the participants included: the pre- or antenatal form, MCFD incident report, request for home/placement, culturally sensitive versions of Form 3 – Birth Family Social and Medical History, Section 96 letters and consents to request medical and health records, letter to request immunization records, mental health referral form, and clinic, hospital, and health authority electronic health records. The social workers also mentioned the voluntary care/special needs agreement, priority service tool, and health care guidelines. These tools, and examples of additional forms and tools, are described in more detail in Appendix I. The use of these documents suggests that there are forms and tools that form part of the MCFD child-in-care health record beyond the six forms reviewed in this thesis research. A systematic approach to confirm and analyze all the forms and tools to confirm the MCFD child-in-care health record is recommended.

Chapter 6 Key Messages

This chapter summarizes the interview tool Part 1 questions 1-6.

The six forms reviewed by the participants are good for typical children-in-care if complete and available, with additional forms needed for complex care needs.

Key information types include: biological parents' relevant medical and social history, prenatal and birth records, child's health history, ACEs (such as abuse and neglect), child's immunization records, past and current medications, guardianship and authority to consent to treatment, and placement information.

Form 2 – Newborn Record would be helpful to have when the child enters care to have a record of any health concerns at birth and, for older children-in-care, to answer any questions they may have about their birth.

Form 3 – Birth Family Medical and Social History would be helpful for assessments, especially if the birth parents were not available.

Form 4 – Comprehensive Plan of Care was time consuming but sections could be copied and it was possible to print only sections. The second version, Plan of Care, included the functionality to capture if the child identified as transgender.

Form 5 – Looking After Children – Health Section was also very time consuming to fill out and had been discontinued at the time of the interviews; however, the form showed someone was actively involved in the child’s health care, was helpful get to know the child, and served as a “growing up book” for the child.

Last, Form 6 – Healthcare Passport was found to be the least helpful, containing many duplicate sections to the other forms.

There were many duplicate fields between Form 1 – Child’s Permanent Medical Record and the other five forms, such as immunizations and family health history.

Participants identified other tools they use to gather information about children-in-care, such as the prenatal form, request for home, Section 96 and consents, culturally sensitive Form 3, and electronic health records. As a means to overcome information fragmentation and to streamline forms, some participants advocated for a centralized electronic record including secure email functionality and the option of paper-based alternatives.

Chapter 7 – Discussion

This chapter ties in the literature, MCFD organization documents, and participant interview analysis findings to answer the research questions. This discussion will highlight gaps and identify contributions to knowledge, research limitations, and opportunities for future research.

7.1 Key findings and implications

Pava's STS approach (Section 2.3.2) was used as the schema to organize the thesis research findings of what health information social workers, foster parents, and medical care providers need to provide care to and plan for children-in-care at the time of initial assessments.

Challenges and barriers to information-sharing and ways to overcome these issues were also described through this approach. The MCFD organization documents and forms were the technical artifacts, and the participant interviews, including how the participants use (or do not use) the forms provided the social elements. The key findings and implications are organized by context, process, and requirements.

7.1.1 Context of an MCFD conceptual child-in-care health-care framework

First, the MCFD conceptual child-in-care health-care framework provides the context for the initial assessments. The framework in this thesis research was derived from organization documents that suggested MCFD formally described health within the definition of physical health. In actuality, MCFD already addresses a fuller concept of health and well-being both in its policies and standards and in the daily practice of social workers, foster parents, and medical care providers.

In reviewing the organization documents, including Document 1 – Ch. 3 Training Manual and provincial *CFCSA* legislation, a medical assessment framework appears to be missing between the provincial legislation and the operationalized MCFD policies, procedures and standards. The CPS drafts and maintains practice points on health issues common to children-in-care, but a review of the literature indicated that the USA, UK, and Australia have health-care frameworks to assess children in state care. The literature provided examples of specific children-in-care assessment tools that neither Canada nor MCFD appear to have (Table 2-3). Such tools include: a national assessment framework (NSW, 2013, Appendix 2; Webster et al., 2012); information sharing and portable record considerations (Kertesz, 2012); comprehensive clinical practice

guidelines (NSW, 2013); guidance notes and glossary for assessments (UK DoH, 2000); study on framework implementation (Gray, 2001); post-implementation practice review (GAO, 2009); case study of initial assessment of a child brought into state care, including the primary care role (Webster et al., 2012); and tracking and trending indicators (Jutte, 2015). For mental health assessments, the BC General Practice Services Committee offers a Child and Youth Mental Health Tools & Resources: Clinical Tools⁶⁵ [GPSC] (2015) that includes some of the “other tools” described by the medical care providers (Appendix I). Although caution is needed in applying any of the other jurisdictions’ assessment models as their federal-state structure might be different than ours, policy makers at Canadian national, provincial, and MCFD levels might review these medical assessment frameworks and the tools developed by other jurisdictions as a way to confirm and then start to address any gaps in BC’s conceptual child-in-care health care framework, including policy and detailed procedures.

With respect to roles, through a Canadian Institute for Health Information project (2013) various organizations in BC participated in developing child health indicators. This engagement suggests that there are many organizations that contribute to children-in-care’s health and well-being both nationally and provincially. Defining each organization’s role is outside the scope of this thesis research; however, if national and/or provincial assessment frameworks were to be developed, role definitions for each organization might be included in the framework to clearly define “authority, responsibility and accountability” (Szilagyi, 2012, p.499). Further, the literature recommended embedding medical care directors within child welfare organizations (Ponti, 2008; Zlotnik et al., 2015). The roles this professional could have in MCFD might also be considered by policy. Last, neither the literature nor the organization documents identified that foster parents usually take children-in-care for initial medical examinations as was revealed through the participant interviews. MCFD may wish to develop policy that defines roles at the operational level.

Finally, several funding issues were raised by social workers, foster parents, and medical care providers. Social workers commented on needing approval for payment to physicians for the mandated Form 1 – Child’s Permanent Medical Record. For foster parents, comments included

⁶⁵ General Practice Services Committee (GPSC). Child and Youth Mental Health Tools & Resources: Clinical Tools. 2015. Available from: (<http://www.gpsc.bc.ca/what-we-do/professional-development/psp/modules/child-and-youth-mental-health/tools-resources>). Accessed April 10, 2016.

that there had not been an increase in funding for many years and that the foster parent's time is better spent with the child than filling out forms. That said, foster parents completed and submitted forms with some creating their own back-up templates. For medical care providers, although there was an MSP billing code for the medical care provider to recoup the costs of providing a copy of the child's medical records to MCFD, there did not appear to be a specific billing code for providing Form 1 – Child's Permanent Medical Record/foster child medical. Further study is needed to confirm if MCFD has the MSP payment for copying medical records as a preapproved billable item. Last, Australia (NSW, 2013; Webster et al., 2012) and the USA (GAO, 2009) have set fee schedules and incentives to support the medical care providers in assessing and treating children-in-care. Further review of these funding examples is recommended.

7.1.2 Processes and challenges

There were three initial assessments identified as the target system for which information is needed, transformed, and outputted (1) the social worker assessment to remove and bring the child into care, (2) the foster home placement assessment and what information to provide to the foster parent, and (3) the initial medical assessment when the child first enters care. Collecting, updating, and disclosing or sharing health information was the unit operation. Neighbouring systems were other individuals and organizations that may have cared for, or will care for, children-in-care. Examples of neighbouring systems included previous medical care providers, the hospital where the child was delivered, infant development centre, travelling dentists, tertiary clinics, and travelling autism and behavioural assessment clinics. The social worker, foster parent, and medical care provider come together from separate formal organizations to form a reticular organization for the purposes of deliberating and deciding on care for children-in-care. The reticular organization also includes the biological parent, if available.

Ideally, the information conversion process follows a linear process whereby the social worker collects health information from the biological parents and/or collaterals, the medical care provider records information from the initial medical examination including treatment recommendations, and the foster parent maintains records of new events. The social worker and medical care provider may also make referrals from the initial assessment, and would provide relevant information to the provider to whom they are referring the child and/or family.

Variations, such as the biological parents or medical records not being available to a medical care provider conducting the initial medical examination without prior knowledge of the child, the child not having a regular family physician, and/or the child experiencing emotions at being removed from parents and entering care, rendered the information conversion process nonlinear. These variations might suggest a need for multiple assessments to enable assessing the child correctly.

