Exploring Income Security Offered through Primary Care: A Mixed-Methods Process Evaluation

by

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Abstract

The objective of this study was to understand the components of a novel income security program offered through an inner-city primary health care team in Winnipeg, Manitoba. Through process evaluation, key patient characteristics and program components were considered, in accordance with the goals of a program-stakeholder evaluation committee. Both quantitative and qualitative data were collected via chart review, document summary, and interviews with both the program provider and multiple program participants. Mixed methods were incorporated into both data collection and data analysis to reflect key program processes and activities.

The process evaluation revealed that the Income Security Health Promoter (ISHP) program, with one full-time service provider, provided comprehensive income security support services to 415 clients within its first 20 months of operation. Clients engaged in the program were medically complex, and received key services in the domains of income security supports (73.3%), associated service assistance (61.7%) (a category that includes housing, medication, food, and transportation), budgeting supports (50.0%), and referrals to other services (45.0%). Making contact and establishing relationships with clients was a prevalent feature of program activity (95%).

The process evaluation was able to ascertain that the ISHP program operated consistently with the stated goals, and did so in a way that provided meaningful enrichment in the lives of program clients. These findings have implications for the development of further income security programs in other primary health care teams across the country.

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Chapter One: Introduction

Canadians may claim relatively good health status on a global scale, yet not all Canadians are equally healthy (Public Health Agency of Canada, 2016), nor do they have equal access to health care services (Statistics Canada, 2016). In fact, the health of individual Canadians differs considerably, and can be broadly predicted, based on an individual's socioeconomic position and access to the social determinants of health (PHAC-Pan-Canadian Public Health Network, 2018). Evidence shows that financially disadvantaged Canadians experience the lowest levels of health, have the greatest health care requirements, and yet do not always receive the health care they need (Williamson et al, 2006; PHAC-Pan-Canadian Public Health Network, 2018). Dissatisfaction with these health inequities has motivated policy and program advocates to focus on reducing systemic barriers and to consider ways to improve access to health care for marginalized populations (Ruano, Fruler & Shi, 2015).

Equity-oriented Canadian physicians may identify poverty in their patients yet find themselves unprepared, after years of biomedical-focused training, to address the multifactorial components of poverty (Bloch, Rozmovits & Giambrone, 2011). Increasingly, health professionals are encouraged to consider the social determinants of health, while expanding their practice scope to include interventions beyond medicine-only solutions (Canadian Medical Association, 2012; Andermann, 2016).

One practical example has emerged among health care providers at St. Michael's Hospital in downtown Toronto, where family medicine health care services have expanded to address income insecurity (Jones, Bloch & Pinto, 2017). Since December 2013, this team has acquired income security providers to provide primary care patients with taxation and social services brokering, financial literacy education and income support (Jones et al, 2017). Tackling poverty through health systems is justified on ethical grounds (Barrientos et al, 2016; Ruger, 2006) and by findings showing that improved income security can improve both individual and population health (Forget, 2017, Ng & Muntaner, 2015).

Recognizing the impact of poverty on the health of inner city Winnipeg residents, the Winnipeg Regional Health Authority launched its own income security program in January 2017. Serving members of the Downtown/Point Douglas primary care team, the Income Security Health Promoter (ISHP) program aims to support both patients and providers (Winnipeg Regional Health Authority, 2016).

This process evaluation was undertaken to better understand and illustrate the workings of Winnipeg's novel ISHP program. A systematic process evaluation can untangle key program components; critically illustrate how an intervention works; and may set the stage for future effectiveness studies (Moore et al, 2015).

Chapter Two: Income and Health

Social Determinants of Health:

The perceived association between health and health care is so strong that most people mistakenly assume our health care system – namely hospitals and access to physicians – is the main determinant of population health (Marmot & Allen, 2014). Health reform efforts focus on health expenditures, including debates over the mix of public versus private health spending, and ways to increase system efficiencies (Leonard & Sweetman, 2014). However, an exclusive focus on health care expenditures – hospitals, doctors, drugs – may be misleading, and erupt into the contradictory and often-cited "American health care paradox", where despite "enormous investment for decades", and per capita spending on heath care highest in the world, "Americans are less healthy than their European and Scandinavian counterparts across an array of measures" (Bradley, Sipsma & Taylor, 2017, p.61; Bradley et al, 2011; CIHI, 2017: WHO, 2001). Resolving this paradox requires a better understanding of what it actually takes to produce a healthy population, namely the social determinants of health (Bradley et al, 2017).

The social determinants of health describe the circumstances in which people are born, develop, live, and age (Marmot & Wilkinson, 1999; Public Health Agency of

Canada (PHAC), 2013; World Health Organization (WHO), 2008). Although the list of determinants varies slightly by source, it generally includes the following components: income and income distribution, education, unemployment and job security, employment and working conditions, food insecurity, housing, social exclusion/inclusion, social safety networks, Aboriginal status, gender and sex, race, early childhood development, and disability (Bryant et al, 2011; WHO 2008).

The social determinants of health are considered the primary factors that shape the health of Canadians, and have a compound impact on individual and population health (Centers for Disease Control (CDC), 2008; Mikkonen & Raphael, 2010). At the highest estimates, these social factors are 50% responsible for an individual's overall health status, surpassing the 25% (or less) contributed by the health care system itself (Senate Subcommittee on Population Health (SSPH), 2009). Social determinants shape health outcomes with more influence than behavioural and lifestyle choices, such as diet or exercise (Raphael, 2015; Wilkinson & Marmot, 1999). Academic literature (McGinnis et al, 2002; Wilkinson & Marmot, 2003), health and public health documents (Butler-Jones 2009, 2008; PHAC, 2013, 2007; SSPH, 2008; WHO, 2008), economic analysis (Conference Board of Canada, 2008), as well as public opinion (Canadian Medical Association (CMA), 2013), recognize the importance of the social determinants of health.

The 2009 Canadian Senate report emphasizes that among the health determinants, the "socioeconomic environment is the most powerful of the determinants of health" (SSPH, 2009, p.7). Because income is an influential force behind so many of the other health determinants - education, social status, child development, housing, nutrition, and working conditions - it is considered the most important determinant of health (Adler & Ostrove, 1999; CMA, 2013; PHAC 2013).

Income and Health:

An evolving body of international research has examined the ways in which individuals living in low socioeconomic conditions consistently experience greater morbidity and earlier mortality compared to more-affluent counterparts (Adler & Stewart, 2010; Adler & Ostrove, 1999; Black, 1980; Bouchard et al, 2014; Canadian Institute for Health Information (CIHI), 2015; Kawachi et al, 2010; Lynch et al, 2000; Marmot & Bell, 2016; Marmot et al, 1991; Marmot et al, 1984; Mikkonen & Raphael, 2010; Muennig, 2008; Organization for Economic Cooperation and Development (OECD), 2008, 2011, 2015; Phipps, 2003; Pickett & Wilkinson, 2015; Raphael, 2007; Reid et al, 1974; Subramanian & Kawachi, 2004; Wagstaff & van Doorslaer, 2000; Wilkinson & Pickett 2006; Wilkinson 1992; WHO, 2001; 2008).

Prior to 1985, very little research was conducted on the relationship between income and health status, and when it did occur, there was a tendency to include poverty non-critically, as a control variable (Adler & Ostrove, 1999). The predominant threshold, or poverty-line model, described incremental health gains associated with rising income levels for those living under the poverty line; but not for those above; it was assumed that more income would not have any additional benefit to health beyond a certain level (Adler & Ostrove, 1999).

The threshold model was challenged by a series of landmark studies led by Michael Marmot in England (Reid et al, 1974; Marmot et al, 1991). The first Whitehall I study, gathered ten years of data on cardiovascular disease prevalence and mortality rates among

more than 18,000 male civil servants, and ranked the results according to occupational grade (Reid et al, 1974). Researchers observed a steep inverse association between occupational grade and mortality; study subjects in the lowest grade (messengers, doorkeepers, etc.) experienced mortality rates three times higher those in the highest grade (administrators, managers, etc.) (Reid et al, 1974). Whitehall I also revealed ascending improvements in health, which continued even into the highest occupational earning grades. This interpretive adjustment re-defined the concept of a strict poverty line, instead displaying a continuous, non-threshold, relationship between social class, morbidity and mortality (Adler et al, 1994; Marmot et al, 1991; Marmot et al, 1984; Reid et al, 1974).

The subsequent Whitehall II study delved deeper into the relationship between chronic disease and socioeconomic status; it was observed that the lower the employment grade of subjects, the higher their incidence of angina, ischemia, and chronic bronchitis (Marmot et al, 1991). Subjects' self-perceived health status was also found to be worse among those in lower status jobs. These differences were observed to be heightened by increased exposure to confluent health-risks including unsafe neighbourhoods, higher smoking rates, reduced education levels, limited social supports, less job security, poor diet, more exposure to violence, social stressors, and monotonous work (Marmot et al, 1991). Again, it was "not simply that those in the lowest status jobs had the worst health and the greatest clustering of potential risk factors", socioeconomic status and health correlates were found to continue even into highest income levels (Marmot et al, 1991, p.1392).

The Whitehall studies propelled public health researchers to reconsider the relationship between income and health, revealing incremental correlations between social status and one's risk of developing a broad range of chronic conditions (Gorman, 2012; Kaplan & Keil, 1993), including cardiovascular disease, diabetes, metabolic syndrome,

arthritis (Cunningham & Kelsey, 1984), infectious disease (Cantwell et al, 1998), respiratory disease, gastrointestinal disease, childhood morbidity (Feinstein, 1993), teenage births, homicides (Pickett, Mookherjee et al, 2005), obesity (Pickett, Kelly et al, 2005), and mental illness (Pickett & Wilkinson, 2010; Pickett et al, 2006). Researchers further explored the combined interactions between income, sex, education, neighbourhood structure, lifestyle, and racial identity, and illustrated their compound impact on health (Adler & Ostrove, 1999; Alder & Stewart, 2010; Kamagar et al, 2006; Hedley et al, 2004; Mackenbach et al, 2008; Pickett & Pearl, 2001).

Income Inequality:

Income inequality has been identified as socially corrosive in and of itself, as observed in increased levels of violence and homicide, lower levels of trust, and lower social capital within disparate societies (Daly et al, 2001; Kawachi et al, 1997; Rufrancos et al, 2013; Wilkinson & Pickett, 2010). Researchers note that a person's health can be affected simply by *living in* a community with economic inequality - a consequence not offset by higher levels of personal wealth (Babones, 2008; Kondo et al, 2009).

Globally, it is recognized that income strata are associated with an average 5 to 10 year difference in life expectancy at birth, and a 10 to 20 year difference in disability-free life expectancy overall (Machenbach et al, 2008; WHO, 2008). In Canada, low-income Canadians are more likely to die earlier and suffer more illnesses than Canadians with higher incomes, regardless of age, sex, race and place of residence (CIHI, 2003, 2015; Lightman, et al, 2008; Mikkonen & Raphael, 2010). Poverty accounts for 24% of person years of life lost among Canadians aged 0-74; the poorest 20% of Canadians experience

double the rate of diabetes, and greater than three times the rate of bronchitis (Lightman et al, 2008; Wilkins et al, 2002). In Manitoba, studies have illustrated how income gradients correlate with lower health outcomes among social housing residents (Martens et al, 2014), and highlight the dramatic fact that 58% of the province's tuberculosis hospitalizations have been concentrated in the most impoverished 20% of the population (Martens et al, 2010).

The empirical evidence of the relationship between income and health has done little to reduce its persistence rather, income disparity has increased within most developed countries since the 1990s (CIHI 2015; Martens et al, 2010; OECD 2008, 2011a, 2015; Oritz & Cummins, 2001). This time period coincides with increased liberation of the flow of global capital, growing strength of corporate autonomy and trade law supersedence, and overall diminishment of the power of nation states to protect national interests, including the erosion of labour laws (Broad & Antony, 1999). In practical terms the changes wrought by globalization have been reflected in a massive transfer of wealth (represented by the value of total assets that a household owns) away from the middle class and the poor towards households at the top 0.1% of the income scale (Saez & Zucman, 2016). American middle class net worth plummeted by 43% between 2007 and 2013, with the top 20% of earners in the United States earning almost 50% of total income while the bottom 15% earned less than 4% (OECD, 2011a; Weicher, 2017). In Canada in 2008, the highest 10% of Canadian income earners in 2008 earned (on average) 10 times more than the bottom 10% (OECD, 2011b; CIHI 2015).

As income inequality increases, we also see a parallel rise in "socioeconomic gaps in survival", whereby health inequalities correspond with income inequalities (Bor et al, 2017, p.1475; CIHI, 2015). Thirty years ago, American life expectancy differed by 5 years

between the highest and lowest income quintile, but by 2015, this difference had increased to 12 years life expectancy for men and 14 years for women (National Academies of Sciences, Engineering, and Medicine, 2015). In describing their health, only 39 percent of Canadian earning less than $30,000 per year reported their health as 'excellent' or 'very good', compared to 68 percent of those earning $60,000 or more (Ipsos, 2012). Of note, this 29 percentage point discrepancy had increased considerably, compared to the smaller, 17 percentage point discrepancy identified between Canadians just three years earlier, in 2009 (Ipsos, 2012).

Health Equity:

Equality and equity are similar but slightly different concepts. Equality is about sameness, and in terms of the social determinants, it is about whether or not two groups have similar conditions for health. Equity, by contrast, is an interpretation of this difference, and stems from the recognition that socio-economic and political choices may lead to an unfair and unequal distribution of these conditions of health in a population.

Equity-based analysis with its interpretation that inequality is 'unfair' and preventable is rooted in an ideological commitment to fairness, human rights, moral ethics, and social justice (Braveman & Gruskin, 2003; Rawls, 2001; Rawls, 1971; Whitehead, 1992; WHO 2008). From this perspective, health differences between high- and low-income earners reflect unfair mal-distributions of resources in society (Armstrong & Armstrong, 2003; Harden, 1999; WHO 2008). According to the World Health Organization:

> This unequal distribution of health-damaging experiences is not in any sense a 'natural' phenomenon, but is the result of a toxic combination of poor social policies, unfair economic arrangements (where the already well-off and healthy become even richer and the poor who are already more likely to be ill become even poorer), and bad politics.
>
> (WHO, 2008, p.1)

As such, inequality between social groups represents choices about "the quantity and quality of a variety of resources *that a society chooses to make available to its members*" (Raphael, 2015, p.7, emphasis added). This stands in stark contrast to an individualizing interpretation of poverty – as entrenched in the Victorian concept of 'deserving' and 'undeserving' poor – whereby less fortunate individuals are seen to be somehow deserving of, and responsible for, their limited material resources and disadvantaged social position (Dorey, 2010).

If poverty is understood in its social context, rather than as a personal failure, then its remediation depends on addressing its causal factors (Meili, 2018), and with this interpretation, equity considerations revolve around the idea that differences in the distribution of social resources is inherently unfair (Raphael, 2015). Embracing such perspective, the WHO's Commission on Social Determinants of Health emphasizes that "the development of a society, rich or poor, can be judged by the quality of its population's health, how fairly health is distributed across the social spectrum, and the degree of protection provided from disadvantage as a result of ill-health" (WHO, 2008, p.ii). The pursuit of health equity requires policies that support *equal opportunity for all population groups to be healthy*, and where the standard of social achievement is defined by the fair distribution of health, not by economic growth (Braveman & Gruskin, 2003; Canadian Medical Association, 2012: Marmot, 2010; WHO 2008). Achieving this requires actions beyond the health sector alone, towards the determinants of health and the root socioeconomic

sources of mal-distribution (CIHI, 2015; Daniels, Kennedy & Kawachi, 1999; Graham, 2004; Marmot, 2010; McCartney et al, 2012; WHO, 2008).

Pursuing Income Security through Social Policy:

The Organization for Economic Cooperation and Development (OECD) points to growing inequality in salaries and wages as the single most important driver of health inequality worldwide (OECD, 2011a, 2015). Income disparity in Canada has been exacerbated by cuts to social assistance in the mid-1990s, concurrent tax rate reductions, and the disproportionate favouring of high-income earners (Fortin et al, 2012). The OECD notes that inequality in Canada can also be attributed to poor redistribution practices, including taxes and benefit schemes that actually reduce inequality less in Canada than in most OECD countries:

> Prior to the mid-1990s, the Canadian tax-benefit system was as effective as those in the Nordic countries in stabilizing inequality, offsetting more than 70% of the rise in market income inequality. The effect of redistribution has declined since then: taxes and benefits [now] only offset less than 40% in the rise in inequality.
>
> (OECD, 2011b, p.1).

Because income is such a clear and consistent determinant of health, health equity can first and foremost be pursued by income security (Eggleton et al, 2018). In efforts to address poverty and inequality on a global scale, income security - measured by an individual's actual, perceived and expected income throughout their lifetime - is key to achieving sustainable international development goals (International Labour Organization, 2017).

Income security policies can aim either to support pre-tax income parity or to achieve post-tax progressive redistribution (Meili, 2018). Targeted policy initiatives may include: goals to offset relative childhood deprivation; enhancement of redistributive taxation; reduction of unemployment; employment retraining and adult education opportunities; initiatives that support gender equality; increased minimum wage levels; payment of a living wage; improvement of working conditions; reduction of adult poverty; initiatives to address social isolation and alienation; and an increase in social assistance and welfare generosity rates, to name a few (Formby et al, 2010, Manzano & Raphael, 2010; Marmot & Bell, 2016; Marmot, 2010; Marmot, 2015; Meili, 2018; OECD, 2015; WHO, 2008).

Among a large sample of European countries, Alvarez-Galvez and Jaime-Castillo (2018) found that welfare spending moderated the relationship between socio-economic status and health. Specifically, these authors noted that health inequalities were lower in countries where social expenditure was higher (Alvarez-Galvez & Jaime-Castillo, 2018). In Canada, Ng and Muntaner (2015) also observed that while medical care, preventive care, social services, and postsecondary education effectively reduced mortality rates, a province's welfare generosity index *had the greatest effect* on overall mortality reduction (Ng & Muntaner, 2015). In an observational longitudinal study, Dutton et al (2018) likewise noted that increased social spending in Canadian provinces was associated with improved population health measures; and yet increased health care spending did not have the same association. The authors suggested that a proportionately small funding reallocation from health to social spending may have the potential to improve health outcomes, with no net changes to overall government spending (Dutton et al, 2018).

International and US data also support the idea that increased social spending (either as welfare generosity, a share of total gross domestic product, or as a proportion of health spending) is associated with positive health outcomes, including improvements in life expectancy, infant mortality, and potential years of life lost (Bradley et al, 2011; Bradley & Taylor, 2013; Bradley et al, 2016; Rubin et al, 2016). As it turns out, the "paradox of high health spending without improved health outcomes within the OECD countries may be informed by differences in spending on social service areas" (Bradley et al, 2011, p.831). As such, Meili (2018) notes, there is potential in this, especially where the "health argument is an effective way to call for more generous social programs" (p.89).

Even small increases in income-targeted social spending have positive improvements on health. Brownell et al (2016) found that an unconditional income supplement provided to low-income women in pregnancy in Manitoba was associated with positive health outcomes, including increased breastfeeding, reductions in low birth weights and pre-term births, and shorter hospital stays. Similar research on the Earned Income Tax Credit in Pregnancy in the US, found that mothers with supplementary prenatal benefits displayed improved nutritional intake, reduced smoking rates, and greater commitment to prenatal care (Hamad & Rehkopf, 2015; Strully et al, 2010).

