Saskatoon Community Clinic: Evaluation Report

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Saskatoon Community Clinic

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Executive Summary

For over 60 years, the Saskatoon Community Clinic (SCC) has stood out as an anomaly in Saskatchewan's—and even Canada's—health care system, delivering team-based, patient-centred services within a co-operative, patient-led governance model that contrasts with the physician-led clinics dominating primary care in the province. And for over 60 years, SCC's leadership has argued that its approach to primary care offers better outcomes for both patients and taxpayers. In delivering holistic patient-centred care, the SCC may incur higher upfront costs, but this investment reduces downstream spending by reducing hospital emergency visits and admissions while avoiding the coordination costs of other clinics. Two earlier studies offered some support for this argument, showing that, from a cost perspective, SCC was both comparable to its physician-led counterparts (McPhee, 1973) and delivered net savings (Saskatchewan Health, 1983) to the province.

Since the publication of these studies, little research has revisited whether their findings still hold. In the meantime, SCC has evolved. Once operating from a single building on 2nd Avenue and serving a largely middle-class patient population, it now delivers care to 25% of its patients[1] at its Westside clinic, which opened in 1975. This site primarily serves lower-income Indigenous patients facing complex health and social challenges that require a more responsive model of care.

The goal of this study was to better understand how the evolving SCC is performing in terms of patient outcomes, cost, and satisfaction. Our approach involved three distinct workstreams. The first workstream analyzed anonymized patient-level administrative data, including information on patient age and sex, medical visits and services, emergency visits, and hospitalizations. These data allowed us to revisit some of the questions addressed in the earlier empirical studies. After spending more than two years seeking approvals, we gained access to the data and assembled a detailed portrait of SCC's patient population and the associated costs of their care from 2016 to 2021.

Compared with patients in other clinics, SCC patients experienced higher incidence rates across numerous disease categories, reported more chronic conditions, and made greater use of healthcare services. Although physician costs were generally lower, hospitalization costs for SCC patients were higher. These findings contrast with those of the 1983 study, which found that while SCC patient costs were higher, hospitalizations were less frequent. This shift may reflect the clinic's evolution—particularly its expansion to serve more diverse groups, including refugees, individuals experiencing homelessness, and those with substance use challenges.

In a more targeted quantitative exercise, we compared outcomes for HIV-positive individuals seen at SCC's Westside clinic with those enrolled in the Saskatchewan Health Authority's (SHA) Positive Living Program (PLP). The Westside clinic's model of community-based opportunistic care appeared to foster stronger patient engagement than the PLP. However, an important caveat tempers this finding: although higher engagement is generally associated with improved viral suppression, this pattern did not hold for many Westside patients, who often face challenges such as substance use, transportation barriers, and housing

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[1] In the 2024-2025 fiscal year, SCC served 19,523 patients during regular daytime clinic hours: 75% of those patients (14,737) were served at the Downtown clinic on 2nd Avenue and 4,786 at the Westside clinic on 20th Street.

insecurity. This discrepancy underlines two important points the SCC has long emphasized: (i) the clinic serves some of the hardest-to-reach populations in Saskatoon and (ii) health outcomes are shaped by a complex interplay of medical and non-medical factors, including access to transportation, housing, and drug treatment.

The second workstream surveyed patients about their primary healthcare experiences, seeking to understand whether SCC patients believed they had better, equal, or worse care experiences than non-SCC patients. Despite their generally poorer health, SCC patients expressed significantly higher satisfaction with their primary care than non-SCC patients. SCC patients felt more listened to, were more appreciative, and valued SCC's coordinated, holistic care.

In the third workstream, we interviewed SCC staff (including medical practitioners), reviewed documentary evidence, and observed SCC's governance practices to better understand the clinic's inner operations—particularly how its model of care relates to its governance practices. If the SCC model differed from that of its counterparts, we would expect to see some evidence of that reflected in how decisions were made. We found that while decision-making was broadly team-based, there was room for improvement. Team-based care was constrained by resource limitations, workforce shortages, and persistent tensions between the team-based ideal and the formal and informal norms that reinforce physician power. We also noted concern—especially amongst longer-tenured staff and members—about the clinic's co-operative identity. Some said the organization had drifted from its grassroots origins and become less responsive, raising questions about how these shifts may be affecting the team-based model.

Our findings suggest that SCC continues to play an indispensable role in the province's primary care system, delivering services to a large, diverse patient population. This diversity is especially evident at the Westside clinic, which cares for patients who are often underserved—individuals whose complex needs make them less likely to be taken on by private physician-led clinics because of the time, cost, and coordination required.