7.1.3 Requirements for forms to fit process

On an applied level, while the majority of participants reported the six forms as being good forms for typical children-in-care, the participants suggested changes to each form. Examples of these new requirements are listed in Section 6.2.2 and Appendix H. From Section 2 – Literature Review Section 2.2, as summarized in Appendix C, some aspects of the child-in-care health record systems and forms worked well (strengths), but overall the systems and forms did not fit the social workers' workflow processes (limitations). The disparate systems rendered the processes less efficient and did not support information to be collected and shared easily. Further, the functionality in some systems (e.g., the UK's Integrated Children's System) seemed designed to fit managerial reporting needs rather than social worker workflow. The implication from these findings is that any tools designed and implemented for MCFD's child-in-care health record need to support information capture and sharing to increase process efficiency.

7.1.4 Tool to overcome information collection and sharing issues

A key finding from participant interview transcripts was that there were challenges and barriers to information collection and sharing. As a way to overcome these issues, some participants suggested electronic options such as a centralized record with secure email functionality accessible to the child's carers. A paper version was also deemed necessary. (Section 6.3- Electronic Options). From a review of the literature and analysis of participant interviews and the six forms, Form 5 – Looking After Children booklets might be an appropriate tool on which to base such a centralized record. The UK based their ICS record on the Looking After Children booklets (Hall, 2010). As some medical care providers commented, the booklet is comprehensive and contains the information one would find in a pediatric record. Social workers observed that, while the format of the booklet limited recording narratives, the guidelines were helpful. Foster parents also commented that the booklets provided a growing up record for children-in-care. A

review of the five other forms might suggest fields that are not currently in the booklet but that might be useful. This view negates the focus of this thesis research on Form 1 – Child’s Permanent Medical Record, and suggests further research on Form 5 – Looking After Children booklets as a potential frame to develop a centralized record. It is important to recall that, according to the children and youth special needs social worker participants, the booklets are not tailored to children and youth with special needs and, as noted in Hall (2010), the booklets were designed for research first and subsequently put into practice as a clinical record. Further, as UK’s ICS was developed from the booklets, a review of any limitations with ICS is recommended.

7.2 Contributions to health informatics and the domain of children-in-care health care

Contributions to the domain knowledge include identifying the potential gap between the provincial legislation and MCFD’s existing conceptual child-in-care health-care framework with respect to initial assessments. From the literature and MCFD organization documents reviewed, the social work process to remove and bring a child into care is well documented. However, the processes and health information needs when a child-in-care first enters care have not been documented in detail, specifically when biological parents are not available to provide their own relevant and their child’s health information, and the child does not have a regular family physician.

Contributions to knowledge in health informatics are applying an STS approach to a social care domain in Canada. This thesis research applied a modified Pava’s STS approach (Section 2.3.2) to organize the research findings. An STS approach has been applied in social care informatics in other Commonwealth countries, such as the UK and Australia, but from the literature at the time of this thesis research, it was unknown if an STS approach had been applied to social care informatics in Canada. The research’s STS approach enabled identification and understanding of the business context and detailed processes in the target system, unit operation, and neighbouring systems. The approach also enabled identifying technical artifacts and social elements used for the health information needs of initial assessments when a child first enters state care, and provided an organizing schema for comparing the technical artifacts and social elements to define the MCFD conceptual child-in-care health-care framework.

7.3 Study limitations

There are six main sources of study limitations: the MCFD organization documents, the participants, the literature review, the researcher, the study design, and the research topic. As only the sections of the MCFD organization documents as provided by MCFD were reviewed, it is possible that some of the gaps identified in this thesis research are already addressed in other organization documents. As some participants were from recommended locations and others were recruited through snowball sampling, the participants were not a random sample. Further, as the participants were experts in their fields, there was the risk of participants promoting personal viewpoints (Kvale, 2008). To mitigate these potential biases, more than five participants of each type—social workers, foster parents, and medical care providers—were interviewed. Moreover, the participants were located in more than five communities. For Chapter 2 – Literature Review, due to time constraints, an exploratory environmental scan rather than a systematic review was conducted. Only a sample of key issues from the reviewed literature are included in this thesis report and it is possible existing evidence was missed.

The researcher has two sources of potential bias, as the research tool and personal bias. As the interviews were conducted by the researcher as the interview tool (Kvale, 2008), and the findings were analyzed by one researcher, researcher bias may have been introduced. The researcher's personal bias was from pre-existing "values, training and experience" (Mumford, 1974, p. 40) in health informatics. These potential researcher biases were mitigated by the researcher having prior experience with staying objective during research, adhering to the interview questions, and adding probing questions as deemed appropriate. Also, the researcher's background was disclosed to the participants and reliance was solely on the participants' opinions for empirical evidence. Further, although the research was guided by experienced researchers and clinicians, the domain was largely unknown to the researcher. As the researcher was not a clinician, this thesis research relied heavily on the literature for triangulating with the health and well-being definitions and with the MCFD conceptual child-in-care health-care framework. The fuller literature review was also conducted after analyzing the participant interview transcripts and MCFD organization documents.

Although this thesis research was designed for, and conducted at, multiple urban and rural communities in BC, the findings might not be generalizable across the province and to other

jurisdictions. The specific demographics of any community to which these findings might be applied should first be considered.

Last, the paucity of studies in the literature on health records for children-in-care compared to the literature on clinical information systems suggests that the topic of health records for children-in-care is fairly recent. A challenge in this thesis research was working with participants to determine which tools are used solely to care and plan for children-in-care versus tools that might be used for children-in-care but are also used for any child as fits the child's needs. Again, a systematic review of the tools is recommended.

7.4 Opportunities for future research

It was not feasible within this thesis report to discuss and address all the findings from the literature, MCFD organization documents, and participant interview analyses. The findings not discussed in detail might provide opportunities for future research. These opportunities include: health information needs for specialized groups of children, such as children of Aboriginal Peoples; homeless children or children living in extreme poverty; youth in custody; education needs for children-in-care; and the aging-out process for typical children-in-care as well as for children-in-care with complex medical needs.

Other areas for future research include: ACEs for children-in-care and parents; travelling health-care teams, including dentists; physician payment schedules for attending children-in-care, including incentive-based payments; medical homes⁶⁶ to address lack of family physicians; and an information-sharing framework between social workers, foster parents, and medical care providers that includes protocol for accessing electronic health records for children-in-care.

Finally, this thesis research did not directly involve, as participants, children and youth who are entering care, are in care, or who had aged out of care. Engagement with representatives from these groups is recommended to better understand and identify health information needs from their perspective.

⁶⁶ An example of two medical homes are: general clinic South Main Public Healthcare clinic, Salt Lake City, Utah (<http://healthcare.utah.edu/find-a-location/south-main-clinic.php>) and Christmas Box House, Salt Lake City, Utah, for children in emergency removals or awaiting placements as well as supporting youth and aging out of care (<http://slco.org/youth/programs/christmas-box-house/>)

7.5 Suggested actions for MCFD

The evidence from this introductory research clearly suggests gaps and lack of continuity in MCFD's medical assessment model. To apply the thesis research findings, as cited in Zlotnik (2015), an in-house senior medical advisor role might be created at MCFD on a multi-tiered level. This role would be involved in consulting staff, helping to address policy and systems issues, and providing advice on practice at the front line for children-in-care. At a practice level, the senior medical advisor might oversee and/or be available for consultation on cases. The evidence from this thesis research suggests that revision of some tools and creation of others—such as changes to the existing six forms and development of a health-care plan—are needed. The MCFD senior medical advisor role might also include working with colleagues from the BCPS and the College of Physicians and Surgeons to develop a medical model that addresses the nonlinear process when a child-in-care's medical and social history are not available to the assessing physician at the point of the initial medical assessment.