Guaranteed income programs, which offer a universal, unconditional cash benefit delivered through the tax system, also have the potential to improve population health (Forget, 2013; 2017). In the 1970s, Manitoba's Mincome (minimum income) project guaranteed a basic income to families in Winnipeg and Dauphin, and subsequent analysis revealed a 8.5 percent drop in hospitalizations, decreased mental health issues, and fewer general practice visits among Mincome recipients (Forget, 2011; 2016).

In 2017, Ontario announced a pilot guaranteed income project in three cities, where recipients were to receive a guaranteed income of $17,000 per year (Shum, 2017). Anecdotal findings indicated the early stages of the program were producing good results, however the project was cancelled following the election of a conservative government in Ontario, citing concerns that it was "too expensive" (Lorriggio & McQuigge, 2018).

Despite such arguments about cost, addressing poverty makes good financial sense (Conference Board of Canada, 2008). In Ontario, poverty is estimated to increase health care costs by $7.6 billion, resulting in a loss of $13 billion in income taxes and over $35 billion in productivity (Laurie, 2008). Offering a Canada-wide guaranteed annual income has been estimated to cost $15 billion per year (Forget, 2017), a fraction of the estimated cost of poverty in Canada at $80 billion per year (Laurie, 2008).

Viewing Socioeconomic Factors through the Health Systems Lens:

In a bold policy statement supporting population health and health equity, the Canadian Medical Association emphasizes that "social status is one of the strongest predictors of health at the population level", and encourages the biomedical community to acknowledge that "socio-economic factors play a larger role in creating (or damaging) health than either biological factors or the health care system" (CMA, 2013a, p.1, 6). Various professional medical bodies – including the British Medical Association (BMA), the Canadian Medical Association (CMA), and the College of Family Physicians of Canada (CFPC) – have adopted policies and practice recommendations highlighting the impact social determinants on patient health (BMA 2011; CMA 2013a; 2013b; CFPC 2015; WHO 2008).

In tandem with a greater emphasis on equity-informed medical student training, the Canadian Medical Association calls on physicians to "explore opportunities to strengthen the primary care public health interface" (CMA, 2013a, p.4-5). Socially-aware physicians are expected to be socially accountable to the populations they serve, to support advocacy-based organizations, to collaborate in support of intersectoral goals, to address upstream determinants of health, to regularly screen their patients for poverty, and to sensitively intervene where necessary (CFPC, 2015).

Although the medical systems increasingly recognize income as a social determinant, it is important to resist the idea that socioeconomic insecurity is a medial problem. Socioeconomic insecurity is clearly rooted in social, political and economic factors, by which medical systems are also influenced. Recognizing this context is important in primary care service delivery, as it has the potential to shape the way that social problems are considered in a medical environment:

> Whilst there is a clear recognition by doctors of the medical consequences of social determinants of health, their interest in affecting those determinants and the impact they have on the health of individuals and communities is not medicalization of the determinants. Instead it is a determination to use the evidence of medical harm resulting from socioeconomic factors in order to lead to a reduction in preventable illness and an increase in general wellbeing.
>
> (BMA, 2011, p.12)

Barriers:

In practice, a combination of attitudinal, structural and knowledge-based barriers hamper the medical system's ability to respond to the social determinants of health (Bloch et al, 2011). Physicians cite time constraints and resource limitations as key obstacles (Berkowitz et al, 2016). They also feel constrained by medical training that leaves them "ill-prepared to deal with complex social support systems or to take the social history of a

patient" (CFPC, 2015, p.3) A United Kingdom study found primary care practitioners invested considerable time responding to patients' social problems, yet they struggled, noting that "social problems are often complex", and "responding to them can be a frustrating experience" (Popay et al, 2007, p.969).

Physician attitudes hamper care, and prejudices towards people living in poverty have the potential to become an additional determinant of healthcare inequality (Loignon et al, 2018). Despite increasing awareness of the determinants of health, including poverty, Loignon et al (2018) still discovered a sub-set of Quebec practitioners who expressed a moral perception of poverty, attributing socioeconomic insecurity to individual traits and personal failures (Loignon et al, 2018). These attitudes may explain why impoverished patients tend to experience health care interactions negatively, and describe an perceived tone of "unwelcomeness" and judgment from physicians (Mercer, Cawston & Bikker, 2007; Wen et al, 2007, p.1011).

In the American context, where predominantly private health insurance coverage may be variable depending on income strata, lower income has been found to be associated with less contact with medical professionals, and with family physicians in particular (Lasser, Himmelstein & Woolhandler, 2006). In the Canadian context, where publically-administered health insurance coverage is universal, members of lower income groups tend to be greater users of the health care services, despite which, researchers in Ontario note, that low income patients are disproportionately hampered by lack of access to transportation, lack of valid health insurance identification, difficulty attending appointments, and self-limited help-seeking behaviors due to stigma, shame, low literacy, cognitive impairment and substance abuse (Bloch et al, 2011). Providers may likewise make access difficult for low-income patients in Canada via inflexible practice rules, short

appointments, unwelcoming practice environments, and "a lack of familiarity with the social security system and relevant community-based resources" (Bloch et al, 2011, p.64).

Although practitioners may "[understand] the importance of the social determinants of health" they have been observed to be "unsure how to take action" (Naz et al, 2016, p.e684). Many lacked the necessary tools to assess a patient's income vulnerabilities, and subsequently failed to inquire about a patient's financial status, simply because they were *unsure of how to ask* (Aery et al, 2017; Naz et al, 2016).

Addressing Income Security through Primary Care:

There are actions that primary care providers can take to address poverty at the individual level, given that "family physicians are often the best-situated primary care professionals to act on issues that affect the social determinants of health of their patient population" (CFPC, 2015, p.3). Family physicians have the autonomy that makes it possible to ensure their practices are accessible to all patients - particularly marginalized populations - and can make flexible office practices routine, while pursuing remuneration arrangements that incentivize social determinants of health (Bloch et al, 2011; CFPC, 2015; Popay et al, 2007).

The collection of social indicators is a helpful first-step to support upstream interventions in population health (CMA, 2013a; Gehlert et al, 2008; Hasnain-Wynia & Baker, 2006). Routine basic needs screening can occur through a variety of means. Pinto et al (2016) found that patients in Toronto were willing to complete a self-administered questionnaire, including sensitive subjects such as sexual orientation, housing, religion and ethnicity, using a tablet device in the waiting room. Researchers in the United States have

also reported on the use of a computer interface as an acceptable and feasible way to collect socio-demographic information from patients (Baker et al, 2007; Hasnain-Wynia et Baker, 2006; Hassan et al, 2015).

In a study of two urban primary care practices in Massachusetts, 15% of patients reported unmet resource-needs, including food insecurity, limited health insurance, and barriers to medication obtainment (Berkowitz et al, 2016). Not surprisingly, these resource-insecure patients also had a greater prevalence of depression, diabetes and hypertension (Berkowitz et al, 2016). Inevitably, front-line health practitioners play a vital role in "eliciting problems from patients", and this opportunity to recognize patients with unmet resource needs is an important first step in providing quality, patient-centered care (Berkowitz et al, 2016; Starfield, 2009, p.70).

Health workers who have specific ways of asking about social challenges are more likely to report having helped their patients, as compared to those who did not ask, or who did not know *how* to ask (Naz et al, 2016). The College of Family Physicians of Canada has helped to standardize a basic approach to income security screening, recommending that practitioners ask all patients, "Do you have difficulty making ends meet at the end of the month?" as part of a comprehensive care approach (Centre for Effective Practice, 2016).

Based on the answer to this question, family physicians may then connect their patients to specialized health services, as well as to community resources and income support services. To assist with this, the Canadian Medical Association recommends, "local databases of community services and programs (health and social) be developed and provided to physicians" (CMA, 2013a, p.6). To reduce barriers to access, the College of Family Physicians of Canada encourages physicians to be familiar with, and to complete

forms for eligible social assistance programs, and to do so without charging user fees (CFPC, 2015).

In Manitoba, a plain language booklet titled "Get Your Benefits" was created by a coalition of healthcare providers, researchers, community agencies and non-profit organizations, with the aim to improve the health and well-being of Manitoba families (University of Manitoba, 2018). This 24-page plain language booklet provides a comprehensive list of provincial and federal services including financial counseling services, disability benefit programs, food and housing services, and employment and income assistance programs (U of M, 2018). The goal is to empower people to access all possible financial benefits and programs for which they may be eligible, recognizing that "better income can lead to better health" (U of M, 2018, p.1). Similarly noting that clinicians often experience the greatest challenge in *finding* resources in the first place, researchers in Winnipeg and Toronto are assessing an online tool designed to assist care providers in choosing appropriate social services and resources in their communities (Aery et al, 2017). Such efforts towards improved referral options have the potential to make the work of front line practitioners "more satisfying", and to improve their ability to "address the social causes of health inequalities more effectively" (Popay et al, 2007, p.969).

Despite the availability of resource materials, many physicians may feel that they lack the expertise or skill to provide 'the best' direction for their patients regarding social services and income supports. To address these profession-based constraints and to improve access to income security care options in primary care, an expanded and sub-specialized set of care providers may be needed to best serve the needs of all patients.

The Link between Social Services and Front Line Health Care:

In Canada, income supports are predominantly offered through social service and community agencies, not typically through primary care medical clinics (Shartel, Cowan, Khandor et al, 2006). Abbot (2002) argues the disconnect that exists between social services and health services disadvantages patients, since they are forced to navigate two (or more) very different and sometimes contradictory, service systems to achieve similar (wellness) goals. This disconnection may in part be due to the way that health services systems are staffed and organized.

Traditional medical care or "primary care", is first-contact health care offered by a family doctor or nurse practitioner, and it usually includes medical assessments, tests, treatments and interventions, as well as referrals to other health care providers where needed. Classically, primary care does not include explicit assessment of income needs or assistance with access to services that address the social determinants of health, like poverty, housing, or food insecurity.

A *primary health care* system is broader than primary care, in that it also includes health promotion and disease prevention activities. First operationalized in the 1978 Declaration of Alma-Ata, a primary health care system is one that includes both primary medical care and activities tackling determinants of ill health, reinforcing the idea that "the prerequisites and prospects for health cannot be ensured by the health sector alone" (WHO, 1978; WHO, 1986, p.2).

Evidence supports the idea that this broader, primary health care orientation is more likely to provide equitable health services and enhance the ability of the health care system to address the social determinants of health (Health Council of Canada, 2009;

Starfield, Shi & Macinko, 2005; WHO 2007). Likewise, when health care providers work in *collaborative groups* the health care system has greater potential to address social determinants in target communities (Dinh, 2014). Recent trends have supported a shift towards team-based, collaborative primary care based on the reported patient-centered benefits of this approach (Health Council of Canada, 2009; WHO, 2008).

Canada's first community health centre, Mount Carmel Clinic was established in 1926 in Winnipeg, and continues to operate today as a multi-sector healthcare organization, integrating team-based primary care with health promotion outreach, illness prevention programs and community development initiatives (Canadian Association of Community Health Centres, 2019). In Manitoba, this collaborative care trend has persisted in the development of primary care networks, known as My Health Teams. In the context of "health system transformation" initiated by the 2016 Conservative government, the team based care model was seen as one way to streamline health service delivery. To shape transformation efforts, the commissioned 'Peachey report' emphasized the opportunities in team-based primary care systems in Manitoba, particularly when conjoined with other services, including Family Doctor Finder (a services that links patients with primary care practitioners) and chronic disease care management programs (Health Intelligence, 2017).

There are currently several different types of similar collaborative team models operating across Canada, and these include variants of community health centres, physician-led practices, nurse practitioner-led practices, and primary care networks (Dinh, 2014). Regardless of their moniker, collaborative clinics and teams provide comprehensive health care services – including multi-faceted chronic disease management, inter-professional collaboration, and lower client-family to physician ratios – as distinct to classic

primary care models, such as physician-only fee-for-service practices, and 'clinical care only' teams (Glazier, Zagorski & Rayner, 2012; Russell et al, 2010a, 2010b).

The Manitoba Association of Community Health highlights the potential of such interdisciplinary centres "to support communities and residents to achieve health by actively addressing social determinants of health such as poverty, access to shelter/housing, safety, education, language barriers and other factors" (Manitoba Association of Community Health, 2016, p.1-2). Researchers at the Manitoba Centre for Health Policy have likewise observed that patients with the greatest number of social complexities – as represented by low income, social housing, and mental illness – tend to access health care predominantly at such collaborative, team-based primary care clinics (Katz et al, 2016). Such usage patterns are particularly relevant among patients with complex needs, since these alternatively-funded, interdisciplinary clinics have enhanced organizational ability to connect patients to extended wellness services, including income assistance and mental health supports (Katz et al, 2016).

Canadian Income Security Program Examples:

In December 2013, the interdisciplinary St. Michael's Hospital family health team in downtown Toronto launched Canada's first income-security specific program to target poverty within the clinical medical setting (Jhung, May 2014). As one of Ontario Ministry of Health and Long-Term Care funded family health teams, St. Michael's Hospital family health team is a collaborative primary health care organization that includes family physicians, nurse practitioners, registered nurses, social workers, dieticians, and other

professionals working together to provide community-specific primary health care (Government of Ontario, 2016).

The unique feature of the St. Michael's family health team in December 2013 was its inclusion of a full-time health promoter, with an explicit objective to help patients improve their financial situation (Jones et al, 2017). The health promoter was introduced as a complement to the primary health care team to assist medically complex patients to navigate social services systems, and to help them "reduce expenses, complete their taxes, set up bank accounts, access free programs, budget, and save for emergencies" (Jhung, May 2014, p.1). Dr. Gary Bloch, a family physician and chair of the Social Determinants of Health Committee in the Department of Family and Community Medicine, University of Toronto, highlights the unique features of such a program, noting that despite existing "social workers and community resources and support programs… this intervention is a first of its kind, in that it's at the individual level to improve income as a social determinant of health" (Jhung, May 2014, p.1).

A retrospective, descriptive chart review of St. Michael's income-security program in its first year of operation revealed service activity levels consistent with its stated goals; encounters centered around helping patients to increase their income (77.4% of all encounters), reduce their expenses (58.6% of all encounters) and improve their financial literacy (26.5% of all encounters) (Jones et al, 2017). This research marked "an important step on the pathway to understanding whether addressing low income in the clinical setting is good for health" (Jones et al, 2017, p.8). Researchers collected demographic and health status information, along with referral and encounter details, to better understand and refine service provision, to shape recommendations for future service delivery models (Jones et al, 2017) and also to shape and inform further research endeavors, including the

proposed IGNITE (addressInG iNcome securITy in primary carE) study (Pinto, 2017). Such research (Mackintosh et al, 2006; Pinto, 2017) is important in the interests of health equity promotion, as findings may offer a greater understanding of health outcomes from service delivery models that address the social determinants of health in primary health care (Ruano, Furler & Shi, 2015).

In 2017, Manitoba launched a similarly dedicated income security program within the Downtown/Point Douglas (DT/PD) My Health Team, which operates in an interdisciplinary manner similar to family health teams in Ontario (Winnipeg Regional Health Authority, 2016). With the inclusion of a full-time income security promoter, the program was intended to provide income security services within the context of chronic disease management among My Health Team partners working in inner city neighbourhoods particularly affected by socioeconomic hardship. Recognizing the challenges faced by primary care providers in managing complex medical patients, the Winnipeg Regional Health Authority (WRHA) funded the initiative to "efficiently align patients and their providers to services and required resources to… address issues arising from the socio-economic status of the patient population" (WRHA, 2016a, p.6). After a busy first 18-24 months of operation, considerable word-of-mouth success was attributed to the program among members of the My Health Team, although a formal evaluation had not been conducted.

Research Needed:

Although there is strong evidence of the associations between wealth and health at a population level (Graham 2000; Marmot & Wilkinson 1999), much less is understood

about how such associations operate at an individual level. In a study of seven primary care sites in England in 2000/2001, researchers noted modest health improvements among participants given welfare benefits advice, and patients who experienced increased income during the study period had significantly better outcomes in mental health and emotional role functioning at 12 months compared to those with no income increase (Abbott, Hobby & Cotter, 2006). Similarly, Adams et al. (2006) found welfare rights advice services resulted in financial benefits for patients, although health benefits were less clear, and concluded that this discrepancy may have been "primarily due to lack of good quality evidence, rather than evidence of an absence of effect" (Adams et al, 2006, p.1).

In order to improve and sustain public health-based interventions, research that seeks to evaluate program components can support program development, ensure quality improvement, and demonstrate measurable results (Glasgow, Vogt, & Boles, 1999; Moore et al, 2015). Often requested by funders to justify program expenditures, outcome (or summative) evaluations describe the impact of a program, and try to determine "the extent to which the desired outcomes of a program exceed what would have occurred without the program" (Devaney & Rossi, 1997, p.588). However, before outcomes are assessed, novel programs may be better served by process (or formative) evaluation, which generates a description of a program's organization and methods in order to understand if it is being implemented as planned (W.K. Kellogg Foundation (WKKF), 2017). As such, process evaluations are often used to inform stakeholders of the need for program adjustments and corrections during a program's start-up period, and outcome evaluations are helpful to investigate and measure program outcomes once a program is well-established and underway (Linnan & Steckler, 2002a; WKKF, 2017).

Chapter Three: The Context of Process Evaluation

Process evaluations are a way of looking at what programs do, and how they do it, allowing researchers to take a critical look at the quality or value of everything that a program does, including program content, program implementation, and unique program features (Moore et al, 2015). Process evaluations also consider the environment within which programs operate, taking note of social systems, program staff characteristics, inter-organizational linkages, external environment factors such as competing programs, external politics, and concurrent events (Zapka et al, 2004).

Process evaluations are considered to be especially useful in assessing "complex interventions" - such as those targeting smoking cessation or obesity management - which are interventions defined as 'complex' by their "multiple interacting components" and by the "difficulty of their implementation" (Moore et al, 2015, p.1; Saunders, Evans & Joshi, 2005). Unlike effect-size outcome evaluations, process evaluations provide policy makers with information about how complex intervention may be replicated, because if an effective program cannot be replicated, then the success inherent in its operation is lost. By knitting together program outcomes and program processes researchers may find that "a careful examination of *how* something is done may help us to understand *why* or how it is more or less effective or efficient" (Unrau, Gabor & Grinnell, 2001, p.70, emphasis added).

Winnipeg's Income Security Health Promoter (ISHP) program was a new initiative in early 2017, which provided targeted income security services within the context of an interprofessional health team to patients in downtown Winnipeg. The ISHP program was lead by a permanent full-time social work position within the Downtown/Point Douglas My Health Team (DT/PD MyHT), with the specific goals to ensure that patients' financial vulnerabilities were "managed independently and collaboratively within the primary care team" and to support "family physicians and patients through case management and provision of income management" (WRHA, 2016a, p.5).

As a new and complex initiative, there was interest among program developers to understand how the program operated at the interface of income security support and primary care. After a brief period of initial set up, the program began accepting regular referrals in early April 2017. In July 2017 a program evaluation team was struck, and the consensus decision was to pursue a process evaluation of the Income Security Health Promoter program of the DT/PD My Health Team. Program managers were also curious about the program's potential for transposition to other My Health Teams in Manitoba.