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Disclaimer: *All inferences, opinions, and conclusions drawn in this report are those of the authors, and do not reflect the opinions or policies of the Health Research Data Platform-Saskatchewan (HRDP-SK) or Data Trustee(s).*

Introduction

The Saskatoon Community Clinic (SCC) was founded during the 1962 Medicare crisis, with the mission of providing medical care for all who sought it.[2] Born of a partnership between citizens and doctors, the clinic was established as a co-operative—one of more than a dozen formed across Saskatchewan. SCC's governance model emphasizes collective ownership and member control, fostering a more inclusive and patient-centred approach to healthcare delivery and organization. For more than 60 years, the clinic has remained innovative and responsive to local communities. The largest of the four remaining co-operative clinics in Saskatchewan, SCC delivers care at two sites: the Downtown clinic established in 1962 and the Westside clinic in 1975.

In 2023–2024 (The Saskatoon Community Clinic, 2024), SCC operated on an $18.1 million annual budget, employed 170 staff, and served 17,000 patients—approximately 10,000 of whom were members, making them eligible to participate in the clinic's democratic governance. All SCC staff are salaried, and the clinic's primary funding comes from the Saskatchewan Ministry of Health and Saskatoon Health Authority (SHA), supplemented by revenue from its pharmacy, support from the SCC Foundation, and membership fees.

SCC's model of care is multidisciplinary, integrating family physicians and nurse practitioners with a broad range of allied health professionals, including counsellors, lab and X-ray technicians, occupational therapists, physical therapists, dieticians, registered nurses (community, mental health, and primary care), pharmacists, and visiting specialists. Reflecting its commitment to holistic care, the clinic offers a variety of health promotion and education programs. It partners with several community organizations to deliver specialized services, such as the Refugee Engagement and Community Health (REACH) clinic, the Student Wellness Initiative Towards Community Health (SWITCH), and the Positive Living Program (PLP), in partnership with SHA.

Because SCC's care model offers a distinctive approach to physician remuneration and financing, its effectiveness and cost have long been subjects of interest. Two studies have explored the outputs of co-operative community clinics. The first, by the Research and Planning Branch of the Saskatchewan Department of Public Health (McPhee, 1973), measured the effect of co-operative clinics in Regina, Saskatoon, and Prince Albert on hospital utilization. It found that patients at co-operative clinics had lower hospitalization rates than those receiving care from other family physicians in the same communities. The researchers concluded that "in total health dollars, the clinics neither save health dollars nor are they a more costly form of healthcare delivery" (McPhee, 1973, p. 2).

The second study, conducted by Saskatchewan Health (1983), examined whether healthcare services— medical, hospital, and prescription drugs—were more or less costly for community clinic patients

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[2] The Medicare crisis began when Saskatchewan doctors went on a 23-day strike in 1962 to oppose expansion of public insurance from hospital services to physician services. As a compromise, the provincial government allowed doctors to maintain their private practice status and continue being paid using the fee-for-service payment method (Marchildon & Schrijvers, 2011). During the strike, the government's negotiating position was strengthened by the mobilization of thousands of Saskatchewan citizens who set up almost a dozen co-operative associations, secured premises, and recruited doctors—largely from the United Kingdom (Rands, 1994) and Asia (McPhee, 1973)—to provide much-needed medical services. The clinics were governed by patients and staffed by physicians (Gruending, 1974; Rands, 1994; Smith, 2010).

compared to those served by private-practice physicians. Initiated at the request of the Prince Albert Co-operative Clinic, the study focused on clinics in Prince Albert and Saskatoon. It found that while community clinic patients used fewer medical services, their average medical costs were higher. However, they spent fewer days in hospital—particularly elderly patients—resulting in lower hospital costs. Drug costs and the number of prescriptions per person were lower for community clinic patients, again with the largest savings in the elderly population. Overall, the total cost of care was significantly lower for community clinic patients: 13% lower in Prince Albert and 17% lower in Saskatoon, compared to their private-practice counterparts in the same urban areas.

Together, these studies offer valuable insights into how community clinics perform relative to private-practice healthcare models. These findings are consistent with broader Canadian and international research highlighting economic and non-economic benefits of community-governed healthcare centres, including co-operatives (Angus & Manga, 1990). Yet more than 40 years have passed since the last comprehensive evaluation of SCC's model, and the clinic has evolved considerably since. Furthermore, neither of the earlier studies attempted—or were equipped—to explain why and how the co-operative clinic model might reduce downstream healthcare costs or why service utilization patterns differ for community clinic patients. Both sets of researchers speculated the answer might lie in the structure and philosophy of the organization or in its care delivery model (McPhee, 1973; Saskatchewan Health, 1983). These unresolved questions remain highly relevant: Does the co-operative clinic model still deliver positive patient outcomes and cost savings, including downstream savings, and if so, through what mechanisms?