Table 2-3 lists models used in jurisdictions in the USA, UK and Australia. As one medical care provider stated, they were unable to ensure the child-in-care's health needs were met if the child was not brought back to them for follow-up. The AAP's pediatric assessment schedule also provides a model used with children-in-care. At the policy level, the existing MCFD health-care policies and procedures might be rounded out more fully to detail “authority, responsibility, and accountability” (Szilagyi, 2012, p.499). That is, when and who takes children-in-care for medical assessments, what information needs to be recorded and how, who is responsible for taking the child for follow up, and who is accountable for monitoring any follow-up.

To support rounding out MCFD's conceptual child-in-care health-care framework, participants identified that funding changes are needed to enable family physicians to fully conduct medical assessments of children-in-care. In addition, medical care providers need reimbursement when they provide a copy of the child-in-care's medical records to the assessing physician. Finally, the information-sharing framework for physicians accessing records for child-in-care medical assessments needs to be clarified. Clear instructions on completing the form are needed, and physicians need a better understanding of when they are authorized to access electronic health records for children-in-care. This authorization is particularly essential when the assessing

physician has no other source of reliable health information about the child-in-care they are assessing.

Chapter 7 Key Messages

This research contributed to the domain of health records for children in state care by providing a fuller understanding of health information needs, and contributed to health informatics by applying STS to a social care system in Canada.

In comparing the existing MCFD child-in-care conceptual health-care framework to assessment models from the USA, UK and Australia (Table 2-3), there is a gap for an overall assessment model. An MCFD assessment model might embed a senior medical advisor within the child welfare agency and address process issues such as missing information at the time of initial assessment and funding.

The Looking After Children booklets (Form 5) might provide a better framework for creating an electronic health record for children-in-care than Form 1 – Child’s Permanent Medical Record, but diligence is needed to ensure the tool fits the workflow and process.

The research limitations included a review involving only parts of MCFD organization documents, nonrandom participants, an exploratory rather than systematic literature review, researcher’s bias, and a potential lack of generalizability to other locations.

Opportunities for future research include involving current and former children-in-care directly as research participants, evaluating the health information needs of special populations (such as homeless children and youth, and children and youth of Aboriginal Peoples), and assessing ACEs and their impact on children-in-care and their parents.

Chapter 8 – Conclusion

For this thesis research, a modified Pava's STS approach was used to structure the analyses of the organization documents and participant interview transcripts (Figure 2-1). Overall, the practice workflows for all three roles—social worker, foster parent, and medical care provider—adhered closely to the processes directed by the technical artifacts. From the participant interviews, there was much consistency in workflow between communities.

The main gap identified was lack of supporting documents directing how and by whom health information is gathered, specifically for circumstances outside the expected pathway for a child-in-care assessment (i.e., if there is not a family physician or pediatrician in possession of the child's medical records, and it was not possible to gather the child's health information from biological parents).

The second gap identified was lack of a national or provincial health assessment framework for children-in-care. While the organization documents provided some context and health and health-related descriptors as part of social worker child protection removal assessments, a formal MCFD conceptual child-in-care health-care framework appears to be missing.

Last, as part of requirements, some participants suggested a centralized electronic system, including secure email-type communication and with paper-based alternatives, as a potential means to overcome information recording and sharing challenges. Further research is need to ensure that technical issues identified in the literature are not repeated. Any such system needs to support well the workflows and communication needs of social workers, foster parents, and medical care providers, as well as meet the health needs of children-in-care and their parents. By addressing the medical assessment process and underlying tools first or concurrently, it may be possible to implement a comprehensive MCFD conceptual child-in-care health-care framework and, potentially, an electronic child-in-care health record that meets the health information needs to provide care to and plan for children-in-care in BC.

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Appendix A - CPS recommendations for child-in-care health care

There did not appear to be a Canadian or BC health assessment framework or health-care guidelines for children-in-care based on a review of the literature, but the Canadian Paediatric Society (CPS) issued recommendations for the health-care supervision of children-in-care on February 1, 2008 (Ponti, 2008) retrieved April 17, 2016, from <http://www.cps.ca/en/documents/position/foster-care-health-supervision#table1> (reaffirmed February 1, 2016).

- Physicians should recognize that children and youth in foster care have a higher incidence of special needs including chronic medical conditions, mental health disorders, and developmental and academic delays.
- Physicians should collaborate with child welfare professionals, foster parents, group home staff and, when appropriate, parents and family members to determine the urgency for assessment and to provide optimum health care to foster children and youth in Canada.
- On placement in foster care, children and youth should have an initial medical visit, including a physical examination, to screen for and treat health conditions requiring prompt medical attention such as acute illness, infection, pregnancy or chronic conditions requiring medication and significant developmental delays or mental health disorders. The need for vision, hearing and dental screening should be assessed.
- During the initial assessment, physicians should evaluate the infant, child or youth's need for screening tests such as complete blood count, ferritin, lead level, HIV, hepatitis B and C titres, b-hCG, cervical or urethral swabs for sexually transmitted infections, and Papanicolaou smear on a case-by-case basis. Routine ordering of tests is not recommended.
- A follow-up medical visit should be arranged to review the medical history including immunization status, perform a complete physical examination, complete or review referrals for developmental and mental health assessments as required, and ensure dental follow-up has been arranged. Laboratory investigations that were part of the initial screen should be reviewed.
- Physicians should be aware of and sensitive to the unique cultural, emotional, spiritual and physical needs of children and youth of all ethnic groups, including Aboriginals.
- Physicians should evaluate the need for referral for psychoeducational assessment and support on admission and throughout foster care placement. This could include liaising with teachers, principals, special educators and tutors.
- Physicians should partner with child welfare professionals to establish and maintain thorough medical records to provide consistent care and follow-up. Health care records should follow the child or youth throughout and beyond foster care placement.
- Children and youth who are either currently or have previously been placed in foster care should be monitored more frequently than the general paediatric population.
- Physicians should advocate for permanency planning including placement stability and personal intervention plans which establish a child or youth's long-term life goals.
- Physicians should be aware of community resources to assist the fostering caregivers in the care of these special needs children and youth (Table 1).

Appendix B - Australia's Medical Benefits Scheme items for children in statutory care

A medical billing schedule formalizes the care a medical care provider is authorized to provide and bill for. Table 1 shows the 32 items that general practitioners in Australia are authorized to bill for within their formal role of providing and coordinating health care for children and youth in statutory or state care. The items span the four health care assessment points identified in the NSW Clinical Practice Guidelines (2011). In British Columbia, there does not appear to be specific billing codes for medical care providers to provide care to and bill for children-in-care. This gap may restrict the medical care provider's ability to provide care and care coordination beyond that approved for a typical patient.

Table 1. Categories of current MBS items available to meet the primary healthcare needs of children and young people in OOHC by GPs⁵					
MBS item categories	MBS item numbers	Preliminary health check	Comprehensive health and development assessment	Development of a health management plan	Ongoing assessment and monitoring
Standard consultations	Level B (23)	✓			
	Level C (36)	✓	✓	✓	✓
	Level D (44)	✓	✓	✓	✓
Population health	Children aged 3–4 years (701, 703, 705, 707)	✓	✓		
	Aboriginal or Torres Strait Islander children aged 0–14 years (715, 10986)	✓	✓	✓	✓
	Child with intellectual disability (701,703,705,707)	✓	✓		
	Refugee or humanitarian entrant (701,703,705, 707)	✓	✓		
Mental health	Preparation of GP Mental Healthcare Plan (2700, 2701, 2715, 2717)			✓	✓
	Review of GP Mental Healthcare Plan (2712)				✓
	GP Mental Healthcare Consultation (2713)				✓
Asthma	Asthma Cycle of Care (2546, 2547, 2552, 2553, 2558, 2559, 2664, 2666, 2668, 2673, 2675 or 2677)			✓	
Diabetes	Diabetes Cycle of Care (2517–2526 and 2620–2635)			✓	
Chronic conditions	Preparation of GP Management Plan (721)			✓	✓
	Review of GP Management Plan (732)				✓
	Coordination of Team Care Arrangements (723)			✓	✓
	Coordination of a review of Team Care Arrangements (732)				✓
	Contribution to multidisciplinary care plan prepared by another health or care provider or to a review of such a plan (729)				✓

MBS item numbers available at www.medicareaustralia.gov.au/provider/medicare/mbs.jsp

Source: Webster et al., 2012, p. 821, Table 1.