Process Evaluation of Winnipeg's First Income Security Program:

The research goal was to understand how the Income Security Health Promoter (ISHP) program has worked in its first year of implementation.

The purpose was to conduct an exploratory, retrospective process evaluation of the first operational year of the Income Security Heath Promoter (ISHP) program operating out of the Downtown/Point Douglas MyHealth Team (DT/PD MyHT), Winnipeg, Manitoba.

Specific Evaluation Questions:

1) What are the characteristics of the patients involved in the Income Security Health Promoter (ISHP) program? What are the key qualities of the program itself? Specifically,
    - What are patient demographics? (age, gender)
    - What are patient medical characteristics? (health conditions, medications)
    - What are patient social characteristics? (social service involvement, housing)
    - What are the program objectives?
    - What assumptions underlie the program intervention?
    - Who are the main stakeholders?
    - What is the target population?

2) How is the Income Security Health Promoter (ISHP) program delivered? Specifically,
    - What referral criteria shape admission to the program (target population)?
    - Is the program reaching its target audience?
    - What is the quantity/type of specific program interventions?
    - How is the program delivered?
    - Who delivers the program?
    - What is the frequency/duration of participant involvement (with each intervention)?

- What is the duration of patient involvement (with the program overall)?
- How do patients exit the program?
- What are the challenges in implementing the program?
- How does the evaluation committee support/shape program processes?

3) What is the individual-perspective from within the Income Security Health Promotion program? Specifically,
   - What is the general process of a patient's "travel" through the program?
   - What is the patient's lived experience of participating in the program?

Components of a Mixed Methods Process Evaluation:

Process evaluations aim to understand the functioning of an intervention, which may be achieved by examining its implementation, mechanisms of impact, and contextual factors (Moore et al, 2015). Various approaches to process evaluation for health-promotion programs have been presented by various researchers (Linnan & Steckler, 2002; Medical Research Council, 2006; Moore et al, 2015; Saunders et al, 2005). The Medical Research Council has provided considerable direction for process evaluation for complex interventions, and continually updates a set of process evaluation guidelines. In general, key components include a description of a program's organization and methods, the quality and amount of services it provides, and a focus on how successfully a program is delivered according to its design (Saunders et al, 2005).

Stakeholders:

Ideally, program evaluations should be planned, remain flexible, and address real issues, while giving stakeholders reliable information to address actual problems (WKKF, 2017). Engaging users in the planning of an evaluation from the start helps to ensure that the type of evaluation chosen reflects evaluation goals, enhances evaluation relevance, and leads to "intended use by intended users" (Moore et al, 2015; Patton, 2012, p.4).

Patton (2012) also notes the importance of "process use", whereby engaged evaluation stakeholders modify and adjust their approach to programs as the evaluation process takes place (p.142). As participants engage and "think evaluatively", evaluators should recognize these change processes as distinct from summative evaluation findings, and as useful outcomes, in and of themselves (Patton 2012, p.142).

Program Pathways and Program Assumptions:

Commonly employed in process evaluation, a logic model is a systematic, visual way to illustrate sequential relationships between program inputs, program activities, and the program's intended changes (short-term outputs) and results (long-terms outcomes) (Centers for Disease Control and Prevention, 2008; Morestin & Castonguay, 2013; Saunders et al, 2005). In pulling these elements together, a logic model helps to identify potential mediators in a program's change process, and when updated iteratively, can help to evaluate program consistency as a program intervention advances (Holliday, 2014; Linnan & Steckler, 2002).

In addition to change processes, it is important to identify and consider the underlying assumptions that underpin the planned interventions (Moore et al, 2015).

Because "evaluation is fundamentally about increasing the effectiveness of change efforts", evaluators often become involved in explicitly helping to illustrate and clarify what theories of change underlie key program activities (Patton 2012, p.231). Understanding these assumptions helps to illustrate the mechanisms by which the interventions produce change, which is useful when trying to replicate the success of an intervention within similar future contexts (Moore et al, 2015).

Program Components:

Program interventions may have a varied impact either because of their design, or because of inconsistent implementation. Therefore, it is important to consider the *implementation* of a program, which includes an assessment of what was delivered, who it was delivered to, and how much was delivered (Moore et al, 2015). Assessing program implementation is somewhat of a gestalt assessment, as it considers a combination of reach, services delivered/received and fidelity, with the aim to represent how well a program meets predetermined objectives overall (Linnan & Steckler, 2002a).

Assessing *recruitment* to a program involves consideration of the processes that occur to engage and attract participants to the program itself (Linnan & Steckler, 2002a). *Reach* considers the intended target population (including age, gender, ethnicity, health status, income, education), and aims to determine how successful a program is in reaching that group (Glasgow, Vogt & Boles, 1999). *Service delivery* refers to "how much" of the intended intervention is delivered to program participants, and is related to *services received*, which reflects how aware participant's are of the program and key program messages (Baranowski & Stables, 2000).

In order to draw conclusions about what kinds of implementations work, process evaluations will also usually aim to capture *fidelity*: whether an intervention was delivered as intended (Moore et al, 2015). *Fidelity* summarizes the quality of the implementation, focusing on the extent to which a program is enacted as planned, and may be monitored through project checklists of core intervention components or minimum program requirements (Baranowski & Stables, 2000; Fisher et al, 2014).

Program Context:

Understanding *context* – which is anything external to the intervention that may act as a barrier or facilitator to its implementation – is also a key component of a process evaluation (Moore et al, 2015). Failure to consider these external factors may lead to errors in any future attempts to replicate a program. This is especially true with complex interventions, because "complex interventions work by introducing mechanisms that are sufficiently suited to their context to produce change" (Moore et al, 2015, p.2).

Mixed-Methods Analysis:

Given the complexity of health care services, there is benefit to employing a range of approaches to illustrate program components (O'Cathain, Murphy & Nicholl, 2007a). Process evaluations can be enhanced by a mixed methods approach, which incorporates both quantitative and qualitative data collection and analysis, to capture not only the *activities* of the program, but also the *experiences* of participant community members (WKKF, 2017). Both types of data collection may occur concurrently, sequentially and/or

cyclically, allowing one data set to guide the sampling, data collection and analysis of the other, and vice versa (O'Cathain, Murphy & Nicholl, 2007b; Zang & Creswell, 2013).

Process evaluations enhanced by the voices of research participants may also reveal insights into complex individual and contextual dynamics not visible through standard evaluation methods, and can provide a "prism through which to observe and appreciate a program's contextualized value" (Costantino & Greene, 2003, p.36; Riley & Hawe, 2005). The argument is that "neither quantitative nor qualitative methods are sufficient in themselves to capture the trends and details of the situation" (Creswell, Fetters & Ivankova, 2004, p.7). Instead, both data types are integrated, related and combined throughout the research process, allowing a multi-layered interpretation and analysis of results (Creswell et al, 2004; Greene 2015; O'Cathain Murphy & Nicholl, 2007a; Zhang & Creswell, 2103).

Chapter Four: Methods

As a mixed methods process evaluation of the DT/PD MyHealth Team's novel Income Security Provider program, this research included a range of qualitative (interviews) and quantitative (process activity) data collection and analysis, and was developed in consultation with an evaluation committee developed specifically to support this research project.

Stakeholder Consultation:

The Working Group on the Evaluation of the Income Security Health Promoter (ISHP) program ("ISHP evaluation committee") was developed in July 2017 to support and assist this research project. The committee included the following nine stakeholders: the Special Advisor to the Deputy Minister on Primary Care and Regional Director, Primary Health Care/Chronic Disease; the Primary Care Initiatives Lead: WRHA MyHealth Teams; the Downtown/Point Douglas MyHealth Team (DT/PD MyHT) Manager; the DT/PD MyHT Medical Lead and Primary Care Provider; the WRHA Community Facilitator for Downtown Community Area; the WRHA DT/PD Initiatives Lead; the Manitoba Primary Care Research Network Director; the ISHP provider; and the process evaluator.

A total of eight meetings of the ISHP evaluation committee occurred between July 4, 2017, and May 9, 2019. The evaluation committee met to discuss the ISHP program, its scope, objectives, and evaluation potential. Discussions also centered on the activities of the program, its target population, and the development of an ISHP logic model. Brief 'teachings' were shared by the process evaluator, regarding evaluation design and approaches, and an overview of logic models and their components. Additional consultation meetings were held with an ad-hoc working group to discuss program scope and stakeholders (August 10, 2017), with the ISHP provider to discuss program activities and evaluation goals (multiple dates), and with the DT/PD My Health Team to share research plans (April 19, 2018).

Between August and November 2017, the ISHP evaluation committee developed a preliminary evaluation scope statement, which summarized potential evaluation opportunities within the ISHP program. A working model of the ISHP program was created by the process evaluator (See Appendix 1: Basic Program Flow and Possible Evaluation Targets), which helped the committee to envision evaluation alternatives. Although the committee was interested in showing that the ISHP program 'worked' in the long run to relieve income insecurity, there was also a strong interest in illustrating the short-term day-to-day activities of the program itself. Discrepancies between the achievable scope of the MSc research project versus the broader evaluation goals of the ISHP evaluation committee emerged, and mutual compromises made in order to create a coherent set of evaluation objectives.

In discussing the evaluation plan, particular interest was paid to a similar income security program operating out of Toronto, which ha published a retrospective chart review (Jones et al, 2017) illustrating socio-demographic information and program

encounter details and service areas. It was hoped that the ISHP program would achieve a similar type of program evaluation. There was a related interest in understanding patient experiences, and in considering program adjustments to better meet the needs of participants. Additionally, there was interest in evaluation findings that would support the scaling up of similar income security programs to other provincial MyHTs. Consensus for a process evaluation was established, and a detailed research plan was shared with the ISHP evaluation committee and the DT/PD My Health Team in advance of commencing the research.

As the process evaluation was implemented, the ISHP evaluation committee provided ongoing support and feedback: letters of support were written to accompany ethics committee submissions, committee recommendations helped to shape chosen data targets and case studies for interviews, and responses to initial data summary and analysis assisted in the development of subsequent data collection. Based on early evaluation findings, the ISHP evaluation committee also discussed possible modifications to the operation of the ISHP program, and was involved in recommendations for future evaluation planning. In addition to preliminary and ongoing data sharing and discussion, an official summary of the evaluation findings was shared with the committee on May 9, 2019, and again, with the DT/PD MyHT on June 3, 2019.

Throughout the process of engaging with the ISHP evaluation committee, descriptive data was collected regarding committee activities through documented meeting minutes, the coalition of working evaluation and logic models, and memos of process completed by the evaluator.

Data Collection:

In keeping with a mixed methods approach, data was collected from both quantitative and qualitative data sources, including document analysis, chart review, and one-on-one interviews. (See Appendix II: Data Collection/Capture Sheets.) Collection of quantitative and qualitative data occurred concurrently over a 10-month period spanning from August 2018 to June 2019.

Ethical Considerations:

Prior to any data collection, ethics approval was obtained from the University of Manitoba Health Bannatyne Campus Research Ethics Board, as well as the WRHA Research Access and Approval Committee.

Such approval was essential to protect participants who may be at risk of coercion, due to the power differential between researcher and participants, and the offer of a financial incentive. There were also risks to confidentiality (especially where personal stories were shared), and of emotional distress (when sharing stories of personal hardships and struggle). On the other hand, potential benefits to participants include receipt of honorarium for time spent, validation received by being heard and recorded, and value derived by contributing to program delivery and research.

Confidentiality and Consent:

To maintain confidentiality, socio-demographic data collected contained no identifying information, with data analysis described in aggregate format. Detailed consent

was obtained from all interview participants, clearly explaining the intent of the research, confidentiality expectations, opportunities for transcript review, opportunities for non-punitive retraction, and financial compensation (honorarium) provided.

Because of the specificity of the ISHP provider's role, the WRHA and the DT/PD MyHealth Team management provided a letter of support clearly specifying that research findings would not be used by WRHA for staff evaluation, and would not affect the provider's employment status.

Program Characteristics:

An initial understanding of the context, purpose, underlying theory, objectives, strategies, and the expected impacts and outcomes of ISHP program was developed using key program documents, including the initial ISHP program proposal (Winnipeg Regional Health Authority, 2016a), the ISHP provider job description (Winnipeg Regional Health Authority, 2016b), as well as the MyHealth Team referral information bulletin for the ISHP program (unpublished, undated).

This data was summarized into a working program outline by the process evaluator, and was organized into a program logic model, or graphical depiction of the logical relationships between the resources, activities, outputs and outcomes of a program. The logic model was developed in collaboration with the ISHP evaluation committee, and was modified according to feedback provided.

Further information about program characteristics was collected though one-on – one interviews with the ISHP provider to help correlate findings from the initial document review. As the primary staff position for the ISHP program since its inception, he was

interviewed to gain more information and insights into the program's context and characteristics.

In order to clarify these findings regarding program characteristics, an initial 1.5 hour interview with the ISHP provider was conducted in August 2018. Once consent was obtained, open ended questions were posed regarding: program objectives and assumptions, program stakeholders, target population, referral criteria, type of program interventions, program delivery, participant involvement, program completion, program challenges, and role of the evaluation committee. The interview was digitally recorded and transcribed into a secure digital file; once the transcript had been reviewed by the ISHP provider, the digital recording - stored in a secure location during the interim - was deleted.

Excerpts from the interview transcript were categorized into a number of themes, including "program goals", "types of client interactions", "target groups", and "the importance of relationships". These findings were corroborated with earlier summaries of program characteristics, and discrepancies, where they existed, were clarified.

Program Participants:

Illustration of the target population was gathered through document analysis using the ISHP program proposal (WRHA, 2016a) and Downtown/Point Douglas community area profiles (Centre for Healthcare Innovation & Winnipeg Regional Health Authority, 2015a; 2015b). This information was supplemented by comments provided by the ISHP provider in his first interview.

Clients of the ISHP program also have their basic socio-demographic information recorded in the Electronic Medical Records (EMR) system Accuro, where each client has a chart outlining their basic medical and social demographic information, as well as detailed chart encounter notes. To augment and corroborate findings revealed through the document review and the qualitative interview, demographic data on ISHP clients were collected by means of EMR Accuro queries and chart review.

Three separate Accuro queries were conducted to collect information on the number of active and inactive charts that had been linked to the ISHP program through the EMR system between January 7, 2017 and September 7, 2018; one listing charts "open" or "active" in the ISHP program, one listing charts "closed" or "inactive" to the ISHP program, and one listing a total of all "open" and "closed" charts linked to the ISHP program during the entire time period. (See Appendix III: Accuro Queries Run to Determine Program Participants.) This information was compared to a manual count of physical "open" and "closed" referrals (kept in paper files in the ISHP program office) in order to verify the accuracy of counts by Accuro query. Given limited discrepancies between the two sources, the Accuro query results were used to determine the reported chart counts.

A complete listing of "active" ISHP client files was then assembled via Accuro query and ordered based on date of enrolment. Among the 122 ISHP participants with an active status within the first operational 13 months of the ISHP program (between March 28, 2017 and April 30, 2018), 60 participants were randomly selected within three time blocks (first, second and final third of the year) for chart review. (See Appendix IV: Charts Selected for Detailed Chart Review.) Replacement random selection occurred where a few inappropriate (non-ISHP program referrals) charts were included in the Accuro query.

Among the 60 active charts selected for chart review, demographic (age, sex), medical (medical conditions and medications) and socio-demographic information (education, employment status, housing, and social service involvement) was collected directly from the EMR subheadings including: "History of Problems", "Active Medications" "Lifestyle", "Client Services", and "Social History".

This data was then analyzed according to data type: average for age; frequency for sex; averages for number of medical conditions and number of medications; categories for education ("less than grade 12", "at least grade 12", "postsecondary"), employment ("employed", "unemployed"), housing ("housed", including housing type, and "homeless/precariously housed"), and social service involvement (by type, varied). Further data analysis included a careful count of the proportion of charts reviewed that had the Accuro subheadings filled out at all. Findings were assembled into chart and graphic representation and were shared with the ISHP evaluation committee and discussed regarding their perceived accuracy. Options for future data collection were also considered collaboratively.

Program Activities:

Details about program activities were drawn from a variety of sources. The initial interview with the ISHP provider reviewed program processes, including patient referral processes, typical patient encounters, duration of involvement, program activities, and specific areas of service provision. These responses were used to corroborate other data collection methods, including review of ISHP program documents (WRHA, 2016a; 2016b), and findings from chart review.

The 60 "active" charts randomly selected for chart review (as discussed above) were assessed in detail beyond basic collection of socio-demographic data to determine "what types" of program activities ISHP clients were involved in, and the duration of client involvement.

Both quantitative and qualitative data was collected by careful review of the encounter notes listed in the 60 active charts reviewed. Each Accuro chart includes multiple encounter note details, entered by various providers to describe interactions between the provider and the client. To determine the type of encounters with the ISHP program, encounter notes specifically entered by the ISHP provider were counted and selected for careful review. Encounter notes entered by physicians and other health care professionals were not reviewed or assessed to determine ISHP program activity.

Duration of Involvement:

For each of the 60 active charts reviewed, duration of activity was calculated based on the number of months between the date when a client first engaged with the ISHP program ("start") and their last data of contact with the ISHP program ("end"), within the 17-month period over which chart activity was recorded. Start and end dates were determined based on first and last encounter notes recorded by the ISHP provider; the difference between the two was calculated to determine the per-client duration of involvement.

Type and Quantity of Service Encounters:

To understand the type of services that each client was involved in, a detailed review of the encounter notes was conducted. Among 60 charts reviewed, a total of 571 encounter notes of varying length were reviewed in detail. These ISHP provider-entered encounter notes were inputted during the 17-month time period (March 28, 2017, when the ISHP program first became operational, and August 30, 2018, the date when the chart review was completed) of program activity reviewed.

Each encounter note was read in detail and categories were assigned to the type of service provided. Before the chart review began, it had been expected by members of the program evaluation team that program activity data in four areas - "employment and income assistance", "identification procurement" and "income tax filing", and "pharmacare/medication access" - would be the most relevant to illustrate the day-to-day encounters of clients in the ISHP program. However, once chart review was underway, it was clear that additional categories were necessary. The final list of 10 categories included: "reason for referral", "employment and income services", "identification", "income taxes", "pharmacare/medication access", "budgeting", "food access", "housing", "transportation", "attempting contact", and "referrals out".

Based on careful review, each of the 571 encounter notes was flagged for certain key actions or services on the part of the ISHP program. To understand how encounter note details were assigned to categories, consider the following encounter note, written by provider, as it appeared in one client's EMR chart:

> Writer spoke with [client's name] from INAC and was told that clt has not been registered for his status. Clt has to wait for his birth certificate and will need to complete the registration form and mail his original birth certificate with the form to Ottawa. Writer met with clt and notified of

> same. Clt told writer that he has not had his medication filled since Friday. Clt stated that he was at his pharmacy and he attempted to tell the pharmacy tech to bill EIA but they would not dispense his medications. Writer contacted [drugstore] and advised the pharmacy tech that clt has medication coverage through EIA. The pharmacy tech is going to fill the prescription and writer advised clt to pick up his prescriptions.

This single encounter note was interpreted to have received ISHP program services in three areas: 1) ID procurement: "complete registration form and mail original birth certificate"; 2) Medication access: "had not had his medication filled since Friday"; and 3) Income support program benefits: "had attempted to tell the pharmacy tech to bill EIA", "writer contacted the drugstore and advised the pharmacy tech that client has medication coverage through EIA".