This study aims to provide a comprehensive and up-to-date assessment of SCC's performance, focusing on the effectiveness and efficiency of its healthcare model in the contemporary healthcare landscape. The research is divided into three workstreams:

(i) Workstream 1 is divided into two parts. The first is a quantitative analysis of health outcomes, service utilization patterns, and costs associated with SCC's model of care. By comparing SCC patients' health data with those of non-SCC patients, we examined whether SCC delivers relatively better outcomes at a lower cost. The second part focuses specifically on HIV care, using a patient survey to compare patient perspectives on and satisfaction with care at SCC's Westside clinic (WSCC) and SHA's Positive Living Program (PLP). The goal was to identify factors that contribute to positive patient experiences and to highlight areas for improvement.

(ii) Workstream 2 investigates patient experiences by comparing those at SCC with those of patients at other local healthcare facilities. We surveyed patients about their primary healthcare experiences, seeking to understand whether SCC patients believed they had better, equal, or worse care experiences than non-SCC patients. The goal was to identify distinguishing features of SCC's care model and evaluate how effectively different settings meet patient needs.

(iii) Workstream 3 involves a qualitative study of SCC's models of care and governance, including mechanisms and outputs. While governance is widely acknowledged as important to organizational performance, few studies have examined its role in primary healthcare. Through interviews, document analysis, and observation, we explored how SCC's governance structure influences its care model, how staff experiences this system, and where its strengths and limitations lie.

Workstream I: Health Outcomes, Service Utilization Patterns, and Costs

The objective of Workstream 1 was to evaluate patient health outcomes and system-level costs associated with the SCC care model. Workstream 1 consists of two parts: (i) an analysis of data on patient health and costs, and (ii) a comparative evaluation of the effectiveness of an HIV care program delivered at the Westside community clinic and an SHA clinic.

1.1 Patient Health Data Analysis

The first part of Workstream 1 compares health outcomes and associated costs of SCC and non-SCC patients. This research involved collecting and analyzing health data to identify significant differences in clinical and economic outcomes between the two care models.

1.1.1 Methodology

To collect and organize the data needed for this research, we gained access in May 2024 to the Health Research Data Platform – Saskatchewan (HRDP-SK), the province's first fully integrated, multi-agency data access platform. This platform draws on data from four major health administrative datasets—Personal Health Registry System (PHRS), Medical Services Branch (MSB) physician billing data, National Ambulatory Care Reporting System (NACRS), and Discharge Abstract Database (DAD). Using a quasi-experimental design, we compared health and cost outcomes across two population groups: patients affiliated with SCC (the treatment group) and those receiving care at non-SCC clinics and by non-SCC physicians (the control group). Two comparative analyses were conducted: one using the full, unmatched sample, and the other using a matched sample. In both cases, the number of SCC patients remained constant, while the number of non-SCC patients varied.

Our sample included patients 18 years and older who had a Saskatchewan Health Card Number or Saskatchewan health coverage and lived in the greater Saskatoon area for the entire study period (2016–2021). The data came from a repeated panel. Patients were identified based on age and sex and categorized into one of two groups—SCC or non-SCC—depending on where they received at least 80%[3] of healthcare services in each calendar year from 2016 to 2021. This threshold, drawn from a similar study by the Health Quality Council of Alberta (2019), was calculated using the number of billing claims linked with a patient's health service number.

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[3] The population in the core neighbourhood area (Saskatoon 5: Core/Downtown) has the lowest primary care attachment rates in the Saskatoon area, as well as the least favourable social determinants of health, emergency department visits, and mental health indicators and highest communicable and chronic disease rates (SHA, 2024). The Westside site serves that core area—the city's least attached, most underserved population, struggling with one or many social determinants of health, including mental health and substance use issues and being un- and under-housed. As such, while Westside patients may receive the majority of their care at the clinic, they are less likely to meet the sample thresholds (80% of care, in each calendar year from 2016-2021). Thus, despite Westside being their primary provider of healthcare services, the site's patients are underrepresented in this sample.