Appendix C – Comparison of social care records across jurisdictions

The table compares studies on social care records from four jurisdictions, the USA, UK, Australia, and Finland. The comparison includes: the record name, if available: short description of record: if electronic or paper-based: short description of study: whether the study is descriptive or an evaluation: first author’s last name: and year. Examples of strengths and limitations from the studies are grouped by record, including whether the studies provide details on any initial assessments and, if so, which assessments.

Appendix C Table - Jurisdiction, social care system, key points

Source: short description, type, first author, year, COUNTRY	Record/form: name, electronic/paper/hybrid, rational, description	Strengths and limitations	Describes initial assessments?
<p>Case study of impact of system on workflow (<i>Descriptive</i>, Smith, 2014)</p> <p>USA</p>	<p>Child Welfare Services/Case Management System (CWS/CMS)</p> <p>Electronic</p> <p>To increase compliance with federal reporting standards implemented in 58 Californian counties between 1997 and 1998 Went from paper to an electronic record system.</p> <p>Study relied on secondary data from worker retention survey.</p>	<p>Strengths: Ability of case assignment and managing deadlines and supervisor approvals immediate access to information improved ability to generate reports.</p> <p>Limitations: reduced time spent with clients and co-workers relationships with supervisors became more monitoring and less supportive costly to maintain lack of comfort, specifically for older workers system downtime decreased workers’ sense of being a professional due to monitoring</p>	No – not in detail
<p>Nine studies: Breakdown of how social workers spend their time (<i>Evaluation</i>, Holmes, 2009); Ethnographic study of initial assessment (<i>Descriptive</i>, Broadhurst, 2010); if the ICS meets casework needs for children with disabilities (<i>Descriptive</i>, Mitchell & Sloper, 2008); practice fragmentation (<i>Descriptive</i>, Hall, 2010) unintended results (<i>Descriptive</i>, Wastell, 2009); formative evaluation of four pilot sites</p>	<p>Integrated Children’s System (ICS) and 26 exemplars</p> <p>Electronic (some exemplars used as paper based) To enable a common approach Implemented in 2007.</p> <p>The ICS sets out national specifications of a core system and 26 exemplars (forms) for initial and core assessments</p> <p>Based on the Looking After Children Assessment and Action Records (LAC-AAR) booklets.⁶⁷</p> <p>Various study data sources.</p>	<p>Strengths: More child-centric Useful metadata on assessments were date started, date completed, and initially assigned to (Shaw, 2009) Saved data time if child comes back into care or child’s file is transferred (Holmes, 2009, p.15)</p> <p>Limitations: timescales for initial and core assessment gave “the sense of ‘the system’ now driving practice” rigidness of the system putting tasks such as assessments at risk of being “meaningless and mechanistic” (White, 2010, p 412) system required time consuming core assessments even if only short service offered regardless whether added value or inconvenienced families (White, 2010).</p>	Yes –social worker initial and core assessments and foster placement assessment; not much description on the medical assessment

⁶⁷ The UK developed the Looking After Children Assessment and Action Records (LAC-AAR) booklets (Hall, 2010). Canada and Australia subsequently adopted and tailored the booklets for their use. The MCFD LAC-Health section is Form 5 of this research.

Source: short description, type, first author, year, COUNTRY	Record/form: name, electronic/paper/hybrid, rational, description	Strengths and limitations	Describes initial assessments?
<p>(<i>Evaluation</i>, Shaw, 2009); Ethnographic study on impact of system and origin (<i>Descriptive</i>, White, 2010); practice-system fit assessment (<i>Descriptive</i>, Pithouse, 2011); Ethnographic observation, emerging trends (<i>Descriptive</i>, Wastell, 2014b).</p> <p>UK</p>		<p>not differentiating between chronological and developmental age (Mitchell & Sloper, 2008, as cited in Shaw, 2009)</p> <p>undermines the narrative and fragments the child and family⁶⁸ (Hall, 2010, p.406). Core Assessment is so long social worker is uncertain who the form is for and who reads it (Hall, 2010, p.408)</p> <p>timescales, developmental milestones in the exemplars and bias in child protection wording were not fully applicable to a child with disabilities Not always clear where to record disability information and whether to repeat the information in other sections Inability to include visual information apart from uploading it as an attachment. (Mitchell & Sloper, 2008)</p> <p>network issues waiting for technical support losing work if the network or system failed or time out lack of auto-save, increased time needed for inputting data and indirect activities not enough workstations with network access for all staff entailing the need to wait for an available workstation insufficient computer literacy levels insufficient remote access to the system to enable working from home with decreased workplace interruptions system not user friendly system not intuitive forms did not enable grouping factors forms fragmented across screens embedded business rules could cause delays staggered roll-out impeded data sharing (Holmes, 2009)</p> <p><i>Issue stated in several studies:</i> social workers may not be able to follow their social worker practices resulting in errors, putting children at risk</p>	
<p>Review of issues with the common assessment framework: illustrates impact of CAF (<i>Descriptive</i>, White, 2009); summary of policy and applied CAF, (<i>Descriptive</i>, Pithouse, 2009); practice fragmentation</p>	<p>Common Assessment Framework (CAF)</p> <p>Paper-based or electronic</p> <p>Full name: The CAF (Signs of Wellbeing) and Appendix 1 (NHS CAF Form, n.d.)</p>	<p><i>One of the 26 ICS exemplars - Strengths and limitations are included in the ICS summary.</i></p>	<p>Yes – initial health/medical assessment with referral option is the purpose of the form</p>

⁶⁸ Hall (2010) notes that the family structure and services themselves have become fragmented, with a non-traditional network rather than nuclear family becoming common, and there is direction to develop comprehensive services (pp. 394-5).

Source: short description, type, first author, year, COUNTRY	Record/form: name, electronic/paper/hybrid, rational, description	Strengths and limitations	Describes initial assessments?
<p>(<i>Descriptive</i>, Hall, 2010); CAF form, National Health Services Kensington and Chelsea, n.d.)</p> <p>UK</p>	<p>Voluntary-use form</p>		
<p>Seven <i>descriptive</i> studies using data gathered from a single, multipart ethnographic study by Gillingham: system design for the occasional user (2014a); redesign of social work systems to support practice (2014b); categorising service users and service activity (2014c); needs of managers for system design (2015a); unanticipated consequences from organizational change (2015b); aspects of information (2015c); and participatory design considerations (2015d).</p> <p>Australia</p>	<p>Client Management System</p> <p>Information system used by human service organizations</p> <p>Electronic</p> <p>Study data collected through social worker interviews, participant observation, attending meetings, design workshops, focus groups, vendor presentations, and review of policy documents.</p> <p>Studies identify issues with existing social care system and what might be improved with respect to both approach and a new or redesigned system</p>	<p>Limitations/suggestions:</p> <p>For occasional end users, data they enter may be incomplete or inaccurate reducing the system's integrity as a source of truth. Also, these end users may take more time to do tasks on the system. Suggestions to overcome these limitations include a clear, intuitive system, super users, and restricted system access (2014a).</p> <p>When considering the social worker's workflow, administrative tasks could be done by a different role; practice improvements driven by the system need to be driven by the social workers; and impact of any change on workflow due to technology needs to be monitored (2014e).</p> <p>Guidelines are needed during design to name categories, standardize service user identifiers, and limit choices, as well as how any changes will be identified, approved and made once the system is built and implemented. Careful consideration is needed to ensure names convey correct meanings. Also structure needs to balance workflow with reporting needs (2014c).</p> <p>Needs of managers and external stakeholders, such as generating reports and minimal data set, need to be considered (2015a).</p> <p>Organizational dynamics need to be taken into account to guard against unintentional consequences such as the system not enabling the social workers to follow social work practice (2015b).</p> <p>Decisions need to be made on "what, who, why and how" information is recorded in the system, including that only relevant, needed information should be recorded (2014c). While participatory design empowers the end user in designing the system, caution is needed against design such as computerizing a task when computerization adds no value to the task and whether the computerization is to address an information problem or an organizational problem (2015d).</p>	<p>No – initial assessments not described in any detail</p> <p>Tenet for information sharing is that a child's life might be saved (2014e, p.8); therefore, there is value in entering information into a "single source of truth" (p. 7)</p>
<p>Three <i>descriptive</i> studies about one system by Huuskonen & Vakkari using the same study data:</p> <p>(1) fit to social work practice (2010), (2) information needs (2011), and (3) social workers as secondary designers (2013).</p>	<p>TIKESOS client information system</p> <p>Electronic</p> <p>System for case management providing child protection and family services to the child and family while a child resides with parents. Process described <i>may</i> result in child brought into care.</p>	<p>Strengths:</p> <p>System is extension of social worker's own memories (2010, p.8)</p> <p>Ability to copy and paste between records to avoid retyping (2010, p.9)</p> <p>Ability to check previous decisions for same circumstance (2010, p.9)</p> <p>Enables narrative for case reports, structured information in case plan, and numerical information to report work tasks (2010, p.9)</p> <p>Supports remembering tasks to bring a child into care (2010, p.10)</p>	<p>No – no details except that a form needing managerial approval is completed to bring a child into care (2010, p.10).</p>