After analyzing 571 encounter notes in this way, count totals per chart in each category of services were tabulated and average numbers of encounters per category of service ("frequency counts") were determined. Further calculations determined the proportion of charts (among 60 reviewed) that provided services in each of the 10 distinct service areas.

In addition to count data, non-identifying illustrative excerpts from the provider's encounter notes were extracted. This qualitative data was used to enrich the frequency, duration, and proportion results, and to illustrate the "path taken" through the program by various clients. For example, one chart revealed an unusually high number of encounters in the service category "housing". In this case, paraphrased excerpts from each encounter note that mentioned "housing" were extracted and strung together chronologically to illustrate the steps taken by the ISHP provider to address one client's housing needs.

"Closed" Charts:

A smaller randomly selected chart review of 20 charts representing "closed" accounts was also assembled and reviewed following the active chart data collection and analysis, to determine the characteristics of "closed" ISHP program charts. This chart review was simpler than that done for the "active" charts, mostly in that it looked only to determine if there were any clear discrepancies between charts that remained "open/active" and charts that were listed as "closed/inactive". Data collection included primarily qualitative descriptions of reasons for chart opening, and chart closing, as well as quantitative counts of number of encounters.

Additional Interview with ISHP Provider:

Based on early analysis of program activities as determined by chart review, a second follow-up interview with the ISHP provider was conducted. This interview aimed to clarify some noted changes in the focus of the ISHP provider's work during the duration of the chart review.

The genesis of the second set of interview questions lay in observations noted in the process evaluator's progress memos and also through consultation with the evaluation committee. Interview questions included inquiry into the ISHP provider's role evolution over the study period, the nature of the ISHPs agency-to-agency relationships, and asked specifically about program evaluation goals and recommendations. After consent was obtained, the second interview was informally conducted through an emailed questionnaire completed in January 2019. Qualitative data from this interview was

categorized into themes and incorporated into the final ISHP program description and summary.

Client Experiences:

Overlapping informally with the chart review process, three interviews were conducted with ISHP participants themselves.

A set of potential interviewees was identified based on recommendations from the ISHP evaluation committee. Individuals selected were intended to provide key examples of engagement in the ISHP program, and also had health and life circumstances that supported their ability to participate in the interview process. Individuals were approached by the evaluator and invited to attend an interview. Once consent was obtained, participants were asked a series of open-ended questions regarding their experiences in the ISHP program. Participants were asked about how they got involved in the ISHP program, what they expected from the program, what happened to them while they were in the program, and what it was like for them to be involved in the program. Ample space for spontaneous conversation was provided.

Once consent was obtained, three individuals in total were interviewed, for approximately one and a half hours of interview time each. Interviews were recorded and transcribed, and each participant received a $10 coffee gift card honorarium. Once transcribed, digital files were deleted, and transcripts were kept on an encrypted (and locked) storage device. Participants were offered the opportunity to review their transcripts, although none pursued this.

Illustrative "snapshots" of non-identifying processes components were extracted from the transcription data, and were used to illustrate program processes, and also to gain a sense of client satisfaction with the ISHP program.

Fidelity:

Consistent with mixed-methods embedding strategy, data from the quantitative and the qualitative approaches within this analysis were mixed to integrate descriptors of the ISHP program processes with demographic information and subjective experiences of program participants. Assessment of fidelity was achieved by consideration of these mixed process descriptors alongside intended program components, with conclusions formed in consultation with the ISHP evaluation committee, the ISHP provider, and research academic advisors.

Knowledge Translation:

As mentioned, the ISHP evaluation committee was involved in the process evaluation from its earliest inception and remained involved throughout its varied stages of data collection and analysis. A series of informal reports and presentations were shared with the ISHP evaluation committee throughout the evaluation process, during eight regularly scheduled evaluation committee meetings. Feedback, insights, and future evaluation goals were considered and discussed. Once the final analysis had been completed, a more-formal presentation of results was given to the evaluation committee (May 9, 2019), and to the DT/PD My Health Team (June 3, 2019).

Chapter Five: Results

Program and Community Description based on Document Review (Results)

The Downtown/Point Douglas Community:

This combined Downtown/Point Douglas (DT/PD) community, which is home to over 125,000 residents (as of June 2009, including 47,546 in Point Douglas and 78,172 Downtown), stands out particularly in terms of economic hardship, experiencing both poverty and complex lifestyles (Centre for Healthcare Innovation & Winnipeg Regional Health Authority, 2015a; 2015b). Based on the 2011 National Household Survey report, 33% of residents in these areas experience low income, compared to 16% of residents in Winnipeg overall[1] (CHI & WRHA, 2015a; 2015b). Forty-five percent of residents in DT/PD rental tenancies spend more than 30% of their income on housing, with a median individual annual income of $22,157 (in 2010) in Point Douglas and $21,801 (in 2010) Downtown (CHI & WRHA, 2015a; 2015b). The combined area also has the lowest scores on material and social deprivation compared to the rest of Winnipeg, marked by lower

[1] In the 2011 National Household Survey (NHS) report, which is the basis for the Community Profiles cited here, low-income statistics are based on the after-tax low-income measure (LIM-AT). This measure is not related to the low-income cut-offs (LICO) presented in the 2006 Census, and therefore it should be noted that prevalence rates of low income are not comparable.

than average household incomes, higher unemployment rates, lower rates of high school graduation, a higher proportion of individuals separated/divorced/widowed/living alone, and a higher proportion of the population that has moved at least once in the preceding 5 years (CHI & WRHA, 2015c).

In addition to economic hardship, disproportionate rates of chronic disease are concurrently prevalent in the DT/PD areas. For example, percentages of community members treated for diabetes - 13.25% in Point Douglas and 11.7% in Downtown – are much higher compared to Winnipeg at 9.2% (CHI & WRHA, 2015a; 2015b). With double the cases of stroke in Point Douglas, and higher percentages of residents treated for respiratory diseases, heart disease, hypertension and dementia, it is no surprise that comparatively, a much lower proportion, 42%, of Point Douglas residents reported "excellent" or "very good" health, compared to Winnipeg, where 58% of residents reported "excellent" or "very good" health (CHI & WRHA, 2015a).

The cumulative impact of these factors is also reflected in the higher rates of suicide in Point Douglas (4.3 cases per 10,000 residents, compared to 1.5 cases per 10,000 residents across Winnipeg in 2007-2011), lower life expectancies among males in Point Douglas (71.7 years, compared to 78.3 years across Winnipeg), and more than double the rates of child mortality between 2005-2009 in both Point Douglas (55.5 deaths per 100,000 children) and Downtown (48.8 deaths per 100,000 children) as compared to Winnipeg (21.3 deaths per 100,000 children) (CHI & WRHA, 2015a; 2015b).

Potential years of life lost (PYLL) – which measures the difference between a person's actual death and the average life expectancy for persons of that sex - serves as another reflection of the impact of acute and chronic diseases. Where the summed PYLL is large in a population, it indicates that people are dying prematurely in that population,

which can then be compared other populations. The estimated PYLL between 2007-2011 in Point Douglas was 100.1 years of life lost per 1,000 residents, and in Downtown, 82.7 years of life lost per 1,000 residents, both of which are almost twice as large compared to Winnipeg with an estimated PYLL of 45.8 years of life lost per 1,000 residents (CHI & WRHA, 2015a; 2015b).

Recognition of Need:

The ISHP program was specifically opened within the Downtown/Point Douglas (DT/PD) MyHT in recognition of the "complex health and social needs" of patients in these communities (WRHA, 2016a, p.2) with a particular aim and focus on "the most vulnerable population in DT/PD… both EIA recipients and the working poor" (WRHA, 2016a, p.13).

While DT/PD MyHT members understood that poverty was affecting their patients, providers were not always sure how to help. The ISHP program proposal noted these existing gaps in care, and noted that providers "continually [identified] difficulties following up with their complex patient population" and struggled with system navigation and "with linkages to necessary programs that support their patient's socio-economic needs" (WRHA, 2016a, p.1). The proposal also noted community-specific needs for "income security pertaining to food security, budgeting skills with limited finances, housing, and optimizing income benefits" (WRHA, 2016a, p.3). A full-time ISHP provider was considered necessary to overcome these barriers, and to support the provision of enhanced primary care, for a specific inner city community (WHRA, 2016b).

The ISHP Program:

The program employs one full-time income security provider, who ensures patients' financial vulnerabilities are "managed independently and collaboratively", and who supports "family physicians and patients through case management and provision of income management" (WRHA, 2016a, p.5). As a member of the DT/PD MyHT of providers, the ISHP provider is "responsible for the development and delivery of income security focused interventions", and also "support[s] and address[es] the health needs and priorities of the network's patient population in liaison with MyHealth Team partners" (WRHA, 2016b, p.2). Relationship-building skills are also an asses, including "experience working in an inter professional team" and a "demonstrated ability to promote teamwork, collaboration and partnerships" (WRHA, 2016b , p.2). Since the inception of the ISHP program, the ISHP provider role has been consecutively filled by the same individual.

Referrals to the program are received only from DT/PD My Health Team members, which includes a designated set of fee-for-service practitioners and community health centres operating in the DT/PD area. Specifically, members include: Eaton Place Medical, Dr. Kuegle Medical, McGregor Medical Centre, Klinic Community Health Centre, Aboriginal Health and Wellness Centre, Mount Carmel Clinic, Hope Centre, Nine Circles Community Health Centre, Access Downtown, Aikins Primary Care Clinic, and Northern Connections Medical Centre.

Beyond the DT/PD MyHT membership, other identified stakeholders include: Manitoba Families; Employment and Income Assistance; Employment and Income Assistance Appeal Board; SEED (Supporting Employment and Economic Development)

Winnipeg; Get Your Benefits Project; Community Financial Counselling Services; WRHA Health Equity Working Group; other MyHTs; Manitoba Health, Seniors and Active Living; Legal Aid Manitoba; and the Canadian Revenue Agency (unpublished document, ISHP evaluation committee, 2018).

The program resides within WRHA Health Services, Downtown Community Services, in the DT/PD area, and funding is provided by WHRA on a non-pilot, long term basis. Client services are provided through both direct contact at the hub site on Elgin Avenue, and through active-outreach, "meeting/reaching patients where they are at, in consideration of their social-economic means" (WRHA, 2016a, p.6), including visits at various off-site clinic locations, and flexible telephone follow-up.

Overall, the ISHP program was created to provide income security supports to complement the health and chronic disease management services of the Downtown/Point Douglas MyHealth Team (DT/PD MyHT). The goals of the program are: 1) To provide support and education around income security within the context of chronic disease among My Health Team partners in the DT/PD area, and 2) To collaborate and align services within EIA and non-profit income support programs, while increasing partners' capacity to deliver income security supports (WRHA/ISHP referral notice, undated).

Program Activities and Program Logic Model:

The ISHP program operates on the assumption that the DT/PD patient population has complex health and social needs, and that a focused effort is required to help link vulnerable patients to income security programs and services. Intended program activities include the provision of client-centred income security services (banking basics,

income tax submissions, and social service navigation), as well as capacity building among the DT/PD MyHealth Team members. Anticipated short term outputs and long term outcome measures are depicted visually in the ISHP program logic model. (See Appendix V: ISHP Program DT/PD MyHT Logic Model.) This exploratory process evaluation focuses specifically on short-term, year one program outputs.

Table 1: ISHP Logic Model Components

Assumptions:	The DT/PD patient population has complex health and social needs requiring a focused effort to help link vulnerable patients to needed services and programs. Connecting patients to income supports through the ISHP program will enhance income security, service integration, and capacity utilization. Income security supports improved patient-centered care and chronic disease management as well as long-term health outcomes, for DT/PD My Health Team patients.
External Factors:	DT/PD community has the lowest scores on material and social deprivation scores across Winnipeg. 46% of families in DT/PD area have yearly income <$20,000. The DT/PD communities have a disproportionate number of members living with chronic disease.
Objectives:	To provide support and education around income security within the context of chronic disease among My Health Team Partners in the DT/PD area. To collaborate and align services within EIA and non-profit income support programs. To increase partners’ capacity to deliver income security supports.
Focus:	Income security, accessing benefits, capacity building, education and advocacy.

Inputs:	Income Security Health Promoter, full time position DT/PD My Health Team Partners (referral source) WRHA Working Group on the Evaluation of the Income Security Health Promoter program ISHP evaluation committee

Program Activities:	On-site and in-home consultative services surrounding income benefits, system navigation, education and advocacy. Outreach to low income patients of the DT/PD My Health Team, in collaboration with My Health Team partners (service providers and partner community agencies). Connect low income patients and families to appropriate supports. Implement self-help sessions such as banking basics, income tax submissions, and social service navigation for targeted population. Capacity building and brokering supports within DT/PD My Health Team providers, partner clinics and clinicians.

Program Outputs:	Program Outcomes:	
Short-term (1 year)	Mid-term (1-2 years)	Long-term (>2 years)
• Number of patients referred to program • Number of appropriate referrals • Number of patients seen and # of visits • Illustrative patient demographics • Type of interventions, number of each type • Number of workshops delivered, number of participants • Patients' experience of support	• Number of patients with ID • Number of patients with filed income tax returns • Number of patients with EIA/SEED/other income security supports in place • Number of patients with reduced financial insecurity (decreased use of food banks, etc) • Number of patients with adequate medication /Pharmacare access • Improved financial literacy scores	• Better health and greater ability to self-manage chronic conditions (decreased return visit rates to providers) • Increased income (change in monthly income from baseline to 12 months after intervention) • Improved stability (housing, food security, number of patients coming off EIA)

(See Appendix V: ISHP Program DT/PD MyHT Logic Model, for a pictorial version.)

Program Activity Details based on Chart Review and Interviews (Results)

Program Activity:

Between January 7, 2017 and September 7, 2018 (20 months), 415 clients engaged with the ISHP program. Approximately 161 client files remained open, or active, at the end of this time period, with the remainder, 254 client files marked as closed.

- Total: 415 clients throughout the time period
- Active: 161 clients (38.8%) at end of the time period
- Closed: 254 clients (61.2%) at end of the time period

Comparison between closed and active charts revealed little difference in the degree of engagement with the ISHP program. Active charts are those that show some ongoing program activity, where interaction between the client and the provider was observed to be occurring on a semi-regular or as-needed basis. Closed charts, on the other hand, showed similar interactions with the provider, but because these interactions were not longer occurring, and showed signs of a more definite 'completion', their status was shifted from active to closed in the electronic medical record. The fluidity between open and closed status should also be noted, as in many cases clients were 'closed' to the ISHP program, only to be later 'reopened' as new income security issues arose.

The ISHP provider explains how opening a client file is easily done:

> *It can vary… because a client is essentially opened up to my program with that initial contact… a first phone call… and even if I can't connect with that client, the client is still open to the program…*

The ISHP provider also explains how clients may self-select out of the program, which usually occurs once their issues have been responded to, or when their contact lapses. But even after chart "closure", the ISHP provider notes that re-opening a chart is easy:

> *So to make it easier, if a client's already been referred to me once, and they're closed, it only takes a simple phone call from them to reopen…*

Population Served:

Age and Sex

Among 60 charts reviewed, the median age was 53.78 years, with a range of 21.26 – 86.66 years. Among these 60 clients, 41 identified as male (67%), with a median age of 55.69 years, and 19 identified as female (31%), with a median age of 42.66 years.

Medical Conditions

Of the 60 charts reviewed, 36 charts (60%) had medical condition details recorded. Among these 36, the median number of medical conditions recorded was 5.0. The fewest number of medical conditions listed was 1, and the greatest number of medical conditions listed was 17. See below for examples.

8 medical conditions	Long QT syndrome, Sleep apnea, Psoriasis, Hemoptysis, Esophageal reflux, HTN, Depressive disorder/suicidal ideation, Widespread pain
2 medical conditions	ADHD, Anxiety

Medications

Of the 60 charts reviewed, 34 charts (57%) had active medication details recorded. Among these 34 charts, the median number of medications recorded was 5.0. The fewest number of medications listed was 1, and the greatest number of medications listed was 16. See below for examples.

6 active medications	morphine, venlafaxine, omeprazole, bisoprolol, amlodipine, flomax
8 active medications	diamicron, duloxetine, amlodipine, candesartan, ASA, pravastatin, metformin, diabetic supplies

The listings of active medications also included non-medicine items, such as diabetic supplies, in 6 of 34 (18%) charts, including “condoms”, “diabetic supplies”, “winter boots”, and “home blood pressure machine”.

Use of opioids among active medications was also noted in 8 of 34 (24%) charts, including “Tylenol #3”, “hydromorphone”, “oxycontin”, “percocet", and “morphine”.

Employment

Thirty-seven out of 60 (61%) of charts reviewed had employment details recorded. Of these 37, 16% were listed as employed, 5% were listed as retired, and the majority (78%) were listed as unemployed. Among the unemployed, one third noted involvement of either Employment and Income Assistance (EIA) or Employment Insurance (EI); over half noted specific disability benefits coverage (either through EIA or Canada Pension Plan (CPP)).

Education

Twenty-three out of 60 (38%) of charts reviewed had education details recorded. Of those 23, 48% had a less than grade 12 education (with last completed grade ranging from grade 6 to grade 11), 22% had graduated high school, and 30% had postsecondary education (ranging from trades school to college/university courses).

Housing

Thirty-three out of 60 (54%) of charts reviewed had housing details recorded. Of those 33, 12% were listed as homeless/precariously housed, 88% listed as housed. Among those housed, two thirds lived in various rental environments, one third were in Manitoba Housing, or a similar supportive housing environment, and a single individual indicated private home ownership.

Services Involved

In addition to DT/PD MyHT involvement, further services were specifically listed in the electronic medical record in 39 of 60 (64%) of the charts reviewed. Those 39 had an average of 1.3 additional services listed. The most frequent (72%) additional service listed was Employment and Income Assistance (EIA).

28 counts of	EIA services/EIA worker listed
7 counts of	Home Care/Home Care Nurse listed
5 counts of	CPP listed
3 counts of	Correctional services listed

2 counts of	Social assistance listed
2 counts of	Mental Health Services listed
2 counts of	Food Bank/Mission services listed
1 count of	HandiTransit services listed

(Note: Some charts had more than one additional service listed.)

Reason Referred:

Referrals are accepted from among the DT/PD My Health Team members. As the ISHP provider explained:

> *… geographical location would be a big factor, as my role is only in the Downtown/Point Douglas area, and those are the only clients that I can officially take on… the client's primary care provider has to be a stakeholder, and sign on with the My Health Teams, for them to be taken on…*

Within this network, the ISHP provider notes that referral primary come from the fee-for-service doctors on the MyHealth Team:

> *I would say that most of my referrals come from the fee-for-service doctors, and that's simply because they don't have that support… Whereas the Community health agencies that have social workers/outreach workers, they attempt to figure out the case on their own, or if they're having difficulty, or if it's something very complex, then they would refer to myself.*

MyHT members refer clients by letter (via the Electronic Medical Record system) or consult the ISHP provider directly. A specific referral form is not used, and practitioners can use their own discretion in referring to the ISHP program.

Among 60 charts reviewed, all were referred for some type of income security assistance.

- 46 (77%) specifically listed the need for income security assistance, including "help with finances" (24 charts), for "income insecurity" (11 charts), or "for help with benefits" (11 charts).
- 9 (15%) were referred for "help with housing",
- 3 (5%) were referred for "help with pharmacy related/medications",
- 1 (2%) referred for "help with identification", and
- 1 (2%) referred for "help with income taxes".