To compare the two groups and control for observable demographic factors (age and sex), we used propensity score matching (PSM)[4] as our primary analytic method, pairing patients in the treatment and control groups based on their likelihood of being in the treatment group. We estimated each patient's propensity score using a logistic regression model, where the dependent variable indicated SCC affiliation, and the independent variables were age and sex—commonly available in administrative data. Using these scores, we matched SCC and non-SCC patients, allowing for a margin of difference in scores ranging from +/-0.01 to +/-0.05 when exact matches were not available.

After matching patients in the treatment and control groups using PSM, we calculated and compared health outcomes and cost indicators between SCC patients and similar patients in the control group. Our primary health outcome indictors were hospitalization incidence rates for a broad range of disease categories (discussed below and in Annex 1). Hospitalization incidence rate was defined as the number of hospitalizations for a given condition per 1,000 person-years (Tenny & Boktor, 2025). This was calculated using data from Discharge Abstract Database (DAD), based on diagnostic codes in the 9th (ICD-9) and 10th (ICD-10) revisions of the International Classification of Diseases[5] (Ford, 2015).

Cost indicators were based on average expenditures for healthcare services, including family physician visits, hospitalizations, outpatient visits, emergency department visits, and diagnostic services. These expenditures were calculated both before and after adjusting for patients' age and sex. The analysis did not include the cost of establishing or maintaining a team-based care clinic.

To assess service use, we also calculated per-patient service utilization rates. This composite index included the average number of family physician visits, specialist consultations, visits to other providers, emergency department visits, hospitalizations, length of hospital stay, and inpatient days per person. Utilization and cost data were taken from DAD, MSB, and NACRS.

We compared these outcomes and cost indicators across clinic groups and analyzed trends over time. In addition, we used regression analyses (e.g., linear or logistic, depending on the outcome variable) and appropriate statistical tests to assess the difference between matched patients in SCC and non-SCC settings.

1.1.2 Findings

This section provides a summary of the main findings for Workstream 1. More detailed results can be found in Annex I.

Comparative Hospital Incidence Rates

We first analyzed hospitalization incidence rates across various disease categories from 2016 to 2021. After adjusting for age and sex, the results revealed consistent patterns among SCC and non-SCC patients.

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[4] The PSM method pairs treatment and control units based on similar estimated probability of being assigned to the treatment group. The probability is estimated using a vector of observed covariates that are associated with the outcome variables. In this case, the covariates are age and sex—commonly available attributes across administrative datasets.

[5] The International Classification of Diseases (ICD) is the global system for classifying and coding causes of death.

SCC patients consistently exhibited higher rates across all measured disease categories, including cardiovascular, metabolic, respiratory, digestive, hematological, dermatological, and infectious diseases; metabolic, neurological, sensory processing disorders (SPD), and trauma. This section presents the four categories with the highest hospitalization rates: cardiovascular disease, metabolic disorders, neurological disorders, and infectious diseases. As shown in Figure 1 below, over the six-year period from 2016 to 2021, SCC patients demonstrated consistently higher hospitalization incidence rates for cardiovascular disease—ranging from 9.09 to 13.75 cases per 1,000 person-years—compared to 6.23 to 10.30 among non-SCC patients (see Table 11 and Figure 7 in Annex I for more details).
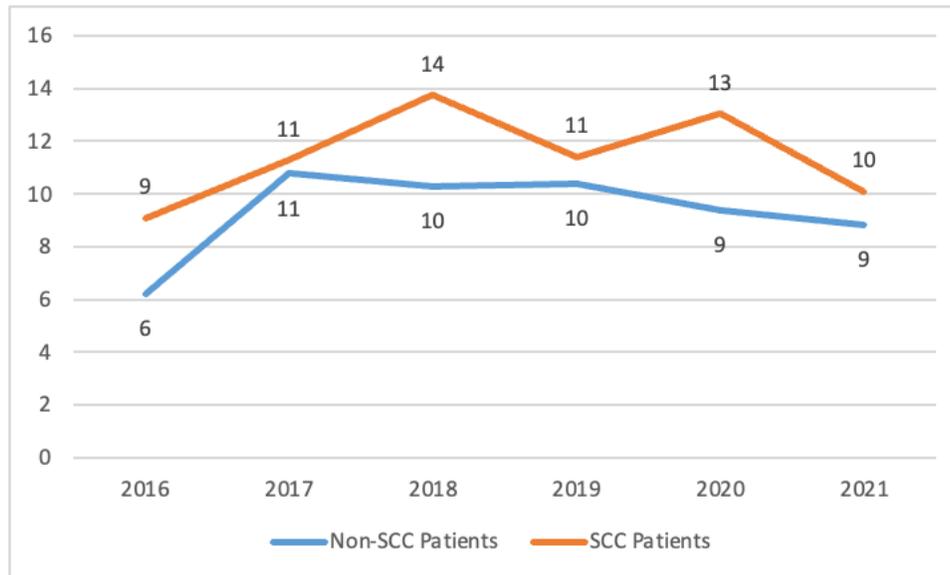
Figure 1. Trends in Annual Incidence Rates of Hospitalization for Cardiovascular Disease by Patient Type in the Matched Sample (2016 to 2021)