Source: short description, type, first author, year, COUNTRY	Record/form: name, electronic/paper/hybrid, rational, description	Strengths and limitations	Describes initial assessments?
<p>Finland</p>	<p>Data collected through interviews and observations of think aloud.</p> <p>The studies document the process starting with a trigger,⁶⁹ information gathering of child and family with a case opened for each child, followed by a child needs assessment. A more detailed assessment is done if needed. Services are provided based on needs. The case is updated, and later terminated when services are no longer needed.</p> <p>This system replaced a legacy system.</p>	<p>Limitations: legacy files not transferred to new system, system downtime, tailor new system to workflow, too complex, difficult to navigate, lack of case overview and timeline, minimum search capacity, lacks notifications and alerts, not able to open two reports simultaneously for copying and pasting.</p> <p>social work is not a linear process; functionality needs to include chronological and at-a-glance structure; system enhancements might be identified by studying workarounds as a type of sociotechnical approach.</p> <p>Overall, the system was not found to be fit for use.</p>	

⁶⁹ The Investigation functionality was added in 2008 as an enhancement to the existing system following the child welfare act (2010, p.7).

Appendix D - Sociotechnical types and definitions

The tables list the different types of sociotechnical approaches and the sociotechnical terms and definitions as applied to this thesis work. Where possible, existing definitions from the literature were used.

Appendix D Table 1 - Sociotechnical systems approaches and authors

Sociotechnical approach	Authors
general overview	Aarts & Gorman, 2007; Fok, Kumar, & Wood-Harper, 1987; Iivari & Hirschheim, 1996; Klein, 2014; Koukoulaki, 2014.
philosophy and style comparison	Fox, 1995; Mumford, 2006; Pava, 1986; Waterson, 2014; Waterson, Stewart, & Damodaran, 2014.
approaches	Atkinson, Eldabi, Paul, & Pouloudi, 2001; Bjorn-Andersen & Raymond, 2014; Davis, Challenger, Jayewardene, & Clegg, 2014.
theory	Aarts, Callen, Coiera, & Westbrook, 2010; Eason, 2014
analysis	Coiera, 2007; Harrison, Koppel, & Bar-Lev, 2007; Sutcliffe, 2000.
design principles	Chern, 1976.
system and process design and re-design	Berg, Langenberg, Berg v.d., & Kawakernaat, 1998; Keating, Fernandez, Jacobs, & Kauffmann, 2001; Lau et al., 2015; Maguire, 2014.
model	Ash et al., 2011; Esquivel, Sittig, Murphy, & Singh, 2012; Maguire, 2014; Sittig & Singh, 2010.
development	Eason, 2007.
policy development	Katsioloudes, 1996.
post implementation analysis	Eason, 2001; Eason, 2014.
knowledge translation	Lau et al., 1998
benefits realization	Doherty, 2014; Eason et al., 2012.

Appendix D Table 2 - Sociotechnical definitions used in this research work

Term	Definition
Boundaries	Boundary differentiates an organization from its surroundings on the basis of territory, technology and time (Miller, 1959, as cited in Fok, 1987) and enable an organization to function as an entity while interacting with its environment (Fok,1987). Boundaries also enable “filter[ing] information and materials entering and leaving the system” (Fok, 1987, p.322).
Dual focus	Consideration of social and technical requirements interdependently (Fox, 1995, p.92).
External boundary	The boundary line between the external environment and neighbouring systems.
External demands	“...an organization being an open system, must interact with its environment to survive and grow” (Fok, 1987, p.322). The environment offers competitive advantages and disadvantages; therefore, the organization must strategically place itself (Fok, 1987, p.320).
External environment	The environment within which the organization exists. In this study, it would be the Province of British Columbia as the children-in-care’s development takes place in the “larger ecology where children live and grow” (Waddell, 2004, p.287).
Internal boundary	The boundary line between the neighbouring systems and the target systems.
Joint optimization	Joint optimization of both technical and social systems means that the task requirements of the production system and the social-psychological needs of workers are jointly satisfied (Fok, 1987).
Linear workflow (programmed)	Programmed tasks rely on “sequential interdependence of subtasks” A process with a clear input, conversion, and output (Pava, 1986, p.203)
Neighbouring systems	The systems that provide information to the target system and unit operation, but which are not applicable for all information needs for all children since interaction is based on a child’s unique healthcare needs as “individual assessment is imperative” (Waddell, 2004, p.288)
Non linear workflow (non programmed)	Non-programmed tasks are non-sequential and “involve poorly structured problems” where roles are interdependent (Pava, 1986, p.203). The inputs and outputs, which may be more difficult to define for non-programmed tasks, still need to be defined (Pava, 1986, p.203). A process that may not have clear start and end points and that may have no easily identifiable conversation or output, or it may have an output that requires further deliberation by one or more members of the reticular organization. An example may be reviewing charts and identifying missing information before the child comes for the initial medical assessment.
Organization	An open system that interacts with its environment to survive and grow (Fok, 1987)
Sociotechnical systems	“Integrate[] the social requirements of people doing the work with the technical requirements needed to keep the work systems viable with regard to their environments” (Fox, 1995, p.92). Dual focus is needed for joint optimization as trade-offs may be required (Fox, 1995, p.92). Paraphrasing Trist as cited in Fox: technical systems fall under natural science laws while social systems fall under human sciences “and is a purposeful system”; however, both need to work together to transform inputs into outputs (Trist, 1971, as cited in Fox, 1995, p.92, 94).
Target systems	The larger system within which the unit operation resides. In this research, the target system is identified as the three initial assessments.
Unit operation	“Transforms the material or product” (Fox, 1995, p.93). In this research, the background information and history transforms into the initial medical assessment and any recommendations for referral and follow up. The operation uses the six forms and additional forms and tools as needed and includes creating, maintaining and archiving a healthcare record for a child in state care
TECHNICAL SYSTEM	The technical system is concerned with the process, tasks, and technology required to convert inputs to desired output [...] and emphasizes the identification of several kinds of variances [...] and then tries to control them. The objective is to meet the task requirements (Fok, 1987, p.322).
Decision	A discrete choice whereby some alternative is pursued at the expense of others as an output (Pava, 1986, p.207) For example, a diagnosis that needs to be recorded and upon which other decisions or information sharing may be needed.
Deliberation	“Sequences of exchange and communication used to reduce the equivocality of a problematic issue” (Pava, 1986, p.206). “Deliberations provide both context and subcontext of decisions (Pava, 1986, p.207). “The concept of deliberations emphasizes encounters, exchanges, and reflections in general that help resolve an equivocal topic” (Pava, 1986, p.207). A deliberation may have a decision as an output. Deliberations are technical artifacts (Pava, 1986).
Forms	Artifacts - paper or electronic - upon or into which data is recorded.
Input	For the purposes of this research, the information put into the activity by one or more members of the reticular organization
Job descriptions	The formal list of tasks, duties, and responsibilities for a given role at an organization.
Information systems	Paper records, electronic applications, or hybrid records used by humans in the tasks of data creation, updating, retrieval, and deletion within a given environment.
Input	Information entered into a process
Key variances	Differing characteristics “that significantly affect the quantity or quality or operating cost or social cost of production” (Fox, 1995, p.94, 99). Enabling the variances to be controlled as close to the originating source or by the group enables “producing superior results and group-member satisfaction” (Fox, 1995, p.97).