Although referrals come in with specific requests, the ISHP provider explains how an initial referral may expand to address a broader set of income security needs:

> *I would also say that some of the referrals that come in might be for something simple as getting Pharmacare, but through asking questions and... screening the clients... I find that other concerns - or other tasks clients might want to work on - come out... and then I might just expand on the referral.*

Chart review revealed that a small number of charts (5 out of 60, or 8.3%) had been referred incorrectly. These charts included referrals that did not have anything to do with income security (such as clients who needed psycho-therapeutic counseling supports, or medical devices – orthotics, etc.), and were re-directed as needed.

According to the ISHP provider, this kind of mis-referral was common in the early days of the ISHP program, as DT/PD MyHT members were emerging in their understanding of the program. Team learning was augmented through active engagement of the ISHP provider with DT/PD MyHT members, including the creation of an ISHP program information page for MyHT team members (WRHA/ISHP referral notice, undated). The end result has been more consistently appropriate referrals, which was also observed by chart review.

Duration of Encounter Note Involvement:

On average, clients engaged with the ISHP program for 5.36 months, with considerable variation, SD 4.44 months. The longest period of encounter note involvement was 16.7 months (within the 17 month period that chart activity was recorded), and the shortest was less than one month. When asked about duration of involvement, the ISHP provider collaborated these chart findings:

> *It can vary… because a client is essentially opened up to my program with that initial contact, so be it a first phone call… and even if I can't connect with that client the client is still open to the program… I try multiple phone calls, mailing the letter, and just giving that time frame, so it can be something as short as a few weeks, to clients that I've been seeing almost for a year.*

Approach to Service Delivery:

Overall, the ISHP program was developed to provide support and education around income security among My Health Team partners in the DT/PD area, and to collaborate and align services within EIA and non-profit income support programs (WRHA, 2016a). On a day-to-day basis, the ISHP provider emphasizes the program's main focus: working with clients to support their income security:

> *From my perspective, the program objectives are to help clients, more specifically from an income security, as well as health perspective. So be it with finances, obtaining IDs, improving access to healthcare, could be through food security, or even just connections with programs…*

Overall, the goal of the program is to help clients learn to manage these income security matters independently, and to help them realize the importance of keeping their financial matters in order. As the ISHP provider notes:

> *I think the end goal is independence… it's to promote independence, for example, having clients understand the importance of filing taxes, or having IDs, and maintaining that… So, filing taxes every year, maintaining photo ID or health cards for improved access, or simply continuing to see their primary care providers…*

In the spirit of promoting client independence and autonomy, the ISHP provider explained that the program helps clients with "system navigation", a service that is distinctly different from case management:

> *So, case manager is a basically a person that takes the lead on a client's situation, so someone that would be organizing their day-to-day needs, holding an order with the public guardian/trustee… kind of like a substitution decision maker… We don't case manage in our program.*

By not "managing cases" the ISHP program is freed up in terms of its day-to-day resources - which are limited with only one full-time staff person - and can provide service that assist and teach clients to manage their own cases. As the ISHP provider explains:

> *It's more short term, a lot of empowerment… trying to create that sustainability, so the importance of education, allowing the client to trial… For example, anyone can get a taxi and go from point A to point B, but if you teach someone how to use the bus, then at least they're not reliant on the taxis, or someone arranging taxis for them.*

Services Provided:

As an income security service, all charts detailed the various levels and types of services provided. The majority of charts (73.3%) included reference to specific income support services. More than half (61.7%) outlined associated support service needs, like housing, transportation, medication and food access. Half (50.0%) had notes specifically

outlining budgeting supports provided: how to save, how to deal with debt, and managing expenses. And where the ISHP program could not meet the needs of clients, just under half (45.0%) of the charts outlined referrals to outside agencies and supports.

Table 2: Service Encounters Among Charts Reviewed (n=60)

Service Need Identified/Addressed	Number (%) of Charts with Service Need Identified/Addressed	Average number of Encounters for given Service Need per chart
Income Services:		
Unemployment and Income Support	42(70.0%)	4.9
Identification	20 (33.3%)	2.0
Income Taxes	26 (43.3%)	2.8
Any Income Services	**44 (73.3%)**	
Associated Services:		
Housing	32 (53.3%)	3.4
Pharmacare/Medication Access	19 (31.7%)	3.0
Food Access	12 (20.0%)	1.3
Transportation	5 (8.3%)	3.2
Any Associated Services	**37 (61.7%)**	
Budgeting:		
Budgeting	**30 (50.0%)**	2.5
Referrals:		
Referrals & Contacts	**27 (45.0%)**	3.3

Making Contact:		
Making/Attempting Contact:	**57 (95.0%)**	4.0

- 73.3% of charts contained encounter notes regarding any income support services.
- 61.7% had encounter notes specifying associated support services needs (including housing, transportation and food access).
- 50.0% of charts had encounter notes detailing budgeting support services offered.
- 45.0% of charts included some reference to outside program referrals, or encounters with outside service providers.

On average, clients had nine encounters (based on number of encounter notes) with the ISHP during the program period reviewed. There was considerable variation in the number encounters, SD = 10, with the greatest number of encounters recorded as 45, and the lowest number of encounters recorded as 1.

Encounters occurred in various ways. Many encounters occurred face to face, across a variety of locations. One subset of encounters - specifically those focused on 'making contact' with potential and ongoing ISHP clients – occurred primarily via telephone and/or letter. According to the ISHP provider, face to face and phone contacts with clients occur on a roughly equal basis, with an additional portion of service time spent meeting with and contacting other agencies:

> *I'd probably say we can do a third phone connecting, a third would be face-to-face or direct contact, and then a third would be connecting with others... other programs, other agencies, or even that systemic change piece.*

Income Services (73.3%):

The most common service need was for any kind of income support, notably EIA, EI, and CPP programs, and when this included completion of income taxes and identification procurement, this service was provided in 73.3% of chart analyzed. This is consistent with the ISHP provider's observations:

> *I'd say most of the clients that I see, come and see me in crisis, so they will be: "I don't have funds for this...", "I can't purchase my medications...", and it's kind of, "I need this fixed now"... And once this concern is resolved, then we don't necessarily follow-up, nor do the clients necessarily want follow-up as part of that resolution. I'd say that's the majority of my clients.*

Unemployment and Income Support Services

Assisting clients with Unemployment and Income Support services (most commonly, EIA, EI, CPP, and Social Assistance) was noted in 70.0% of charts, and required an average of 4.9 encounters per client, with the greatest number receiving 19 encounters, and the lowest number receiving one. For example, a set of five paraphrased encounter notes for one client illustrate the complicated process that a person might wade through to determine if they qualify for social benefits:

> Client on EIA and has applied for EIA disability, but was denied, signed consent form for ISHP worker to contact EIA re: disability? / EIA worker expects ongoing denial of EIA disability as long as there are other employment opportunities, recommends Society for Manitobans with Disabilities / Client planning to attend initial vocational rehab through SMD / Client appealing EIA decision, client struggling to connect with SMD / Client dissatisfied with EIA, has updated address with SMD (after house fire), awaiting appointment with SMD

Another set of 12 paraphrased encounter notes reveals the back and forth 10 month process that the ISHP provider charted regarding one client in pursuit of a Canada Pension Plan Disability and EIA top-up:

> Met with client to discuss CPP benefits / Completed applications for CCP and EIA / Denied / Met to discuss how to appeal / CPP documents gathered for appeal / Letter sent to client for follow-up / CPP appeal sent / CPP appeal in process / Attended EIA intake with client / CPP approved / CPP disability and back pay received by client / Met re: application for EIA top up

Clearly, accessing social benefits is neither simple nor intuitive. In this case, one client describes his frustration with an assistance system that does not seem supportive or helpful:

> *Because it seemed like every four or five months, or maybe it seemed like three months… then they do the same thing over, and over, and over, and over… cutting my disability, so then I always have to go through the thing over, and over, and over… and then sometimes I think, maybe I don't need it, it's too much trouble, always to be hassled with… and so then that's why I usually just sometimes like, run away…*

The frustration faced by clients is evident, and it is easy to see how individuals that need income assistance may fail to get it due to systemic barriers. The support and guidance of the ISHP provider played a key role in overcoming these barriers:

> *Well [ISHP provider] did lots, he helped me lots. As soon as he jumps on the phone he talks to the people, and then he gets back hold of me and says, "All the things are fine now"…*

One client poignantly expressed his multi-layered combination of feelings – frustration, help-seeking, and relief – all related to one encounter with the provider:

> *Cause what was that…? Almost a week and a half ago that social assistance, they cut my disability, so I came and seen [ISHP provider] and I showed him that letter. And then [ISHP provider] made a phone call over there - cause he's an associate with [Dr.X] - so he had social assistance overturn that thing! So now I will be getting back onto my regular budget.*

Identification

Often, clients needed help acquiring necessary personal identification documents (health cards, SIN and treaty cards) prior to completing their applications to these, and related, programs, and this was specifically noted in 33.3% of charts, for an average of 2.0 encounters per chart. For example, a set of seven encounter notes specifically related to this category contained the following details:

> Birth certificate paperwork completed / Status application paperwork completed / Assistance with making connections re: ID procurement and getting necessary supportive document / Further guidance through process of acquiring IDs / Client acquired MPI photo ID / Client in process of getting photos done for ID / Client working on getting a guarantor / Complete and mail all paperwork

Client interviews highlighted the importance of acquiring identification documents; as one participant noted:

> *[The ISHP provider] asked me about identification, and then he said, "That's no problem, I can arrange that right away". And he made some calls, and then maybe within two to two and a half weeks – first I went to this place to take a picture – and then two weeks after that, I had a picture ID.*
>
> *I have more peace of mind now, because now I know that I have those… documents.*

Income Taxes

Filing up to date income tax returns is a key part of accessing income security programs and tax-related income benefits, and specific reference to this activity was noted in 43.3% of charts, with an average of 2.8 encounter per chart. In one example, the work involved in filing income taxes was considerable for one client with visual impairment; the

ISHP provider's case notes illustrate the sequence of 9 encounters that occurred in this regard:

> Taxes not done in almost 20 years, request form for CRA to access tax slips for past 10 years / Follow-up re: tax slips, have not arrived / Client to re-request tax slips / Slips received / Client to arrange tax appointment / Client needs assistance with calling community financial counseling services, assistance provided, appointment arranged / Awaiting assessment of 2016 tax year / Client calling with questions re: mail from Canadian Revenue Agency / ISHP to visit home and review CRA mail

Client interview also revealed the role of tax filing in the overall network of services provided:

> *So [ISHP provider] has been helping me, and then part of that too, he helped me out with receiving all my tax papers, so he got all that information and I did all those taxes.*

Associated Services (61.7%):

Housing, pharmacare/medication access, food access, and transportation are related key areas where clients required assistance with acquiring basic necessities. 61.7% of charts included reference to any one of these associated services.

Housing

Housing was frequently noted as a key service need, and was found to occur in 53.3% of charts, with an average of 3.4 encounter notes per chart. In some instances, secure housing access requires multiple encounters with the ISHP provider, Manitoba Housing (subsidized provincial housing), and S.A.M. Management (a non-profit property

management corporation that supports affordable housing), as this set of eight paraphrased excerpts from one chart's encounter notes reveals:

> MB housing application form / SAM management application completed, awaiting response / follow up MB housing application process, phone number update, on waitlist for MB housing / awaiting SAM management response, ISHP to contact SAM / follow up, no reply from MB housing or SAM, client to call / MB Housing requires support worker letter / ISHP assistance with application, ISHP letter of support / client looking for apartment, still has not heard from MB housing, discussed assistance re: free furniture

Access to housing also had particular significance for clients themselves:

> *I had no place to stay, I was something like, how do you say that? Couch surfing… Now I got a home too to stay now. Yes, cause [ISHP provider] made some phone calls and some arrangements, so then I went to a meeting to see a lady there for housing. She showed me a place, and I was referred to that place. So that's where I am now.*

This was especially important to one client, given the personal risks of unsecure housing:

> *Especially, you know, there's a lot of bad things going on, on the street now. So now today, as soon as it hits seven o'clock, do not go out… you want to be in your place.*

Having a home translated into safety for this one client:

> *I feel good where I am, at the level I am. I have more security, like now that I have my own place, nobody can say, "Get out", or things like that, because I have my own place, I'm in the door before seven, and I can lock it and I don't really bother with anybody.*

Pharmacare/Medication Access

31.7% of charts indicated some attention to pharmacare application and/or medication procurement, with an average of 3.0 encounters per chart. One chart with four paraphrased encounter note excerpts, written by the ISHP provider, revealed the steps one client needed to take to get access to much-needed medications:

> Having difficulty affording medications / Pharmacare application filled out /Client to go to Mount Carmel Clinic re: medication installment payment plan / Client able to purchase meds as CPP funding received

Food Access

20.0% of charts indicated food access needs, for an average of 1.3 encounters per chart. In some instances, this simply involved helping clients to connect to food bank services - one client appreciatively describes such support:

> *Yes, and also too, [the ISHP provider] also helped out in the food bank. He called there, and he set up an appointment – like sometimes they make you wait – but when [ISHP provider] made a phone call there, they said 'We'll see you in about an hour'. So then I went down there and I gave them my name, and they said they had the stuff already packaged for me, and all ready to pick up. And that was like a big surprise for me, like it helped lots.*

Transportation

8.3% of charts included some reference to assistance with accessing transportation, for an average of 3.2 encounters per chart. One client explained how this support made it possible for him to attend his income security appointments with greater reliability. When asked if bus tickets made a difference, the same client replied:

> *Yes, lots… He helps out with transportation too… I say I'm going down to that social service office, and [the ISHP provider] gives me a couple of bus tokens for there and back… So you don't have to… walk back and forth, or even try to find transportation.*

Budgeting (50.0%):

Services and supports relating to budgeting and financial literacy was specifically noted in 50.0% of charts, for an average of 2.5 encounters per chart. This category

primarily involved banking access, as well as strategies for cost reduction, budgeting and savings. In two charts this also involved enrollment in Money Matters, an educational classroom-based module to systematically teach budgeting techniques. (Enrollment numbers were low because this module was just getting started at the tail end of this chart review.)

This ISHP provider noted that most clients came to the ISHP program with pressing income security needs. Once these needs were resolved, some clients stayed engaged in the program to work on their budgeting skills:

> *Some… clients do continue, and want to improve their financial situations, and so they may attend some of the Money Matters groups, they may continue working with me to create budgets, or address their current budgets, or to explore options how they can lower their costs or increase savings.*

Summarized encounter note details illustrate the importance that budgeting skills played in helping clients enhance income security. For one client, the provider's notes illustrated how involved simply learning to manage banking errors and to reduce costs can help with income security:

> Issues with banking mix up, client met with bank / Discussed budgets and plan to reduce phone bill to cut costs / Discussed banking error, client to follow-up / Follow-up with client re: banking error

Another set of paraphrased encounter notes illustrate the step-by-step process, as the ISHP provider assisted one client to manage her financial assets and negotiate her debt:

> Request for client to note down income and expenses before next appointment / Client has bank account and direct deposit set up / Client has consulted with 4 pillars regarding her debt and has considered bankruptcy / Planning for her future and setting up wills / Negotiating with creditors to pay reduced amount

For some clients, budgeting assistance played a considerable role in their engagement with the ISHP program. The following set of comments from an ISHP participant describes how the ISHP provider helped his family to learn how to set targeted goals, and to manage money more effectively:

> *[ISHP provider] asked us questions, and we wanted to do these things, but we were hesitant about doing them. And a lot of times when we met him, he'd say, "What do you really want to do?" and we'd break it down… And he'd give us a manageable goal, and then we would accomplish it. The same thing with the hearing aides; we accomplished that. We wanted to do the roof for a number of years; we accomplished that. So we've had these physical goals that we've set for ourselves and we've met them. So that's been quite a blessing. It's been really beneficial that we've done this … [ISHP provider] has been quite a beneficial impetus in getting us to physically do that.*

In one particular case, the greatest budgeting support occurred where the ISHP provider helped one client identify that she did, in fact, have adequate resources:

> *Yes, he's been very positive. He wrote it all out… a rough schedule of our expenses and he said, "Look you won't even touch your income, if you can just take it out of [spouse's]… and you'll still have this much left!"*

Some of the participants found the budgeting supports to be most valuable in helping them to understand complicated financial offers:

> *Yeah, it's been very good in that way because we've learned more about the various vehicles that we can take advantage of. A lot of these, nobody explains that they are available, and if you understand that they're there, you can take advantage of them. Your so-called financial advisor, at the bank, a lot of times they don't give you the information…*

The budgeting support helped these clients not only to understand various financial vehicles, but also to use them appropriately to help improve their financial situation:

> *I know it takes a lot of time and effort to understand some of these of things, and a lot of people feel that it's just a kind of waste of time…. But [getting help] was very good*

> *because there are a lot of things that you don't understand because they are open-ended, and that you can negotiate and get better personal deals.*

Participants noted that one of the greatest issues that comes up with money is the worry and anxiety about not having enough, especially with aging:

> *Well, there are so many programs that add to this atmosphere, even commercials you see about older people, seniors who are running out of money…. [So] I always feel, with every cent I spend… it's like…how am I going to replace that?*

The ISHP program made a reportable difference in reducing these anxieties:

> *Well, yeah, it was good because we learned a lot about resources, and … it would allay… our fears about… we wouldn't have enough resources.*

Referrals Out (45.0%):

Considerable reference to referrals to other associated support services and connections with other agencies was evident on chart review. 45.0% of charts indicated services provided in regard to referrals and making contacts, for an average of 3.3 encounter notes per chart. Referrals are a regular part of ISHP program services, particularly where a client has needs beyond the program itself. As the ISHP provider explains, sometimes, clients can be best helped through appropriate referrals:

> *For the most part… if the client is with the My Health Team for Downtown/Point Douglas, and they would like to work together, then we continue to work together. And if it's something I can't help with, or if it's something not my control, I connect them to resources or a program that can provide initial supports.*

Among the charts reviewed, referrals to a range of service categories were observed, including: mental health services (Canadian Mental Health Association, Assertive Community Treatment program), health services (community health clinics,

hospital discharge team, geriatric assessment program), financial and debt services (Community Financial Counseling Services, SEED Winnipeg), vocational rehabilitation supports (Society for Manitobans with Disabilities), food security (Winnipeg Harvest), and legal/police services (Wpg Police Victim Services, John Howard Society).

Making Contact (95.0%):

Although not specifically an income security service of the ISHP program, the activity of making contact with clients deserves special mention. Among the detailed chart review of 60 client files, 95.0% of charts had encounter notes that described attempts by the ISHP provider to engage with clients, for an average of 4.0 encounters per chart.