Metabolic disorders, including diabetes and thyroid conditions, had similar results, with SCC patients showing higher hospitalization rates throughout the study period. As seen in Figure 2 below, their rates ranged from 17.06 to 25.80 cases per 1,000 person-years, with the highest in 2021 at 25.80. The non-SCC group maintained lower rates of between 10.72 and 19.64. The gap between the two groups was most distinct in 2021, with SCC patients experiencing 6.16 more cases per 1,000 person-years than their matched counterparts (25.80 vs. 19.64) (see Table 12 and Figure 8 in Annex I).
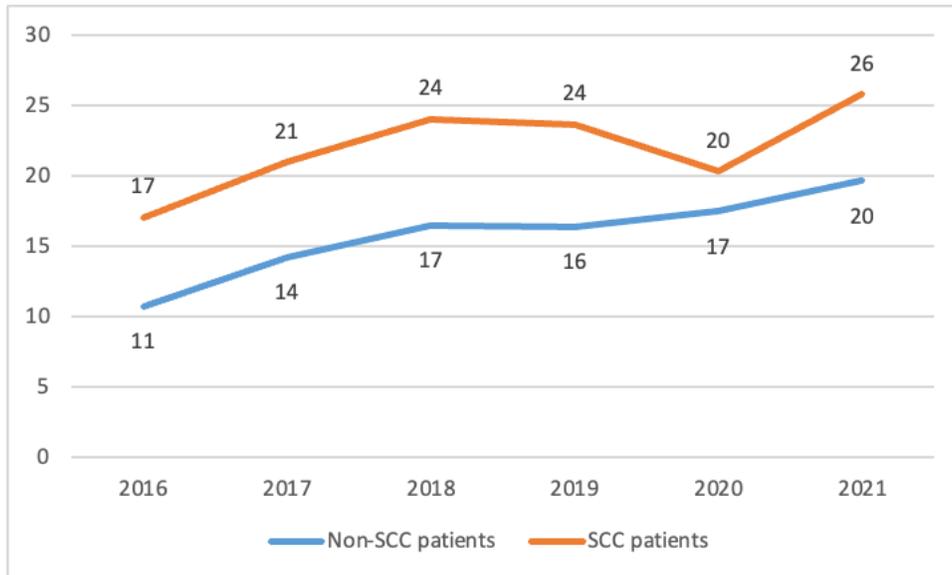
Figure 2. Trends in Annual Incidence Rates of Hospitalization for Metabolic Disorders by Patient Type in the Matched Sample (2016 to 2021)

The most striking difference between the two groups was observed for neurological disorders. As Figure 3 shows, the hospitalization rates for SCC patients ranged from 17.93 to 26.38 per 1,000 person-years, while non-SCC patients showed much lower rates of 5.85 to 7.85. The peak difference occurred in 2021, with SCC patients experiencing 26.38 cases per 1,000 person-years compared with just 7.32 in the matched non-SCC group, a 19.06 case difference per 1,000. This pattern of substantially higher rates of neurological disorders among SCC patients was consistent year-over-year (see Table 13 and Figure 9 in Annex I).
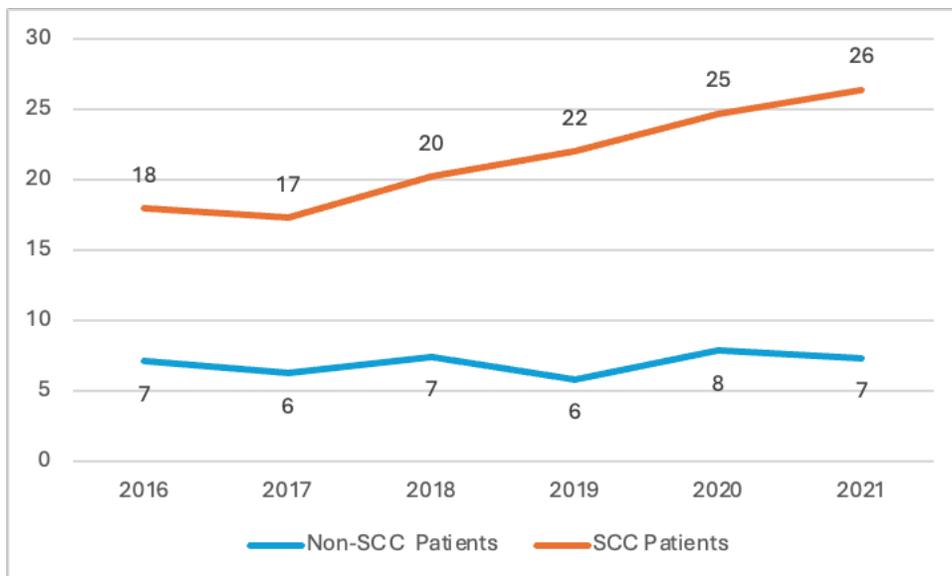
Figure 3. Trends in Annual Incidence Rates of Hospitalization for Neurological Disorders by Patient Type in Matched Sample (2016 to 2021)