Term	Definition
Legislation	Legal rules granting authorities and defining processes at national and provincial levels. Passing, maintaining, and retiring is at a parliamentary level.
Output	"The physical or informational transformation of input" (Fox, 1995, p.98)
Policies	An organization's interpretation of statutes or regulations to which the organization adheres.
Regulations	Statutory obligations tailored to a sector which may also include provisions by the external environment, sector or organization.
SOCIAL SYSTEM	The social system "comprises the occupational roles" (Fox, 1995, p.93), and includes the people who perform the organization's task, their attributes [...], the relationships among them, the roles they enact, their control and reward systems, and the authority and communication structures within the organization. The focus ... is the enhancement of psychological job criteria and to foster high commitment and high performance. The ultimate goal is to increase job satisfaction and quality of working life (QWL) (Fok, 1987, p.322).
Blurring	An individual in a role defined by a job description may step outside the job description where there is uncertainty and a need - but also the individual has the capacity - to act to address the need. This is also known as "boundary spanner role or lateral overlay" (Pava, 1986, pp.207-8).
Discretionary coalitions	"...consist of people with divergent values who can make intelligent trade-offs for the sake of some long-term general interest" (Fok, 1987, p.327) and are comprised of size 1 to "n" individuals (Pava, 1986, p.207). "For discretionary coalitions, STS technical analysis focuses on the identification of deliberations and roles and social analysis attempts to develop and maintain discretionary coalitions" (Fok, 1987, p.327). For this study, foster parent, child (depending on capability), biological parent, government social worker and medical care provider roles may comprise a coalition or reticular organization.
Education	Formal training recognized by an institution or organization with monitored learning, often resulting in a certificate or other formal recognition.
Experience	Knowledge gained from carrying out work
Reticular organization	Is comprised of individuals and professionals, and has a fluid distribution of information and the authority shifts as required (Fox, 1995, p.103). The concept of reticular organization is used to identify the boundary of the reticular organization and to further analyze the changes in power when providing healthcare to and planning for a child-in-care. For the purposes of this study, the focus is on roles who complete form fields. For example, a specialist might be brought in to lead the reticular organization with diagnosis and treatment and then step away once the assessment and treatment has been prescribed and hand the medical "lead" back over to the family physician.
Role	Activities that individuals do as part of carrying out their responsibilities. An individual may take on activities that go beyond the activities expected of them for a process based on their competencies.
Training	Instruction on how to carry out work

Appendix E – 2013 Human Research Ethics Certificate of Approval

Ethics approval for this thesis research was issued under number 12-543 by the Human Research Ethics Board, University of Victoria, on March 21, 2013. This certificate was provided to the Research Branch, Ministry of Children and Family Development, on March 22, 2013, before commencing participant recruitment for the field study.

 <p>University of Victoria</p>	<p>Human Research Ethics Board Office of Research Services Administrative Services Building PO Box 1700 STN CSC Victoria British Columbia V8W 2Y2 Canada Tel 250-472-4545, Fax 250-721-8960 ethics@uvic.ca www.research.uvic.ca</p>									
	<h2>Certificate of Approval</h2>									
<p>PRINCIPAL INVESTIGATOR: Cori Thompson</p> <p>UVic STATUS: Master's Student</p> <p>UVic DEPARTMENT: HEIS</p> <p>SUPERVISOR: Dr. Francis Lau</p>	<table border="1"> <tr> <td>ETHICS PROTOCOL NUMBER</td> <td>12-543</td> </tr> <tr> <td>ORIGINAL APPROVAL DATE:</td> <td>21-Mar-13</td> </tr> <tr> <td>APPROVED ON:</td> <td>21-Mar-13</td> </tr> <tr> <td>APPROVAL EXPIRY DATE:</td> <td>20-Mar-14</td> </tr> </table>		ETHICS PROTOCOL NUMBER	12-543	ORIGINAL APPROVAL DATE:	21-Mar-13	APPROVED ON:	21-Mar-13	APPROVAL EXPIRY DATE:	20-Mar-14
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ORIGINAL APPROVAL DATE:	21-Mar-13									
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APPROVAL EXPIRY DATE:	20-Mar-14									
<p>PROJECT TITLE: A proposal to study health and medical information needs for child-in-care care planning in British Columbia using participatory action research</p> <p>RESEARCH TEAM MEMBER: Jeremy Berland, Committee Member (UVic); Martin Wright, Thesis Executive Sponsor (Ministry of Children and Family - MCFD)</p> <p>DECLARED PROJECT FUNDING: BC Ministry of Children and Family (MCFD)</p>										
<p>CONDITIONS OF APPROVAL</p>										
<p>This Certificate of Approval is valid for the above term provided there is no change in the protocol.</p> <p>Modifications To make any changes to the approved research procedures in your study, please submit a "Request for Modification" form. You must receive ethics approval before proceeding with your modified protocol.</p> <p>Renewals Your ethics approval must be current for the period during which you are recruiting participants or collecting data. To renew your protocol, please submit a "Request for Renewal" form before the expiry date on your certificate. You will be sent an emailed reminder prompting you to renew your protocol about six weeks before your expiry date.</p> <p>Project Closures When you have completed all data collection activities and will have no further contact with participants, please notify the Human Research Ethics Board by submitting a "Notice of Project Completion" form.</p>										
<p>Certification</p>										
<p>This certifies that the UVic Human Research Ethics Board has examined this research protocol and concluded that, in all respects, the proposed research meets the appropriate standards of ethics as outlined by the University of Victoria Research Regulations Involving Human Participants.</p> <div style="text-align: center;">  <p>Dr. Rachael Scarth Associate Vice-President, Research</p> </div>										
<p>Certificate Issued On: 22-Mar-13</p>		<p>12-543 Thompson, Cori</p>								

Appendix F – Interview questions

The 19-question, nonvalidated interview tool was developed for this thesis research and was used in all participant interviews.

Interview Questions

I. Participant Characteristics:

1. Role (please circle): child protection worker medical care provider caregiver (foster parent)
other: _____
2. Years in role (please circle): 0-5 6-10 10+

II. Form Specific Questions:

1. Please go over the *Child's Permanent Medical Record* and highlight in **yellow** any datums you provide, **pink** for any datums you rely on and **green** for any datums you both provide and rely on.
2. Please underline in **red** any datums that are commonly updated.
3. Please strike out in **purple** any datums that you neither rely on nor provide.
4. Do you use this form? (present each of the other five forms – not reviewing these forms, just having present to use as prompts for ease of recall if any of the datums should also be on the *Child's Permanent Medical Record*)
5. Does the form work well for you? Why or why not? Are there any datums that should also be on the *Child's Permanent Medical Record* form? (Rational: study focus is on the *Child's Permanent Medical Record* form so this is where all the pertinent health information should be captured if only one form is available.)
6. Are there any other tools (e.g. software, forms) you rely on to provide health care to a child-in-care? If so, could you please tell me about these? Do they work well for you? If not, what might be improved?

III. Study Questions:

1. What are three of the main types of care you provide to a child-in-care?
2. How is first contact with the child-in-care initiated? (e.g. by referral?)
3. How do you gather health information prior to the visit or meeting?
4. Do you find out about the child's health history (e.g. recurrent infections or hospitalizations or allergies). If so, how do you gather this information?
5. What information is easy to obtain? What information is difficult to obtain? (i.e. are there any challenges or barriers in obtaining or sharing information?)
6. What do you do if information is missing?
7. Do you provide referrals? If so to whom, why, when and how would you make a referral. Would you get information back from the referral? If you get information back from the referral, what do you do then? (i.e. How is the information stored, the record updated, and is there further information sharing?)
8. Do you provide information from your visit or meeting with the child-in-care to another individual? If so why, when, how and to whom do you provide this information and what is the information you provide?
9. How do you ensure health needs are met for the child-in-care?
10. Who is responsible for the overall health care of the child-in-care?
11. Is there anything else that I have not asked that you think I should know?