Specifically, 'making contact' refers to occasions where the ISHP provider initiated contact with clients (via telephone calls or letters) to arrange appointments, re-schedule appointments, or request follow-up. The ISHP provider explains how making contact is an important first step in establishing a relationship with clients:

> *Most of the time, if a provider sends in a referral, I attempt to connect with the client. If the client's interested in working, we would set a face-to-face meeting, or if it's more convenient, over the phone, to do an assessment…*

Attempts to contact will generally continue for three times by telephone, and also once by letter, at which time the onus is on the client to connect with the ISHP provider if needed. The ISHP provider emphasizes that client's autonomy is thus preserved:

> *There are times when I am unable to connect with the client and that's through multiple phone calls, mailing letter… at which point I see if the client's interested… because it's a completely voluntary program.*

Attempts to contact clients may be frequent, and are generally brief. However, in some cases, the cumulative number of attempts to contact can add up considerably. For example, one chart contained a total of 16 encounter notes excerpts detailing attempts to make contact. The paraphrased notes that follow help to illustrate the huge effort that the ISHP provider put into simply making contact with program clients. Although it may seem that "making contact" predominates interactions with this client, these encounter notes represent 39% of all contacts made with this client, the remainder of which involved helping the client with her EIA application (32%), accessing needed medications (17%), and housing access and housing safety (22%). Nonetheless, this income security work did not occur without concerted and ongoing efforts to stay connected:

> Client asking for appointment rescheduling as not feeling well today / Client calling to reschedule appointment / Missed scheduled appointment / Attempt to call client, no answer, left a message / Attempted to call client, no answer, writer unable to leave a message / Letter to client / Attempted to contact client to follow up re: apartment, no answer, writer unable to leave a message / Writer attempted to contact client to follow up with regards to EIA, no answer, writer was unable to leave a message / Letter sent to tell client "unable to connect with you" / Attempted to contact, not answering phone / Writer attempted to contact client to follow up from last visit, no answer, writer was unable to leave a message / Attempted to contact client over phone, no answer, cannot leave a message / Client appointment rescheduled / Attempt to contact / Attempt to connect, no answer, unable to leave voicemail / Writer attempted to contact client via text and phone / Writer unable to leave voice mail for client but text was sent, writer to wait for reply from client and/or attempt to follow up again

This example represents the importance of providing a service that meets clients where they are at, and does so in a non-punitive manner. One client for example, had the regular habit of moving out of town and losing touch with the program. This however, did not stop the ISHP provider from keeping the client's file open, and responding to requests for contact from the client when he returned to the city.

Client Experience:

In addition to receiving services specific to their income security needs, program participants recounted satisfaction with the ISHP program. One client who had needed a lot of support to feel confident about his financial security, expressed gratitude that he was able to learn a lot more about the services and resources that were available in the community:

> *I'm glad we had this opportunity… I want to give great bouquets to [ISHP provider], because he's been really wonderful in our life, we're quite happy that he's there. All these other aides that we were given, it's been very, very, very, useful. I feel quite enriched. It's removed a lot of anxiety… and that's quite beneficial in our life.*

Another client recognized the difficulty that future participants may feel in talking to the ISHP provider about personal financial issues, encouraging them to reach out for help as needed:

> *People should try the program. There's a lot of helpful things that [the program] can help the community, and the people with. Especially if the people are having hard times, maybe they should see people like [ISHP provider]…*

One client had a particularly poignant way of describing how the ISHP program (and the ISHP provider) had transformed his life through greater income security, and through an added essential component - 'respect':

> *I feel a lot more better, like say I was here (motions with hand about five centimetres above table), like with no IDs or nothing… and now I have everything like a big jump, now I'm way over here (motions about 60 centimetres above table)… I have all my IDs, I even have my social insurance number too, and a home, and I am treated well, like with dignity, and respect…*

Overall, clients did not recommend improvements or changes to the way that income security services had been delivered to them. Their only critique comments included regret that others might miss the chance to engage in the ISHP program:

> *…they offered the classes, and then the numbers kept dwindling… and I don't know why, because the information was just so important…I think it's unfortunate that people maybe think that they're too busy with other aspects of life…*

Regardless of this critique, it is more likely that poor attendance was due to chaotic lifestyles and income insecurity itself, rather than a lack of interest.

Inter-agency Connections:

In addition to those referral supports noted in the chart review, interviews with the ISHP provider also highlighted the key role of inter-agency relationship building. The ISHP provider pointed out that these relationships were formulated in earlier career endeavors, but expanded more significantly within the ISHP program:

> *I would say that the relationship building started in my previous role as a social worker in Access Downtown… which I think helps with my current role… Now I'm just using those skills that I learned there, and replicating those in this role… meeting with the different buildings, the different EIA offices, different community partners…*

The ISHP provider emphasized that relationships are key to effective operation of the ISHP program:

> *I'd stress to anyone that asks, that the relationship-building component is very important in this role… the importance of collaboration.*

By working collaboratively, the ISHP program developed linkages with similar programs in the community to reduce replication, improve the efficiency of referrals, and support advocacy where needed:

> *Relationship-building …is very important, like meeting with EIA offices, explaining our role, how we could better work together, which in turn, would help the clients… or it could be that advocacy piece… it could be just getting to know… different resources in the community.*

Of particular significance is the shift to having the ISHP provider and the DT/PD My Health Team sitting on the EIA medical panel, which helps to decide eligibility for medical benefits for EIA participants. The ISHP provider notes that this involvement has cumulative gains not only for clients, but also for health care providers completing paperwork on behalf of those clients:

> *To this day we are assisting in reviewing and providing consultation for EIA managers to help determine eligibility for disability status for EIA. An unintended success from our assistance on the medical panel is that we are able to connect with physicians in the community to help build their capacity in completing the forms properly. In turn this decreased the denials of incomplete EIA disability packages.*

The outcomes of this collaboration help to make the ISHP program more effective, since one of its goals is to support "family physicians and patients through case management and provision of income management" (WRHA, 2016, p.5). This is reflected in reports by the ISHP provider of improved service referrals and enhanced physician capacity:

> *Since the inclusion of the ISHP and the MyHT on the [EIA Medical] panel it has been communicated to me that appeals are decreased, appropriate cases are being approved and there is capacity building with the physicians who are completing the forms.*

Inter-program collaboration is also ongoing though the program's participation with Clients in Common, a committee "initiated to help make collaboration organic", which aims to foster authentic encounters and unplanned collaboration between groups. As the ISHP provider explains, this interdisciplinary team works to find solutions to client problems that can't easily be solved in isolation:

...it consists of managers meeting once a month from various programs (community mental health, home care, public health, primary care, MyHT, EIA, MB housing). The point of the committee is to essentially "get to yes" and to resolve barriers that the system is creating for clients. The end goal for the committee is have these programs to collaborate together and breakdown barriers organically...

Shifting Role of ISHP Provider:

As a result of this heightened collaboration, there has also been a concurrent shift in the role of the ISHP provider during the first 18-20 months of program activity. Initially the ISHP provider noted that he spent about two-thirds of his time in front line work (which includes direct service delivery to clients via counseling, coaching, service brokering, and advocacy assistance) and one-thirds of his time engaged in intra-agency contacts. Over time, this role shifted to a 50:50 division, as the role of the ISHP provider became more specialized:

This is the newest way that my role has evolved. I would say my role might be shaping to 50-50 split.

This shift does not mean that ISHP clients are getting fewer services; rather they are getting more efficient services:

In my opinion there is a larger shift from front line work to working with agencies... however, in the end the clients do not lose on benefits.

The ISHP provider also spends more of his time in training other providers in income-security-support skills:

With my role being specialized I will be helping new social workers build their capacity within their community areas with regards to income security... through a new initiative... Social Workers in the Community. This has resulted from the numerous requests from managers and programs across the WRHA requesting to meet... regarding the ISHP role and the successes that have come as a result.

This shift in the role of the ISHP provider illustrates the collaborative and team-building skills needed "for the development and delivery of income security focused interventions", which "support and address the health needs and priorities of the network's patient population in liaison with MyHealth Team partners" (WRHA, 2016b, p.2). Rather than a case manager, the ISHP provider instead approaches his work with the intent of a collaborative innovator.

Program Evaluation Goals:

The ISHP evaluation committee was involved and engaged in the process evaluation throughout the data collection process. The committee expressed satisfaction at the summaries provided throughout, and discussed further evaluation goals. In particular, the evaluation committee professed interest in gathering feedback from among member providers of the DT/PD MyHT, specifically in terms of how the ISHP program meet their need to address the income security needs of their patients. Feedback from allied service providers was also considered important for future assessment and enhancement of the ISHP program.

> *In my opinion I think it would be important to interview the Downtown Point Douglas MyHT as well as the stakeholders to bring in their input on the ISHP role. This would bring in different experiences and perspectives. I would also suggest conducting interviews with EIA to bring in the perspective from management about the ISHP, as well as the frontline staff who have worked with [me] in the ISHP role. These experiences of mutual clients could paint a picture of what happens behind the scenes.*

Cost savings were further discussed as an area of evaluation potential. As described by the ISHP provider, shifting one client from expensive stretcher services to more cost-

effective forms of transportation highlights the potential of measuring cumulative financial savings for the whole system:

> *There have also been cases where... we have been able to reduce spending on stretcher service. These types of savings could also be measured quantitatively in future evaluations.*

Overall, one of the key messages from the ISHP evaluation committee was the importance of the ISHP provider's role as being one of service brokering, rather than case management. The team cautioned that if case management had been the primary method of service delivery, the ISHP provider would have remained bogged down in process minutiae. Rather, by encouraging and supporting autonomy, the program had been able to see a large number of clients and connect them to appropriate resources, and also to intermittently provide assistance in accessing the labyrinth of service delivery models, where appropriate.

In additional to valuing the sheer number of clients that the ISHP provider was able to engage with over the first year and a half of ISHP program operation, the evaluation committee was also appreciative of the nature of intra-agency contacts that had been established and nurtured throughout this same time period.

Chapter Six: Discussion

The goal of this research was to conduct an exploratory, retrospective process evaluation of the first operational year of the Income Security Heath Promoter (ISHP) program operating out of the Downtown/Point Douglas MyHealth Team (DT/PD MyHT), Winnipeg, Manitoba.

This program operates within a collaborative, interdisciplinary primary care network – called a My Health Team in Manitoba – which is a model of primary care service delivery considered most likely to provide equitable health services and address the social determinants of health (Health Council of Canada, 2009; Glazier, Zagorski & Rayner, 2012). As income is a predominant health determinant, this program aimed to improve individuals' income security as a means to improving their overall health, a link that multiple social research studies support (Brownell et al, 2016; Dutton et al, 2018; Forget, 2011, 2016; Ng & Muntaner, 2015).

In order to understand this novel program better, this research looked at the ISHP program from multiple perspectives, utilizing a mixed-methods process evaluation, to capture not only the activities of the program, but also to incorporate the experiences of participants themselves (WKKF, 2017; Zang & Creswell, 2013). Unlike outcome evaluations that assess project deliverables, a process evaluation seeks to understand the

functioning of an implementation, and assesses how successfully a program is delivered according to its design (Moore et al, 2015; Saunders et al, 2005). For emerging programs like the ISHP program, a process evaluation is a useful tool in understanding a complex public health intervention, and determining how it may later be replicated in similar environments (Patton, 2012). This research was completed within the context of a formal evaluation group which also had a strong interest in illustrating the day-to-day activities of the ISHP program.

To evaluate the ISHP program, this research considered a number of key questions. It first looked to understand the characteristics of the program and the clients that engaged with it. Secondly, it sought to understand how the program was delivered, and the nature and quantity of the services it provided. And finally, it aimed to interpret these first two questions through the narratives of program administrators and participants themselves.

This formal process evaluation allowed the evaluator to take a critical look at the quality or value of everything the ISHP program did in its first 20 months of operation, including program content, program implementation, and unique program features (Moore et al, 2015).

Program Participants:

Initially, this work considered the ISHP program's population base and population served, because knowing who your patients are and understanding their unmet resource needs is an important first step towards helping them (Berkowitz et al, 2016; CMA, 2013a; Naz et al, 2016). The ISHP program was created to offer income security services to

medically complex residents in the Downtown and Point Douglas community areas, where the combined scores on both material and social deprivation has been found to be the lowest in Winnipeg (CHI & WRHA, 2015c).

Between January 7, 2017 and September 7, 2018 (20 months), 415 clients engaged with the ISHP program. Chart review revealed that the ISHP program served predominantly unemployed (78%) male (67%) clients, with an overall median age 53.78 years and with signs of medical complexity and social deprivation. ISHP clients had a median of 5 medical conditions, and a median of 5 medication prescriptions, combined with notable income insecurity concerns: 78% of clients were unemployed, 48% had less than a grade 12 education, 12% were precariously housed, and 72% were engaged with income and employment assistance services.

The fact that the ISHP program offered income security services to clients in the context of an interdisciplinary team is noteworthy. Not only are patients with the greatest number of social complexities more likely access health care through team-based primary care clinics (Katz et al, 2016), such clinics are also more likely to have the means to address the social determinants of health – including poverty, and access to safe shelter and housing (Health Council of Canada, 2009).

Program Delivery:

This program was delivered by a single full-time staff person who was responsible for the “development and delivery of income-security focused interventions… to address the health needs and priorities of the [DT/PD MyHT] network’s patient population” (WRHA, 2016b, p.2). At the initial onset of program delivery, the ISHP provider spent

about two-thirds of his time in front line work, including direct service delivery, counseling, coaching, service brokering, and advocacy assistance, and about one-third of his time engaged in intra-agency contacts. Over time, this role shifted to a 50:50 division, as the role of the ISHP provider became more specialized to include to a greater proportion of collaboration with income security agencies. Throughout this, service delivery to clients was maintained through a model that looked to empower clients, "allowing clients to trial", and working "to create that sustainability" which would allow clients the autonomy and skill to address their income security needs independently (ISHP provider interview).

Referrals to the ISHP program were targeted from among MyHT membership, thus limiting reach within the DT/PD community area, yet appropriate to stated ISHP program service delivery goals. Although referrals were occasionally inconsistent (8.3% of charts reviewed) with program service delivery parameters, especially during early program operation, accuracy was enhanced when referral criteria were clarified among members of the MyHT (WRHA/ISHP referral notice, undated). Once early misconceptions were corrected, referrals were overwhelmingly appropriate and included 77% referred for income security assistance, 15% for help with housing, and the remainder (8%) for help with medications, income taxes and identification procurement.

Referrals often came in to the ISHP program with urgent specific requests, such as "needs help with housing", "needs help with benefits". The majority of clients (61.2%) received help with these urgent requests and were closed to the program (with the option to re-open later as needed), but a remainder (38.3%) stayed open while issues were being addressed, or longer in some cases, to address "other concerns" or "other tasks the clients might want to work on" (ISHP provider interview). This approach meant that clients were

offered supports tailored to their specific needs. This is important, since a combination of attitudinal and structural barriers tends to hamper the medical system's responsiveness to social determinants of health (Bloch et al, 2011). Moral perceptions of poverty (Loignon et al, 2018), unwelcome practice environments (Wen et al, 2007), and inflexible practice rules can all interact to make access to services difficult for disadvantaged clients (Bloch et al, 2011).

To overcome these barriers, the ISHP program maintained flexibility of access - including open-ended initial assessment, multiple attempts at forming client connections, non-punitive reopening of cases, and referral to outside supports and services, as needed. A client-centered approach was maintained by beginning with client needs and assessing each for their own particular answer to the question, "Do you have difficulty making ends meet at the end of the month?" (CFPC, 2016). Most charts (95%) included documented attempts by the ISHP provider to engage with clients - by phone, in person, or by mail – to arrange contact, re-schedule appointments, and to request follow up. This approach was aligned with service delivery goals of "meeting/reaching patients where they are at, in consideration of their social-economic means" (WRHA, 2016a, p.6). Although it may sound time consuming, these encounters took up relatively little time, and the flexibility they provided allowed the ISHP program to adapt to the predominantly crisis-based needs of the target population.

Program Services:

Based on "evidence that individuals living in poverty benefit from case coordination", the ISHP program was designed to "efficiently align patients and their

providers to services and required resources to effectively address issues arising from the socio-economic status of the patient population" (WRHA, 2016a, p.6). Providing income security support was the primary goal of the ISHP program, and is consistent with the delivery of a similarly targeted income security program run out of St. Michael's Hospital family health team in downtown Toronto, which during its first year of operation helped patients increase their income (77.4% of all encounters), reduce their expenses (58.6% of all encounters) and improve their financial literacy (26.5% of all encounters) (Jones et al, 2017).

As the St. Michael's program recognized, primary care is often the ideal place to address poverty at an individual level, especially as this is the place where patients may first reveal their difficulties and struggles with the determinants of health (CFPC, 2015; CMA, 2013a). However, many primary care practitioners cite time constraints and resource limitations as key obstacles in providing support (Berkowitz et al, 2016). Such problem were also apparent to Winnipeg's downtown primary health care team, where DT/PD MyHT, providers "continually [identified] difficulties following up with their complex patient population" and voiced struggles with system navigation and with making links to social services. (WRHA, 2016a, p.1).

In response, the ISHP program was developed to assist members of the DT/PD MyHT by providing income security supports to eligible referrals from within a targeted inner city community. On average, clients engaged with the ISHP program for 5.36 months (SD 4.44), with considerable variation ranging from 16.7 months (within a 17-month chart activity period) to less than one month. More so than duration, the number of encounters illustrates the intensity of service use among clients. Complex social problems are not easily managed in short patient visits, and attempts to do so without resources can

be frustrating experience (Popay et al, 2007). On average, clients had nine encounters (SD 10.0) with the ISHP during the program period reviewed. As with duration of involvement, there was also considerable variation in the number of encounters per client, ranging from as high as 45 encounters for one client, to as low as one encounter for others.

This high level of encounters required to address income security needs among DT/PD MyHT clients highlights the need for a specialized service like the ISHP. The most frequent type of service provided was for any type of income support, as identified in 73.3% of charts reviewed. An average of 4.9 encounters occurred per client, which included help navigating income services, directing applications to suitable agencies, and direct communication with social services where needed. Among this category of service provision, unemployment and income support services were the most frequently provided (among 70.0% of charts), in addition to income tax filing support (43.3%), and identification procurement (33.0%).

These income security services offered by the ISHP program helped clients to overcome the real and perceived barriers to social service supports, assisting them with access to identification cards, ensuring they'd completed up to date income tax returns, and helping them find their way though the complicated maze of income security vehicles. Participant interviews and chart reviews poignantly illustrated the seemingly insurmountable barriers clients face in accessing supports: "sometimes I think, maybe I don't need it, it's too much trouble, always to be hassled with, and so then that's why I usually just sometimes like, run away" (ISHP program participant interview).

In addition to helping clients access specific income assistance supports, the program provided help in accessing associated support services (61.7%), primarily safe housing (53.3%), medication access (31.7%), food access (20.0%), and to a lesser extent,

transportation (8.3%). The program's predominant focus on assisting clients to access housing supports (53.3%) was an appropriate response to known needs among renters in the DT/PD communities, where forty-five percent of renting residents spend more than 30% of their income on housing (CHI & WRHA, 2015a; 2015b). Housing support included assisting with connections, and providing assistance with Manitoba Housing and S.A.M. Management applications.

Given their medical complexity - ISHP clients had a median of 5 medical conditions, and prescriptions for a median of 5 medications - assistance with affordable medication access was a key area of associated service provision, as noted in 31.7% of charts. Medication support often involved helping clients complete Pharmacare applications, or access essential medications. Food (20.0%) and transportation (8.3%) support was also essential, and involved helping clients to access Winnipeg Harvest supports, and the provision of bus tickets for social service appointments.