Infectious diseases, including parasitic disease and HIV, showed disparities between groups. As seen in Figure 4, the hospitalization rate for SCC patients fluctuated between 5.73 and 15.48 cases per 1,000 person-years, with a notable high of 15.48 in 2018. Non-SCC patients had lower rates (1.75 to 3.31). The 2018 data point showed the most extreme difference, with SCC patients experiencing over five times the rate of their matched counterparts (15.48 vs. 2.98) (see Table 20 and Figure 16 in Annex I).
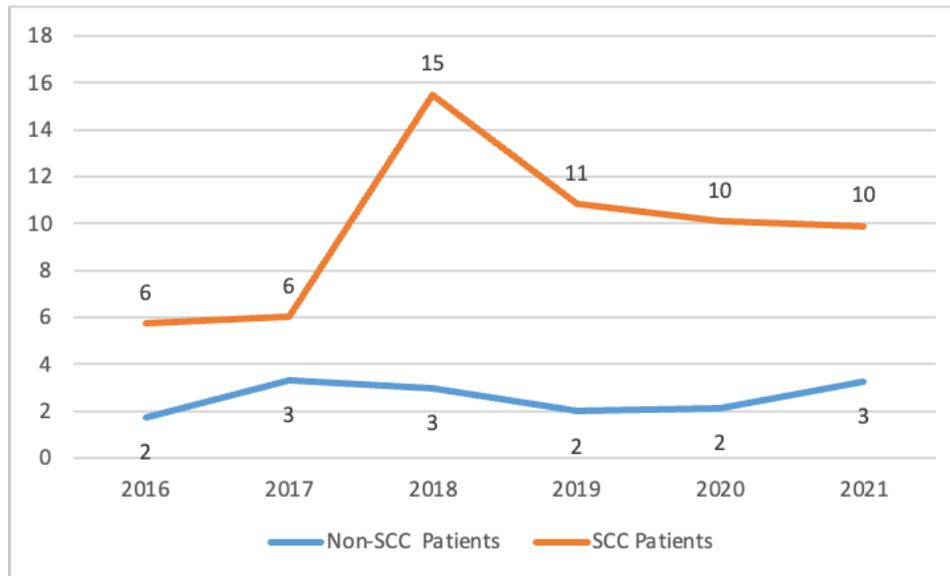
Figure 4. Trends in Annual Incidence Rates of Hospitalization for Infectious Diseases by Patient Type in the Matched Sample (2016 to 2021)

Costs

The data show that SCC patients incurred higher total healthcare costs than non-SCC patients throughout the study period, with an annual cost premium ranging from 7.8% to 16.4%. For example, in 2017, the average annual cost for a SCC patient was $1990.90 compared to $1669.10 for a non-SCC patient—a difference of 16.16%. This cost gap gradually narrowed over time, declining from 16.4% in 2016 to 7.8% in 2021. Higher costs were primarily driven by hospitalization and emergency services, likely reflecting both the greater clinical complexity of SCC patients and potential systemic barriers to accessing preventive care. The downward trend in recent years may indicate improvements in care coordination (see Table 26 in Annex I). The following section examines five categories of healthcare costs: physician, hospitalization, outpatient, hospital emergency, and diagnostic—each adjusted for age and sex.

    (i)   Physician costs – Non-SCC patients consistently incurred higher mean physician costs per patient than SCC patients across all years. For example, in 2016, non-SCC patients had significantly higher mean costs per patient ($424.3) than SCC patients ($403.2), a pattern also observed in 2018 ($428.8 vs. 398.6) and 2021 ($456.2 vs. $423.1) (see Table 21 in Annex I). All

differences were statistically significant (p <0.05), suggesting that non-SCC patients may have required more physician services or faced higher costs due to other factors.