Appendix G – Form 1 - Child’s Permanent Medical Record, section by role

Table 8-3 lists the fields on Form 1 – Child’s Permanent Medical Record, indicating which role(s) participants reported completing by field or by section if the section is typically completed in its entirety by the role. To denote sections, the fields following the section name or key information types are shaded grey. “R” indicates the role responsible for completing the field and “OR” indicates an “Occasional Role” that may complete the field on occasion. For each section, Form 1 states which role(s) are responsible for filling out the section and which are anticipated to support filling out the section. The bolded “**FRR**” in green indicates which the role(s) the form instructs to fill out the section, and the bolded “**FORR**” indicates the role(s) the form instructs to support filling out the section. For some sections, the form also instructs the social worker to work with family. These instructions are indicated by comments in the appropriate sections.

Table 8-3 - Form 1 Child’s Permanent Medical Record fields and role(s) completing field

Profession/ Field on form	Medical Care Provider	Foster Parent	Ministry social worker
NAME OF CHILD	OR	OR	R
GENDER	OR	OR	R
BIRTHDATE (YYYY/MM/DD)	OR	OR	R
CHILD’S PERMANENT HEALTH NUMBER (PHN #)	OR		R
SECTION 1			
FAMILY HISTORY	OR “FORR”	OR	R “FRR” Form states to work with family
MOTHER’S NAME, MOTHER’S BIRTHDATE (YYYY/MM/DD), ETHNIC ORIGIN, FATHER’S NAME, FATHER’S BIRTHDATE (YYYY/MM/DD), ETHNIC ORIGIN, SIBLING NAME [x4 rows], BIRTHDATE x4 (YYYY/MM/DD)			
FAMILY HISTORY OF ILLNESS – [MATRIX: CONFIRMED HISTORY X CHILD FATHER MOTHER SIBLINGS]	R “FORR”	OR	OR “FRR” Form states to work with family
Diabetes, Blood disease/disorder, Tuberculosis, Diagnosed Mental Illness, Seizure disorder, Heart attack/Stroke/Defects, Alcohol abuse, Drug abuse, Allergies, Kidney disease, Hearing/Vision impairments, Eating disorders, Tobacco use, Special needs/disability, Date of death (if applicable), Other (specify)			
Section 2 – Birth Record	R OR “FRR”	OR	R
KNOWN HEALTH PROBLEMS DURING MOTHER’S PREGNANCY, MOTHER’S STATUS REGARDING (+VE, -VE): HEP B, HIV, HCV; PRENATAL EXPOSURE TO DRUGS AND/OR ALCOHOL – DRUGS, ALCOHOL; FREQUENCY, AMOUNT; GESTATION OF PREGNANCY; BIRTH WEIGHT; APGAR; HEAD CIRCUMFERENCE; DELIVERY – NORMAL, COMPLICATIONS; DETAILS; KNOWN NEONATAL PROBLEMS (e.g. alcohol/drug effect; medical) – ALCOHOL/DRUG EFFECT, MEDICAL, OTHER; DETAILS			
SECTION 3 – CHILD’S PAST MEDICAL HISTORY	R “FORR”	OR	R “FRR” Form states to work with family
SIGNIFICANT ILLNESES; CHRONIC MEDICAL CONDITIONS; ACCIDENTS OR OPERATIONS; HOSPITALIZATIONS; PREVIOUS CONCERNS OF ABUSE OR NEGLECT; MENTAL HEALTH (diagnosis, treatment, referral); DEVELOPMENTAL/BEHAVIOURAL DIFFICULTIES; CURRENT MEDICATIONS – Indicate dosage, and frequency; CURRENT ALLERGIES – specify:			
SECTION 4- IMMUNIZATIONS (enter “x”, date, any side effects)	“FORR”	OR – record from Health Authority Public Health	R – record from Health Authority Public Health Form states to work with family “FRR”
2 months of age – 1 st set of shots; 4 months of age – 2nd set of shots; 6 months of age – 3rd set of shots; 12 months of age – 4th set of shots; 18 months of age – 5th set of shots; 4-6 years of age; 11 years of age (grade 6 level); 14 years of age (grade 9 level)			
Section 5 – MEDICAL CONSENT INFORMATION			R (in some cases, may ask Parent to complete, or child if the child has capacity)

			"FRR"
For the child without capacity – WHO HAS THE AUTHORITY TO CONSENT: SOCIAL WORKER, PARENT, OTHER: (PLEASE SPECIFY); SOURCE OF AUTHORITY e.g. CFCSA section, Agreement or Order – CFCSA, The ADOPTION ACT, UNDER FRA, by virtue of a signed VCA/SN Agreement, OTHER: (PLEASE SPECIFY); STATEMENT: "I (FULL NAME) give consent for (CHILD/YOUTH'S NAME) to be examined and treated by a physician. This consent expires on (YYYY/MM/DD) (no longer than 6 months from the initial date.); SIGNATURE; DATE (YYYY/MM/DD)			
SECTION 6 – INITIAL PHYSICAL EXAMINATION	R "FRR"		
EXAMINATION DATE; AGE; WEIGHT; HEIGHT; PULSE; BLOOD PRESSURE; HEAD CIRCUMFERENCE (INFANTS); Colour; Skin; Head and Neck– Hair and Scalp, Eyes, Ears, Nose, Mouth, Teeth, Neck; Lymph Nodes; Respiratory System; C.V. System; Abdomen; Genitalia; Musculoskeletal; C.N.S. (i.e., gait, reflexes); Marks, Bruises; Others:: Behaviour; Lab Work; General Appearance; Final Impressions; Recommendations for a Treatment Plan; Follow up Appointment required; Date of Follow-up Appointment (YYYY/MM/DD)			
DOCTOR OFFICE INFORMATION	R (often stamp, and by doctor's medical office assistant)		
NAME OF DOCTOR; PHONE (); OFFICE ADDRESS; CITY/TOWN; POSTAL CODE			
PLEASE RETURN WHEN COMPLETE TO:			R (resource worker may fill out for social worker)
NAME OF WORKER; PHONE (); OFFICE ADDRESS; CITY/TOWN; POSTAL CODE			

Legend: (R) indicates responsible role; (OR) indicates occasion role; **FRR** form states responsible; **FORR** form states occasional/supporting role.

Appendix H – Analysis of Forms 2, 3, 4, 5 & 6

An informal analysis of Forms 2 through 6 was done. The comparison table provides examples that participants stated were the benefits and limitations of the five forms.

Appendix H Table - Summary comparison of forms 2, 3, 4, 5, & 6

Form	Key features	Key issues
Form 2 – Newborn Record	<ul style="list-style-type: none"> • Good form • BC Provincial Health Services Authority hospital form • Four pages, two per side, double sided • Completed for all babies delivered in hospitals in BC by physician(s) delivery baby and nurse • Pediatrician involved if complex delivery • Contains information needed for requesting assessments (E.g., Apgar score) • Contains substance abuse information for such diagnosis as fetal alcohol syndrome (FAS) enabling early diagnosis and interventions • Helpful for child-in-care to develop identity (i.e. When was I born? How much did I weigh?) • Contains similar birth record information found on Form 1 	<ul style="list-style-type: none"> • Handwritten so may be illegible • Progress notes section has only enough room for four days for non complex births (need to add extra page to record) • Copies may be faint/illegible • May need court order to obtain • Only provided to potential adopting parents • Generally, social workers and foster parents would like to receive form as early as possible when child comes into care to enable proper assessments and treatment • Some would like to have the information interpreted into layman terms • One-page version was suggested • Even biological parents do not receive this form for their child
Form 3 – Birth Family Medical and Social History	<ul style="list-style-type: none"> • Good comprehensive form • Form completed for each parent • Helpful for initial assessment if completed and family is not available to provide history • Helpful for foster parents when they meet child-in-care (e.g. what parents are like, genetic conditions) • Helpful for child-in-care to develop identity (e.g. what their parent, grandparents were like) • Contains parents' social history and identity (not on Form 1) • Form gives insight into mental health of parent • Estimate of 3-4 minutes for physician to read completed form • Some foster parents commented they could complete form after caring for a child-in-care for a length of time 	<ul style="list-style-type: none"> • Long form (19 pages) • Some duplication between other 5 forms such as family medical history • Much duplication with children and youth special needs forms • Only completed as part of guardianship (e.g. for adoption process) • May be emotionally difficult for parents to complete • Family may not be available to complete form • Instructions ask parents to complete form but social worker or foster parents usually complete form with parent • Geared toward birth mom