The importance of these providing these supports is vital, since although well intentioned, many primary care providers lack familiarity with social security systems and do not have the time to research and understand local community supports (Bloch et al, 2011). Although the Canadian Medical Association recommends that databases of community services be developed and provided to primary care providers (CMA, 2013a), the ISHP program took this resource navigation one step further, in the form of a specialist interpreter of community services. Not only did the ISHP provider help clients to optimize their income benefits, he also assisted with "income security pertaining to food security, budgeting skills with limited finances, [and] housing", as consistent with initial proposal objectives (WRHA, 2016a, p.3). The impact of such service supports was keenly felt by ISHP program participants, as they were not accustomed to receiving a welcome in

social service environments: "that was like a big surprise for me, like it helped lots" (ISHP program participant interview).

Understanding how to save money and reduce expenses can also contribute to income security. As such, the ISHP program also provided support in the development of budgeting skill and financial literacy (50.0%) among clients, including educational group classes, referral to debt management supports, and verification of bank accounts and the ability to receive direct deposit payments. This tangible support helped increase client confidence and autonomy in achieving financial goals, by "break[ing] it down" and focusing on "a manageable goal" (ISHP program participant interview).

In terms of system management and work flow, it is also important to note that during the first 20 months of program operation, the sole full-time ISHP provider engaged with 415 clients, without an ongoing wait list. This speaks to the responsiveness of the program and the provider, and his ability to quickly assess individuals and engage with them as needed, at a rate of approximately 20 clients per month.

Participant and Provider Insights:

Program evaluations enhanced by the voices of program participants themselves, reveal complex program components not visible through standard evaluation methods (Costantino & Greene, 2003; Riley & Hawe, 2005). This approach is consistent with the principles of a narrative medicine approach, which includes medical evaluation informed by story, as first established by Charron (2007). To enhance patient-centered care, medical practitioners may infuse their "clinical practice with the narrative competence to recognize, absorb, metabolize, interpret, and be moved by the stories of illness" (Charron,

2007, p.1265). By listening to patients and inviting them to provide their own account of their illness (or income security experience), care providers may enhance their "ability to understand the patient and what he or she is experiencing" (Rosti, 2017, p.S3).

This process evaluation allowed for client voices to infuse and illustrate the description of the program itself. While chart review quantitatively described the proportion of clients that received assistance in each key service area, qualitative interview gave voice to the experience of receiving such services, including a sense of relief, "dignity, and respect" (ISHP program participant interview). Client interviews revealed the consistent nature in which support from the ISHP provider was available to them: "the [provider] made a phone call over there"; "the [provider] has been quite a beneficial impetus"; "and then he said, 'That's no problem, I can arrange that right away'"; "he's been very positive"; "so, the [provider] has been helping me"; "the [provider] made some phone calls and some arrangements"; "getting help was good"; "I want to give great bouquets to [the provider] because he's been really wonderful in our life"; "[the provider] did lots, he helped me lots"; "As soon he jumps on the phone he talks to the people, and then he gets back hold of me and says, 'All the things are fine now'" (ISHP program participants). These comments are important to consider, because they reveal the relationship between the provider and the client is in and of itself and important part of service delivery. For clients who had previously experienced income services as punitive, unhelpful and complex, a noted appreciation for the supportive nature of their relationship with the ISHP provider was clearly expressed.

The interviews with the ISHP provider also revealed an interesting qualitative change in the delivery of program services over time. A shift not observed through chart review, the ISHP provider explained how service delivery had changed from primarily

one-on-one client services, towards an increased emphasis on interagency collaboration and relationship building. This shift was seen to improve the efficiency of service delivery, as in the end, "a larger amount of clients are being helped in the background through the collaboration" (ISHP provider interview).

This shift in service delivery is important to recognize. The environment within which a program operates, including supportive social systems, program staff characteristics, and inter-organizational linkages, is key consideration of process evaluation, as often it is the context that contributes notably to a program's delivery successes (Zapka et al, 2004). Consideration of the ISHP provider's insights reveals that the establishment of key interagency relationships may be essential in ensuring that a similar income security program launched elsewhere is be equally effective.

Inter-agency Collaboration:

The ISHP program aimed "to collaborate and align services within EIA and non-profit income support programs, while increasing partners' capacity to deliver income security supports" (WRHA/ISHP referral notice, undated). Program fidelity in this regard was noted in the expansion of connections with inter-related service providers and various stakeholder organizations, particularly with the Employment and Income Assistance medical panel, and the solution focused collaborative, Clients in Common. The unique feature here is in the way that income supports are offered through a primary medical care team, in collaboration with social service and community agencies, which is not the usual trend in how income supports are delivered in Canada. Rather, income support services tend to be disconnected from patient care (Shartel, Cowan, Khandor et al, 2006), meaning

that clients need to negotiate two, often-contradictory service systems in search of health (Abbot, 2002). Interviews with the ISHP provider - as well as feedback from the ISHP evaluation committee - emphasized the positive outcome of interagency collaboration, where it exists between health care and social services.

Inter-agency collaboration also helped to improve the accuracy of referrals to outside agencies. Within the ISHP program, 45.0% of charts included client referrals to outside agencies and supports, including mental health services, financial supports, and vocational rehabilitation networks.

Another key component of this relationship building are intrinsic to the ISHP provider himself. The job description for the position emphasized this in noting that "experience working in an inter professional team" is an asset, as is the "demonstrated ability to promote teamwork, collaboration and partnerships" (WRHA, 2016b, p.2). Through interview, evaluator observation, and interactions with the evaluation team, it became apparent that the individual in the role of ISHP provider during the course of this evaluation had a particular talent for initiating and fostering such relationships: "I'd stress to anyone that asks, that the relationship-building component is very important in this role… the importance of collaboration" (interview with ISHP provider). The provider also demonstrated a strong interest in providing insight and expertise to other professionals working in the area of income security. The qualities in the current ISHP provider are important to emphasize, as they made huge contributions to the effectiveness of the program processes outlined in this evaluation.

Program Fidelity:

A process evaluation is interested in program fidelity: whether an intervention was delivered as intended (Moore et al, 2015). Fidelity assessment helps an evaluator to determine whether or not a program was able to act in an operational manner consistent with its initial program objectives (Fisher et al, 2014). Looking back to the ISHP proposal of 2016, the stated objectives of the ISHP program were to: 1) Provide support and education around income security within the context of chronic disease among My Health Team Partners in the DT/PD area; 2) To collaborate and align services within EIA and non-profit income support programs; and 3) To increase partners' capacity to deliver income security supports (WRHA, 2016a). The goals of this program suggest the need for a program that will engage targets in need - namely DT/PD residents and MyHT practitioners struggling with income insecurity issues - and assist them through the development of relationships supported and facilitated by the ISHP program provider.

In its orientation, service delivery, achievement of core intervention components, and ongoing developments (Fisher et al, 2014), the ISHP program was found to show fidelity in the delivery of these intentions. Stakeholder engagement through the ISHP evaluation committee helped to ensure that the program remained aligned to its intended income security goals. Additionally, the operation of the ISHP program showed an ability to adjust its approach to program delivery as the evaluation process took place, which is an important part of illustrating how an evaluation may be seen to be 'useful' to programs themselves (Patton, 2012).

To support arguments regarding the fidelity of a program, it is necessary to consider whether a program's conceptions of what types of activities are needed to pursue program objectives - or its "theories of change"– are actually able to create such outcomes (Patton, 2012). The ISHP team articulated its own assumptions regarding 'how' the ISHP program could help clients through the program-held belief that 'connecting patients to income supports through the ISHP program will enhance income security, service integration, and capacity utilization' (ISHP logic model).

Core ISHP program features were delivered in a manner consistent with such an attachment-based, relational theory of change, identified both within the relational component 'assumptions' highlighted in the logic model, and as illustrated through provider interviews and evaluation team feedback. Chart review indicated that 96% of charts contained notes regarding provider efforts towards relational engagement with ISHP clients. More importantly, these relationships - which were described by one participant as preserving a sense of "dignity, and respect" - were was consistent with the non-punitive approach towards client entry to and exit from the program. Relational trust was likewise maintained through the program's client-centered flexible manner of meeting scheduling (via phone, home visits, and adjustable scheduled appointments). Further to this, interagency relationships that created linkages between the DT/PD MyHT and program stakeholders helped to create an environment of supportiveness and mutual trust within which the ISHP program was able to operate more effectively.

Strengths:

One strength of this research was its engagement with key stakeholders from earliest conception. Evaluation reports that engage end-users are more likely to be helpful to the programs and groups they evaluate (Patton, 2012). ISHP program stakeholders, and particularly, ISHP evaluation committee members were highly committed to participation in regularly scheduled evaluation discussions, a feat in and of itself, given the sometimes-peripheral role that evaluation projects can take in organizations.

The support and guidance of the ISHP evaluation committee from the start of this process played a significant role in keeping this evaluation project on task and relevant. In particular, it illustrated the appropriateness of a process evaluation, as compared to an outcome evaluation, as best suited to meet the needs of key stakeholders. Feedback from the committee shaped the choice of program components to evaluate, and also played a significant role in determining future areas of evaluation. As it is important to ensure transparent reporting relationships in any process evaluation (Moore et al, 2015), a clear plan for communicating information to stakeholders was established at the outset of this evaluation and followed.

Collaborative interactions can be difficult to establish between stakeholders and evaluators, because stakeholders have an interest in portraying the intervention in a positive light, while evaluators need to maintain sufficient independence in order to consider stakeholders critically (Moore et al, 2015). This necessary distance was ensured through the support of the primary research advisor, who helped the researcher to remain clear about the distinction between the goals of the evaluation committee and the goals of the process evaluation itself. Ongoing and transparent discussions with the evaluation

team, and with the primary research advisor, as well as formal presentations to the evaluation committee and the MyHT ensured that data analysis was known, and relevant to key stakeholders.

Another strength of this evaluation was its collection of rich qualitative data, in the form of detailed chart notes, and interviews with participants and the ISHP provider. Interviews with program participants allowed clients the space to voice their own narratives, and to be recognized as content experts of their own experiences. And where client stories were overlaid alongside quantitative data analysis, the mixed methods approach provided a richly representative review of what the ISHP program actually looked and felt like on a day-to-day basis. This type of data collection illustrated the importance of relationships, both with clients, and with outside agencies, as key component of the success of ISHP program delivery.

An additional strength of this research is that it lends support to the further development of integrated service delivery teams, both within Winnipeg, and on a broader scale, as collaboration between Winnipeg and Toronto practice teams emerge. Integrated primary health care teams make good sense for marginalized populations, as such teams allow medical providers to focus on medical diagnosis and management, while collaborative team members support such management through complementary services to improve overall patient health. This potential is especially relevant in Manitoba, where recommendation for team-based health system transformation is already underway.

Even more important is the inclusion of income security experts on these teams – individuals who are skilled at recognizing ways that existing social services and supports can be leveraged to increase income security for patients, and who can lead, educate and inform other practitioners to collaborate in this regard. Because this research has been

followed and supported by leaders of new service delivery models in primary care in Manitoba, it has significant potential to lead the development of similar income support services across the province.

Limitations:

This research was limited in its collection of sociodemographic data. Less than half the charts reviewed had details illustrating socio-demographic characteristics of ISHP clients and only 10% of charts had any detail referencing Indigenous status. Limited data on social determinants accessible through Accuro makes it difficult to accurately describe the client group served. Front-line health care practitioners play a vital role in recognizing patients with unmet resource needs (Berkowitz et al, 2016; Starfield, 2009), and accurate data collection tools can improve practitioners' skill in the collection of vital socio-demographic information.

Another limitation is that this research did not provide a detailed understanding of how the service supports delivered by the ISHP program were received by DT/PD MyHT members. One of the specific goals of the program was to increase partners' capacity to deliver income security supports, but is not clear how the program did this. There is also little data to represent the voices of associated service providers, to understand how the ISHP program collaborated with other agencies, and to identify needed areas of improvement. As a result, the evaluation was unable to fully capture an illustration of the intra-agency connections and describe the process of relationship building that was so essential to observed successes of the program.

Evaluation, Research, and Next Steps:

To take the program forward in terms of its evaluation cycle, feedback was provided to the program, based primarily on those broader and long-term goals as expressed by the evaluation committee itself.

As knowing the target community is essential to meeting the needs of that community, the program may improve its service delivery through more consistent and reliable collection of information about its clients. During the intake steps followed for each new client, one component could involve accurate completion of the medical and socio-demographic “bands” in the electronic medical record. This could facilitate later data collection, summary and analysis, especially if the information was collected in a codified and systemic manner.

To assist in future data analysis, it is suggested that a program checklist be developed to provide a quick reference chart of each client’s progress through the program. This could be easily added as a variant within the set of chronic disease toolkits in the electronic medical record used by the ISHP program. The associated income security checklist could identify key program components, for example: “monthly income”, “identification”, “completed income taxes”, “is/is not able to make ends meet at the end of the month”, “bank account”, “referral to support services”, “completed application to income-based housing”, etc. Each component could be associated with a date of achievement, to help track an individual’s progress over time. Cumulative data could be assembled to track ISHP program activity levels over time. Where information regarding “income levels” and “able to make ends meet at the end of the month” is

collected over time, these comparative results would provide an accessible source of long-term outcome results for the program.

Additionally, the data recorded could enhance continuity of care. Where overlap between health team electronic medical record systems exist, the check list would enhance communication between primary care providers and the ISHP program, facilitate provider learning, and enhance the quality of follow-up support for clients who “exit” the formal ISHP program. The EMR system could also be harnessed to help primary care providers to write appropriate letters of support to social service agencies and to medical review panels.

As the program is considered as a potential seed to similar programs in other jurisdictions, further research and evaluation could outline the steps undertaken by the ISHP provider to unfold such a program, including successes and set-backs, to help inform others. In particular, this draws attention to the potential of the ISHP provider to offer considerable support in the future evaluation and development of ISHP programs, both within the DT/PD MyHealth Team and at other locations across the province.

Further research projects may consider the nature of relationships within an income security of program and in relation to other support services in the community. Care models that focus on patient needs and that integrate attention to the social determinants of health have potential to improve the way that both health and social services are delivered efficiently and effectively in the complex health systems in the future. Patton (2012) points out that analysis of complex systems invites the use of system diagrams and maps that depict the relationship among the parts, and allow consideration of the ways in which various partners come together to work toward desired outcomes. Further research may therefore consider the components of relationship-based theories of

change, and may map more explicitly the nature, frequency, and impact of such relationships on income support program delivery and service effectiveness in patient care and population health improvement.

Chapter Seven: Conclusion

The Income Security Health Promotion (ISHP) program was a new service addition to a comprehensive chronic disease management approach in primary care service delivery among members of the inner city, Downtown/Point Douglas My Health Team, (DT/PD MyHT) in Winnipeg, which began accepting referrals in early 2017.

In an effort to understand and support this program, a process evaluation was conducted, with the support and assistance of a formal ISHP evaluation committee. This project was initiated out of a sense of curiosity regarding the new ISHP program, a desire to understand how the program actually was operating in its first year and a half, and the intent to provide a comprehensive illustration of a service with considerable potential to bring meaningful change to individuals' lives.

In this context, a process evaluation is a useful tool to illustrate the activities of a population health delivery service, especially during its early stages of evolution. This process evaluation focused on the assessment of short-term outputs from the ISHP program during its first year of operation. Once the plan to pursue this type of evaluation was determined, with the ISHP evaluation committee's support, it was pursued with due diligence and collaborative input. In the end, the process evaluation undertaken here was able to illustrate what the ISHP program was doing on a daily basis to address the income

security needs of DT/PD MyHT patients, and to understand how these activities were consistent with stated program goals.

This process evaluation revealed that the ISHP program, with one full-time service provider, provided comprehensive income security support services in a manner that maintained program fidelity to its express objectives. Clients that engaged in the program were medically complex, and received key services in the domains of income security supports (73.3%), associated service assistance (61.7%) (a category that includes housing, medication, food and transportation access), budgeting supports (50.0%), and referrals to other community services, where needed (45.0%). This process evaluation was able to ascertain that the ISHP program operated consistently with stated goals, and did so in a way that provided meaningful enrichment in the lives of program clients.

In addition to preserving client dignity, these services were offered in a manner that encouraged autonomy and the development of self-sufficiency. Interagency relationships played a key role in enhancing the ability of the ISHP program to provide coordinated and efficient system navigation services to a large group of clients.

Too often, patients feel divided, socially and economically from their medical care providers, who seem to live in different worlds and have different values. These gaps can reduce the likelihood that patients will voice their concerns about socioeconomic challenges to their health care providers, even when these factors are impeding their health. Family physicians and health care providers engaged with patients experiencing socioeconomic and related health setbacks, have an ethical and professional responsibility to care for patients in a manner that addresses all components of their health.

Information gathering tools, patient-friendly workspaces, attention to socioeconomic factors, and enhanced referral services are needed to assist clients in need.

Where busy health care providers struggle in serving medically complex patients who experience financial hardship, and where traditional referral services do not suffice, health systems may greatly enhance care provision through interdisciplinary health care teams that include income security support services, and in a broad range of interventions that equitably address the social determinants of health.

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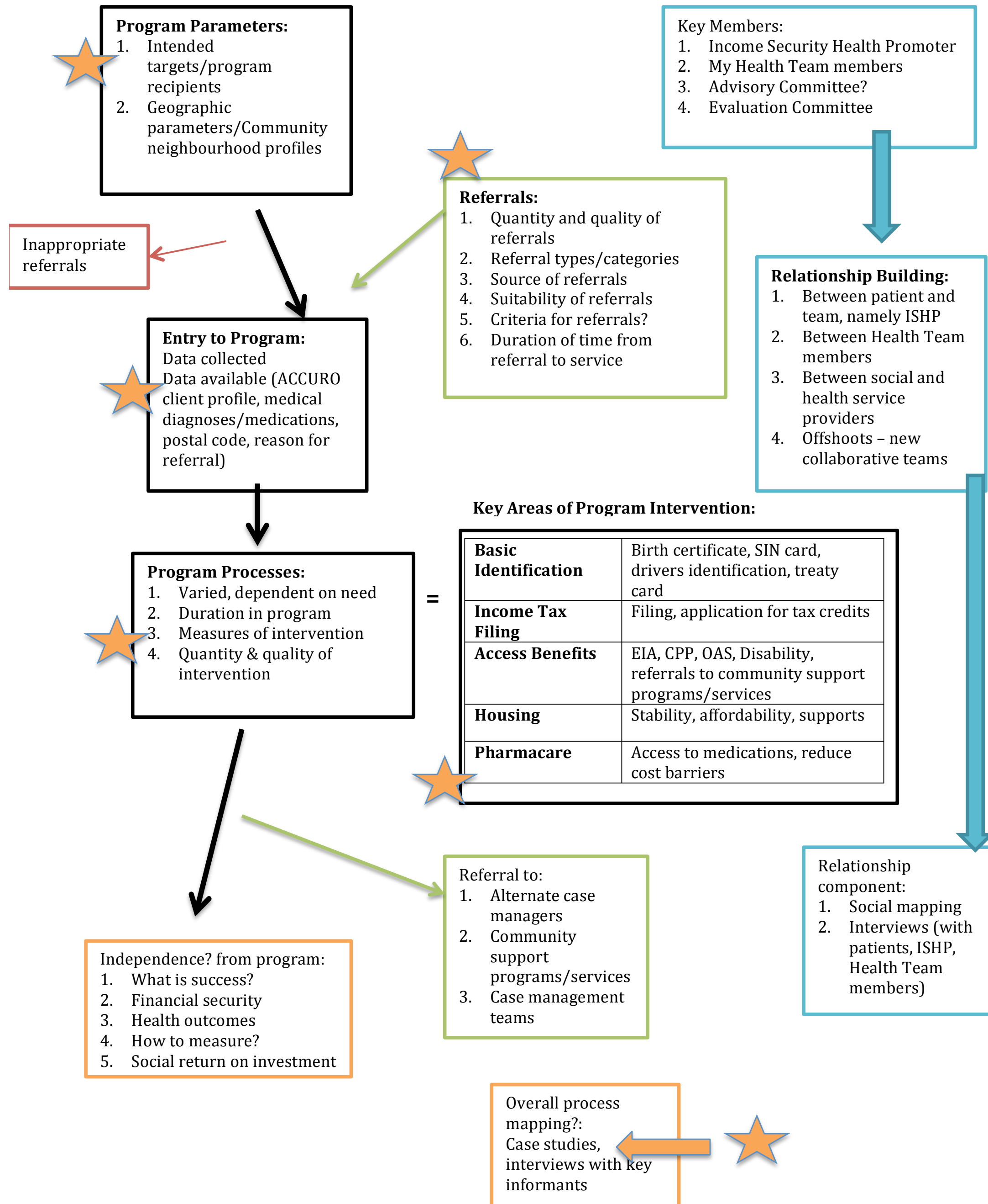
Appendix I: Basic Program Flow and Possible Evaluation Targets



***DT/PD My Health Team Income Security Promotion Program**: Basic Program Flow and consideration re: possible Evaluation Targets (working model, September 2017)*

Appendix II: Data Collection/Capture Sheets

Data Collection/Capture Sheet

Title: Income Security through Primary Care: A Process Evaluation

Data to be entered directly into computer spread sheet Yes ☑ No ☐

Patient Characteristics: What are the characteristics of patients involved in the Income Security Program?