(ii) Hospitalization costs – SCC patients had consistently higher mean hospitalization costs per patient than non-SCC patients throughout the study period (2016-2021), with all differences reaching statistical significance. For example, in 2016, the mean cost was $729 for SCC patients compared to $531 for non-SCC patients; in 2018, $678 vs. $491; and in 2021, $490 vs. $368 (see Table 22 in Annex I). All p-values were below 0.05, suggesting that SCC patients may require more intensive or frequent hospital care due to severe health conditions.

(iii) Outpatient costs – The data reveal a shift in outpatient cost patterns over time. From 2016 to 2018, SCC patients had significantly higher mean outpatient costs—for example, $388 vs. $334 in 2016, $393 vs. $355 in 2017, and $388 vs. $348 in 2018. However, this trend reversed between 2019 and 2021, with non-SCC patients incurring higher average outpatient costs, such as $332 vs. $299 in 2020 (see Table 23 in Annex I). These findings suggest that while SCC patients initially required more outpatient resources, non-SCC patients eventually showed equal or greater outpatient service utilization in later years, though statistical significance varied.

(iv) Emergency costs – SCC patients consistently incurred significantly higher mean costs per patient for emergency department visits than non-SCC patients across the study period (2016–2021). The yearly cost differences were statistically significant. For example, in 2016, SCC patients averaged $143.50 vs. $104.60 for non-SCC patients, a pattern that persisted through 2021 ($137 vs. $101.50). The extremely low p-values (all <.0001) strongly suggest that these differences reflected disparities in emergency care utilization or severity between the groups rather than random variation (see Table 24 in Annex I). These findings indicate that SCC patients consistently required more costly emergency department services year after year.

(v) Diagnostic costs – SCC patients incurred higher diagnostic costs across all years, with significantly greater mean costs than non-SCC patients. In 2016, the average diagnostic cost for SCC patients was $298.80, compared with $248.90 for non-SCC patients. This pattern persisted throughout the study period, with SCC patients reaching their highest mean cost in 2021 at $306.40, compared to $275.80 for non-SCC patients.

1.1.3 Summary of Findings

The matched sample analysis shows that SCC patients had consistently higher incidence rates of hospitalization across nearly all disease categories compared to non-SCC patients, particularly for cardiovascular disease, neurological disorders, and infections. SCC patients also incurred higher overall annual healthcare costs, with elevated hospitalization and emergency visit costs outweighing savings from lower outpatient and physician service costs.

These findings suggest an association between patient status, health outcomes, and healthcare utilization patterns. The data indicate that SCC serves a disproportionately vulnerable and medically complex population compared with non-SCC clinics. This discrepancy is evident in consistently higher hospitalization rates and emergency visit costs for SCC patients, which likely reflect greater illness severity

and socioeconomic barriers to preventive care. While we cannot say for certain, it appears that non-SCC clinics tend to serve less complex patients, possibly due to patient selection mechanisms such as clinic location (e.g., being situated in neighbourhoods with fewer social and economic challenges) and waitlist practices. These dynamics underline systematic inequalities in healthcare access, with SCC absorbing the burden of caring for a marginalized, medically complex population that other clinics may not be structured or incentivized to support.

1.2 Comparative Evaluation of HIV Program Effectiveness

The second part of Workstream 1 compares the effectiveness of care for individuals diagnosed with HIV in two clinical settings: SHA's PLP and SCC's Westside clinic (WSCC). This comparative analysis highlights the respective strengths and limitations of each care model in managing a complex, high-needs patient population with frequent interactions with the healthcare system. Saskatchewan continues to report the highest HIV rates in the country, and as a lifelong chronic condition, HIV imposes substantial costs on the provincial healthcare system—with an estimated $1.44 million lifetime cost per new infection (Warkentin et al., 2024). Delivering timely, appropriate, and responsive care to this population is critical for reducing HIV viral spread in the community and preventing new infections.

1.2.1 Methodology

This evaluation included an analysis of clinical data and patient outcomes in each clinical context to determine the impact of the models of care on patient health outcomes, as well as factors influencing the effectiveness of these models. A cohort analysis was conducted for the HIV patient populations in SHA's PLP and at SCC's WSCC over a five-year period. The demographics of the patient population were comparable across both sites, differing only in terms of resources and care models. PLP uses an acute care, specialist-led, hospital-based model, while WSCC follows a community-based, primary care-led, team-based model.