Form	Key features	Key issues
Form 4 – Comprehensive Plan of Care (replaced by Plan of Care)	<ul style="list-style-type: none"> • Liked by most participants • Replaced last section of Form 5 • Assesses and plans for nine dimensions (placement, health, education, identity, culture & religion, family & social relationships, social presentation, emotional & behavioural development, self care skills assessment) • Could copy and paste information into subsequent versions • Able to print certain sections for certain care team members (I.e., school) • Contains identity information options such as transgender • Contains some guidelines for completing form • Checkboxes for completing items useful such as Form 6 updated • Links to developmental milestone chart • Knowing permanency goal helpful to some physicians • Completed form serves as care plan agreement for child 	<ul style="list-style-type: none"> • Time consuming to complete (4-5 hours over 2-3 days) • Fine for typical children-in-care but did not work well for children-in-care with special needs • Did not have enough narrative space • Electronic form. Concern of disrupting relationship by taking computer to foster parents' home • Expected outcomes do not always add value (e.g. brushing teeth daily where outcome is obvious) • Not all physicians would find form helpful in their assessment (e.g. overwhelming, would not inform their clinical assessment, just more paperwork)
Form 5 – Looking After Children booklet – Health section	<ul style="list-style-type: none"> • No longer used • Mixed feedback whether form was liked within all three roles • Would inform Form 4 • Foster parent would like booklet as soon as possible to learn any triggers for the child-in-care (I.e., from past trauma) • Six booklets spanning six age ranges from newborn to aging out at age 19 • Same questions with diction changes, some extra content tailored to child's age • Adapted from UK's LAC form • New booklet completed for a child each year • Comprehensive • Questions that would be found in a pediatrician's record • Entire medical social personal record • Growing up book for child-in-care capturing milestones • Helpful for record keeping if child changes placements • Contains guidelines for completing form; some social workers still rely on these guidelines • Foster parents commented completed booklet helpful to get to know the child-in-care • May contain mental health assessment questions for children over age 5 (e.g. Ages and Stages questionnaires are up to age 5) • A maintained booklet is similar to diabetic diary shows someone is taking an active interest in the child-in-care's health care 	<ul style="list-style-type: none"> • Time consuming to complete (5-6 hours in multiple sittings) • Not useful for a child-in-care with special needs • Foster parent with day-to-day care of child rather than social worker is more appropriate role to complete booklet • Dietician needed to complete dietary assessment and questions • Not enough room for narrative • Varied comments on whether "role to complete task" is useful or not useful •

Form	Key features	Key issues
Form 6 – Healthcare Passport	<ul style="list-style-type: none"> • Similar to BC Ministry of Health’s passport • 12 pages long • Used after the initial medical examination • Foster parent uses to record child’s health events • Includes historical sections • Informs Form 4 • If completed and available helpful for new foster parent if child changes foster home placements 	<ul style="list-style-type: none"> • Least helpful of forms • Several redundant sections to other forms (e.g. immunizations, family history of illness) • Not helpful to care for a child with special needs (I.e., there are more helpful forms) • Often lost or forgotten • Some foster parents only record new information on the form especially if child has lived with them for a while • Duplicates some information recorded in child-in-care’s logbook that foster parent maintains

Appendix I – Other tools used in initial assessments

Part 2, question 6 of the interview questionnaire asked participants for any other forms or tools they rely on to provide health care to a child-in-care as part of the initial assessment. This section lists examples of the other forms and tools mentioned by the participants. Note the list is not exhaustive.

1. Existing assessments, including individual education plans

Social workers and medical care providers commented that they would rely on any historical records that were available, such as existing psychosocial assessments, psychoeducational assessments, occupational therapy assessments, physiotherapy assessments. If a child had an individual education plan (IEP), this plan would also be requested and reviewed.

2. Incident report

As part of a child protection investigation, a social worker may complete and file an MCFD incident report.

3. Request for home form

A request for home form is an MCFD form used by the social worker to gather information about the child and is provided to the resource worker for the initial placement assessment.

4. Request for placement form

Request for Placement form appears to be variation of the *Request for Home* form.

5. Section 96, consent forms, and immunization request form

To request records, social workers rely on a Section 96 [of the *CFCSA*] form to request records from public entities such as hospitals or Pharmanet, and personally-addressed consent letters or a Section 96 form to physicians, depending on their clinic. Immunization record requests are faxed to the health authority public health unit for the child's immunization records.

6. Voluntary Care/Special Needs Agreement (CF0322 (11/07))

This agreement is used in intake for children entering care under Circumstances 2 special needs agreement or 3 voluntary care agreement.⁷⁰ At the very least, parents must grant MCFD the authority to consent to necessary health care and then decide what other authority to grant MCFD. The voluntary care agreement is for up to three months for children under 5 years and for up to 6 months for older children at a time. Special needs agreements may be renewed annually.

7. Priority service tool – children and youth with special needs

This document is used for assessing priority for services for children and youth with special needs; it is used in conjunction with a *special needs agreement*.

8. Guide to the Priority for Service Tool

The guide supports children and youth with special needs social workers to understand the questions in the Priority for Service Tool. The guide also suggests how information is collected, such as from the child's parent and the social worker's own observations, and references the Determining Priority for Children's Services policy.

⁷⁰ Youth provided services under a Youth Agreement with the MCFD are not defined as being in-care of the MCFD.

9. Medication blister pack

In place of a medication administration record (MAR), a foster parent commented that blister packs facilitated tracking medication administered to the child.

10. My Child's Birth Family Medical and Social History

My Child's Birth Family Medical and Social History was created by a community and is a variation of the thesis research Form 3 - Birth Family Medical and Social History. The form is less formal in that it addresses the child and is more suitable for completion by the birth father or birth mother whereas Form 3 is more tailored to the birth mother.

11. Circles of Cedar Resource Centre Birth Family Background Health History Information - parent

Circles of Cedar Resource Centre Birth Family Background Health History Information – parent form is similar to the thesis work Form 3 - Birth Family Medical and Social History, but it is used by a specific First Nations community and appears culturally sensitive. There are duplicate sets of questions so that the birth mother and birth father may complete one form – (internal, not publically available).

12. Circles of Cedar Resource Centre Birth Family Background Health History Information – collateral

Circles of Cedar Resource Centre Birth Family Background Health History Information – collateral form is the same as the parent version but tailored to a collateral. This version also asks for photographs of the child from birth to 10 years of age (internal, not publically available).

13. British Columbia Antenatal record

The British Columbia Antenatal record BCPHP(HLTH) 1582-1 Rev. 2007/06/05 is prepared by the British Columbia Perinatal Health Program (formerly BCRCP). This two-page form collects the pregnancy information and medical history of the birth mother, and demographics of the partner and other children.

14. Growth curve tool

The growth curve tool is relied on to assess the child's baseline and subsequent growth. *Nelson Textbook of Pediatrics* discusses using the World Health Organization standard for the growth charts as there may be variations between countries (Keane, V.A., 2016).

15. Ages and Stages Questionnaire (developmental) and Second Edition (psycho-social)

At least three medical care providers stated they used these two forms to assess children under 5 years of age for development and mental health respectively.

16. Mental Health Referral Form

Social workers refer children-in-care for child and youth mental health services using a referral form. Any supporting documentation, such as relevant assessments, pediatric reports, and lab work, may be attached.

17. Practice Guidelines for Managing Critical Health Care Decisions

Practice Guidelines for Managing Critical Health Care Decisions including Advance Health Care Directives (November, 1999, with note November, 2003) provide several guidelines for the child's safety and well-being and to ensure the child receives necessary health care, including advanced directives and hospital discharge information. The guidelines define "health care" as "[a]nything that is done for a therapeutic, preventative, palliative, cosmetic or other purpose related to maintaining health" (p.6 – internal organization document, not publically available).

18. Electronic records

Almost two-thirds of participants reported relying on information systems to retrieve and enter information as part of their initial assessment of children-in-care.