Basic Demographics (**collect for all 60** in year one, upon admission)

Collect:	**Data Type**	**Source**	**Analysis**
Age	Number	Accuro DT-PD Electronic Health records	Average, variance
Sex	Category	Accuro DT-PD Electronic Health records	Frequency

Medical (**collect for all 60** in year one, upon admission)

Collect:	**Data Type**	**Source**	**Analysis**
Health conditions	Number, category (conditions)	Accuro/Clinic EMRs	Average number conditions Frequency of categories
Medications	Number, category (medication types)	Accuro/Clinic EMRs	Average number of medications Frequency of categories

Socioeconomic (**collect for 60** in year one, on admission)

Collect:	**Data Type**	**Source**	**Analysis**
Social service involvement	Category, type	Accuro/DT-PD	Frequency
Housing	First three digits of postal code	Accuro/DT-PD	Frequency

Program Interventions: What are the specific program interventions? What is the duration of patient involvement (with each interventions, with the program overall)?

Overall program involvement (**collect for 60** in year one)

Collect:	Data Type	Source	Analysis
Reason for referral to program?	Category, type	Accuro DT-PD Electronic Health records	Frequency
Entry date into program	Date	Accuro DT-PD Electronic Health records	Duration descriptive statistics
Exit date from program	Date	Accuro DT-PD Electronic Health records	
Reason for exit	Category, type	Accuro DT-PD Electronic Health records	frequency
Referral to	Category, type	Accuro DT-PD Electronic Health records	frequency

Specific components of project involvement (**collect for 60** throughout year one)

Collect:	Data Type	Source	Analysis
Employment and Income Assistance a. Was assistance provided/required? b. If so, what type? c. What duration/frequency for each type?	• Category, yes/no • Category, type of assistance provided • Dates/frequency of support provided	Accuro DT-PD Electronic Health records + Clarify with ISHP staff	Frequency of intervention type; duration of intervention
Identification procurement a. Was assistance provided or required? b. If so, what type of assistance? c. What was duration or frequency of assistance given?	• Category, yes/no • Category, type of assistance provided • Dates/frequency of support	Accuro DT-PD Electronic Health records + Clarify with ISHP staff	
Filing Income Taxes a. Was assistance provided or required? b. If so, what type of assistance? c. What was duration or frequency of assistance given?	• Category, yes/no • Category, type of assistance provided • Dates/frequency of support	Accuro DT-PD Electronic Health records + Clarify with ISHP staff	
Pharmacare and Medication access a. Was assistance provided or required? b. Medication category c. If so, what type of assistance? d. What was duration or frequency of assistance given?	• Category, yes/no • Category, type of medication/ assistance provided • Dates/frequency of support	Accuro DT-PD Electronic Health records + Clarify with ISHP staff	

General Program Interventions and Process Components:

<table>
<tr><th>Collect:</th><th>Data Type</th><th>Source</th><th>Analysis</th></tr>
<tr><td>What are the program objectives?</td><td>qualitative</td><td rowspan="13">To be gathered through formal interview with the ISHP program staff person, and in conjunction with program evaluation team, supplemented by program activity findings (see above).

RE: ISHP staff interview:
• Interview with ISHP program staff will require formal consent and will be transcribed.
• Support from WRHA supervisor attained.
• NOT a job evaluation.</td><td rowspan="13">Development of program logic model

Transcription, data to support and enhance overall process analysis and description

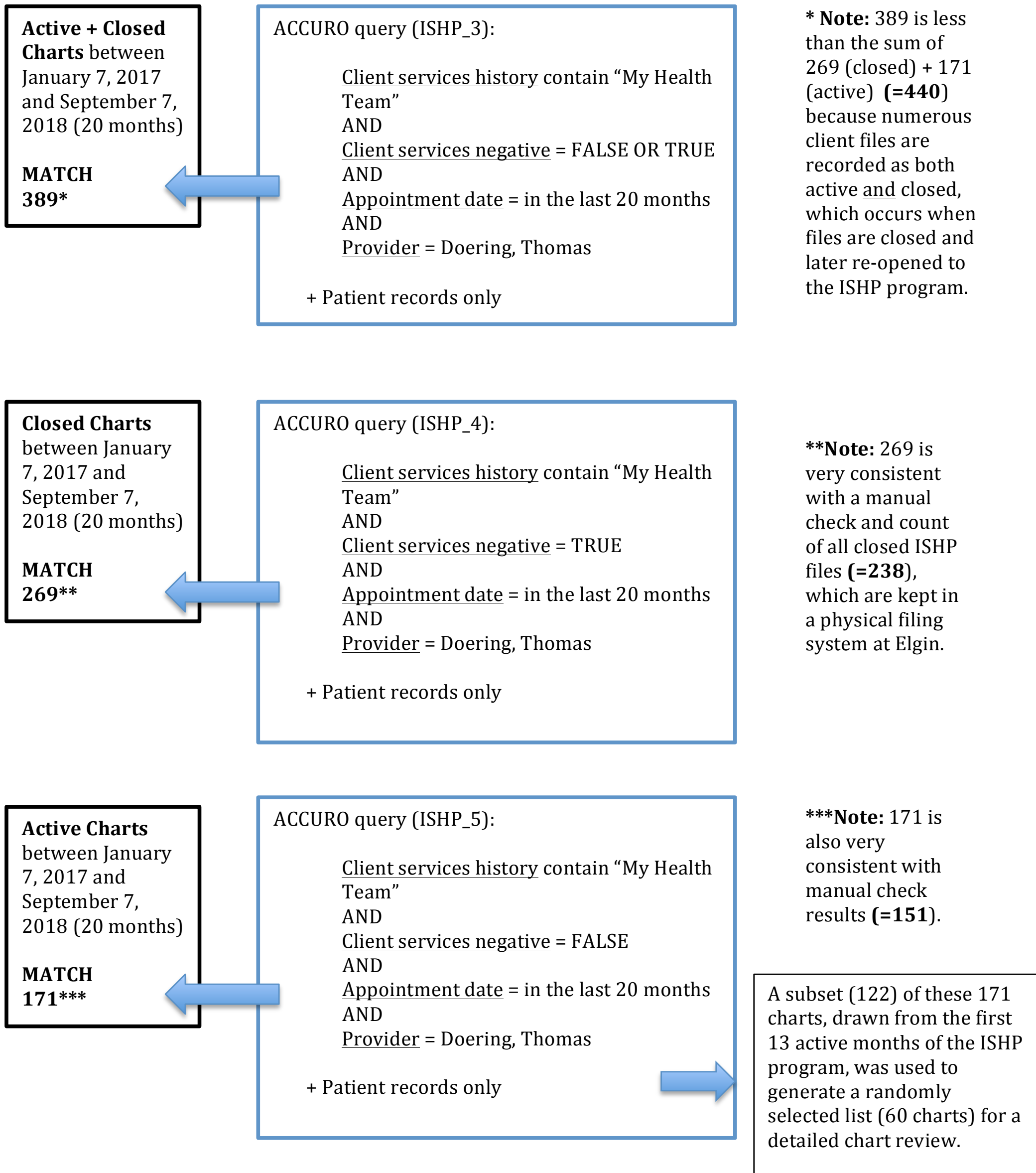
** This question does not represent an intended outcome analysis, but rather is a component of logic model development.</td></tr>
<tr><td>What are the program inputs?</td><td>qualitative</td></tr>
<tr><td>What are the assumptions underlying this program?</td><td>qualitative</td></tr>
<tr><td>What are the external factors shaping this program?</td><td>qualitative</td></tr>
<tr><td>What are the program activities?</td><td>Qualitative & quantitative program activity data</td></tr>
<tr><td>What are the expected program outcomes: short-term, mid-term, long-term? **</td><td>qualitative</td></tr>
<tr><td>Who are the program stakeholders?</td><td>qualitative</td></tr>
<tr><td>What referral criteria shape admission to the program (target audience)?</td><td>qualitative</td></tr>
<tr><td>Is the program reaching its target audience?</td><td>qualitative</td></tr>
<tr><td>How is the program delivered? Who delivers the program?</td><td>qualitative</td></tr>
<tr><td>How and why do patients exit the program?</td><td>qualitative</td></tr>
<tr><td>What role does the evaluation committee play?</td><td>qualitative</td></tr>
<tr><td>What are the challenges in implementing the program?</td><td>qualitative</td></tr>
</table>

What is the patient-perspective from within the Income Security Health Promotion Program?

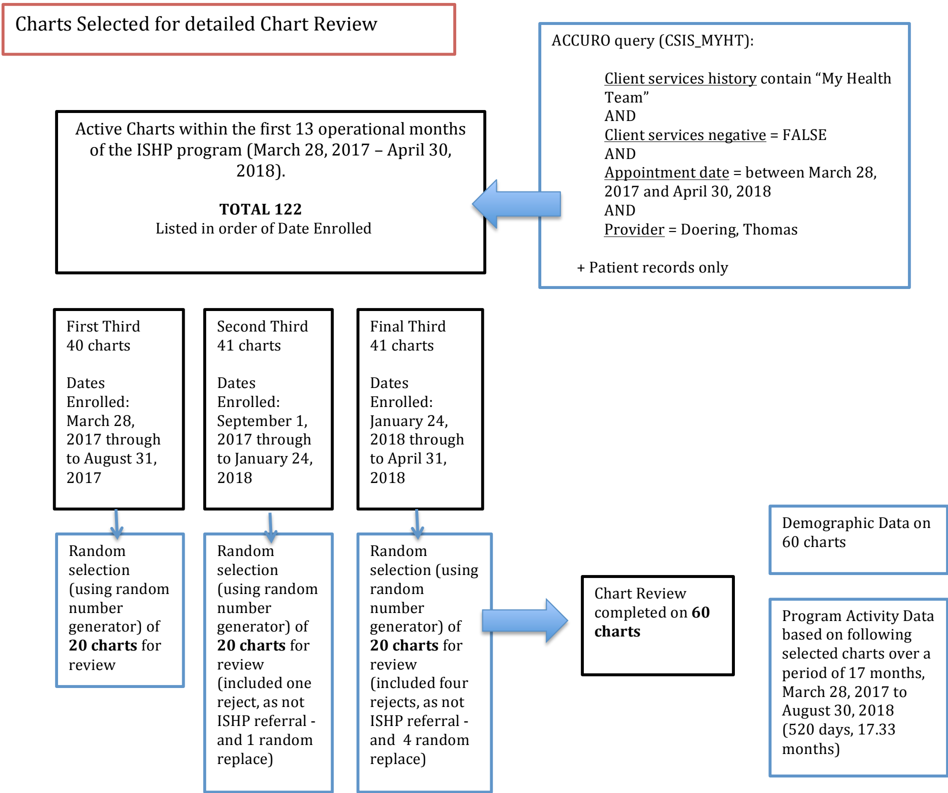
Open-ended interviews conducted with 2-3 ISHP participants:

Collect:	**Data Type**	**Source**	**Analysis**
Signed consent form	Consent obtained		
How did you get involved with the ISHP program? (With Tom?)	qualitative	One on one interviews conducted with 2-3 ISHP participants (Individuals chosen based on team recommendation)	Transcription and description as case studies; aggregate description of overall ISHP program processes (removal of individual identifiers).
What did you expect from the program?	qualitative		
What happened while you were part of the program?	qualitative		
What does this program mean to you?	qualitative		

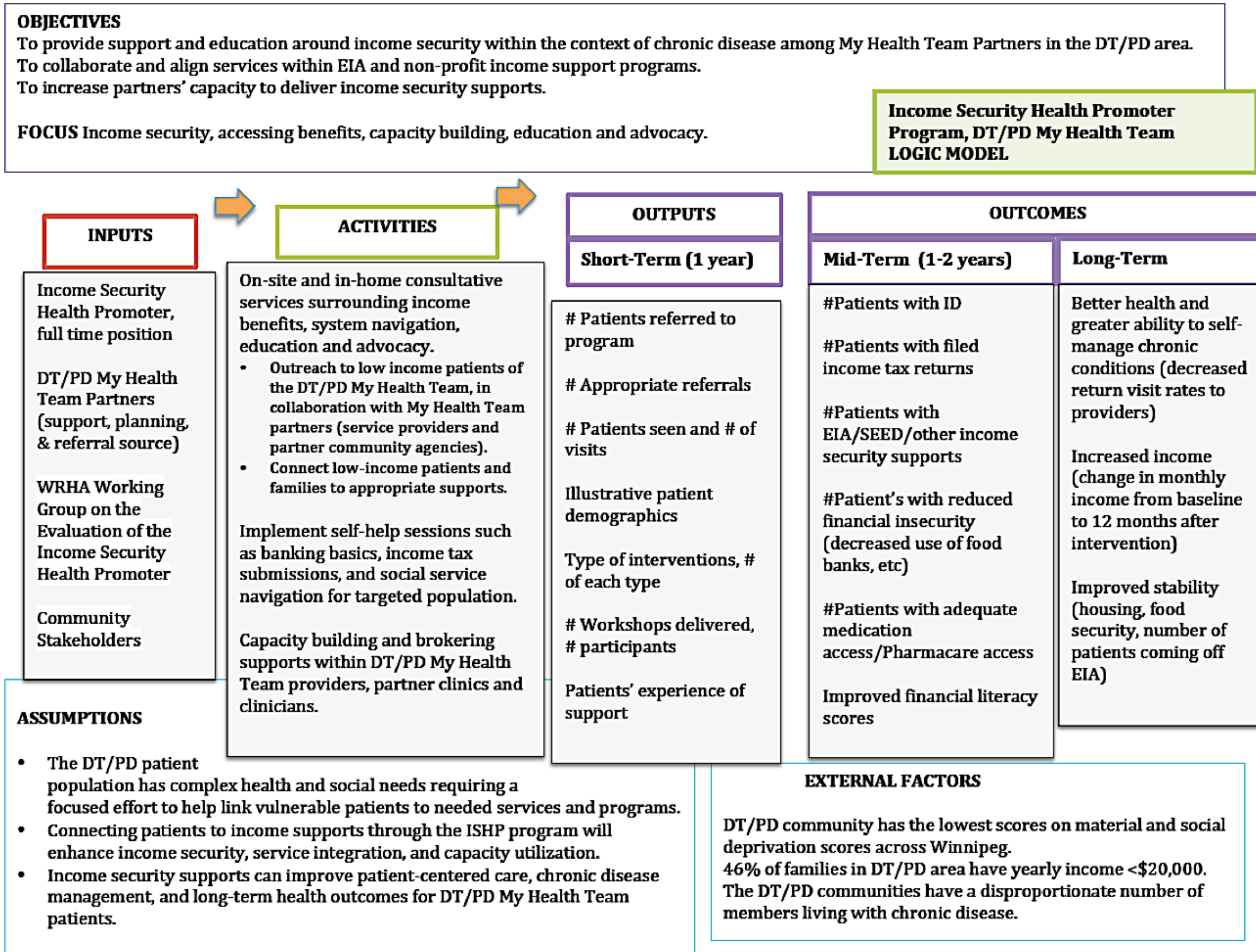
Appendix III: Accuro Queries to Determine Program Participants



Appendix IV: Charts Selected for Detailed Chart Review



Appendix V: ISHP Program, DT/PD MyHT Logic Model


OBJECTIVES
To provide support and education around income security within the context of chronic disease among My Health Team Partners in the DT/PD area.
To collaborate and align services within EIA and non-profit income support programs.
To increase partners' capacity to deliver income security supports.
FOCUS Income security, accessing benefits, capacity building, education and advocacy.
Income Security Health Promoter Program, DT/PD My Health Team LOGIC MODEL
INPUTS
Income Security Health Promoter, full time position
DT/PD My Health Team Partners (support, planning, & referral source)
WRHA Working Group on the Evaluation of the Income Security Health Promoter
Community Stakeholders
ACTIVITIES
On-site and in-home consultative services surrounding income benefits, system navigation, education and advocacy.
• Outreach to low income patients of the DT/PD My Health Team, in collaboration with My Health Team partners (service providers and partner community agencies).
• Connect low-income patients and families to appropriate supports.
Implement self-help sessions such as banking basics, income tax submissions, and social service navigation for targeted population.
Capacity building and brokering supports within DT/PD My Health Team providers, partner clinics and clinicians.
OUTPUTS
Short-Term (1 year)
Patients referred to program
Appropriate referrals
Patients seen and # of visits
Illustrative patient demographics
Type of interventions, # of each type
Workshops delivered, # participants
Patients' experience of support
OUTCOMES
Mid-Term (1-2 years)
#Patients with ID
#Patients with filed income tax returns
#Patients with EIA/SEED/other income security supports
#Patient's with reduced financial insecurity (decreased use of food banks, etc)
#Patients with adequate medication access/Pharmacare access
Improved financial literacy scores
Long-Term
Better health and greater ability to self-manage chronic conditions (decreased return visit rates to providers)
Increased income (change in monthly income from baseline to 12 months after intervention)
Improved stability (housing, food security, number of patients coming off EIA)
ASSUMPTIONS
• The DT/PD patient population has complex health and social needs requiring a focused effort to help link vulnerable patients to needed services and programs.
• Connecting patients to income supports through the ISHP program will enhance income security, service integration, and capacity utilization.
• Income security supports can improve patient-centered care, chronic disease management, and long-term health outcomes for DT/PD My Health Team patients.
EXTERNAL FACTORS
DT/PD community has the lowest scores on material and social deprivation scores across Winnipeg.
46% of families in DT/PD area have yearly income <$20,000.
The DT/PD communities have a disproportionate number of members living with chronic disease.