We analyzed the HIV cascade of care markers to compare clinical outcomes across the patient populations. The HIV cascade is a standardized framework used to assess the effectiveness of HIV-related healthcare services and patient engagement along the continuum of care. Key cascade markers include patient engagement and retention, medication adherence, and viral suppression rates. These markers help evaluate treatment and care, identify service gaps and engagement patterns, monitor healthcare system and HIV program effectiveness, and highlight challenges in the continuity of care across populations and clinical sites. The HIV care cascade assumes a linear, unidirectional progression in which individuals enter upon diagnosis and remain unless lost to follow-up or are deceased. The UNAIDS 95-95-95 global targets for HIV care set a benchmark of 95% achievement for each marker.

Clinical data were extracted from electronic medical records at both clinical sites for individuals diagnosed with HIV (diagnosis code 0.42–0.44) who accessed care between May 1, 2019, and April 30, 2024. A retrospective chart review captured variables, including name, Saskatchewan health identification number, sex, date of birth, age, postal code, date of diagnosis, risk factors, appointment history, antiretroviral treatment records, and laboratory results (HIV confirmation, viral load count and collection date, CD4 count and collection date). The dataset was de-identified, cleaned, and filtered to exclude deceased individuals and patients without an HIV-related clinical visit within the past 24 months. Descriptive

analyses were then conducted to summarize patient demographics and the following definition markers for the cascade of care:

- Total patient count: All individuals with an HIV diagnosis (excluding deceased), including both active and inactive patients.
- Active patients: Patients with at least one HIV-related clinical visit within the past 24 months.
- Engaged in care: Patients with at least one HIV-related clinical visit within the past 12 months.
- Received antiretroviral (ARV) medication: Patients who were prescribed antiretrovirals (i.e., HIV medication).
- Virally suppressed: Patients with a laboratory-confirmed viral load of fewer than 40 copies/mL.

1.2.2 Findings

In Saskatoon, PLP (SHA) and WSCC (SCC) are the main clinical care sites for the chronic disease management of HIV. The two clinics operate under distinct models of care: PLP offers specialist-led services within an acute care setting, while WSCC delivers community-based primary care through a multidisciplinary team. At PLP, medical care is provided by infectious disease specialists based primarily at Royal University Hospital. Medical visits are appointment based, and PLP patients are required to check in at hospital admissions prior to being seen in an outpatient clinical space within the hospital. The PLP team includes HIV case management workers, a dedicated pharmacist, nursing staff, administrative support, and management personnel.

Located in the inner-city neighbourhood of Saskatoon near St. Paul's Hospital and other community services, WSCC provides integrated, low-barrier care through a comprehensive team approach. Although the clinic has no dedicated staffing for HIV care and receives minimal HIV funding ($50,000 per year), it provides space for PLP staff to support community-based patient visits and outreach activities.[6] WSCC also provides administration and reception support and access to their care team members—an in-kind contribution to PLP. Care at WSCC is opportunistic, allowing multiple needs to be addressed during each patient visit, without requiring HIV-specific appointments. This flexible and accessible model results in frequent engagement with people living with or at risk for HIV, strengthening their connections with the clinic staff and healthcare providers.

Because patients can choose where they receive HIV care, the patient profiles differed slightly between the two clinical sites. For instance, individuals in the "men who have sex with men" (MSM) category, as well as pediatric, newcomer, and immigrant populations, typically received care at the hospital-based PLP site, while those with risk factors for injection drug use, limited access to transportation, and/or housing instability were more often seen at WSCC. Despite these differences, the overall demographics of people living with HIV were comparable across the two sites: the median patient age was 45 years (IQR = 33), with a mean of 44.4 (SD = 12.2). At PLP, the gender distribution was 62% male and 38% female, while at WSCC, it was more balanced at 49% male and 51% female. The primary risk factor for the PLP population was sexual transmission, whereas at WSCC it was injection drug use. In both clinics, individuals of Indigenous

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[6] SHA contributes a small leasing fee towards WSCC's cost of providing the space to PLP.

ancestry were disproportionately represented. Total patient counts were similar—1,103 at PLP and 1,016 at WSCC—yet the cascade of care outcomes differed greatly between the two sites.

Between 2019 and 2024, WSCC consistently reported better HIV care cascade outcomes compared to PLP. See Table 1 below. At WSCC, approximately 80% of patients were classified as "active" in their care—defined as having had at least one HIV-related visit in the past 24 months. In contrast, only 45% of patients at PLP met this threshold. Among those active in care, an average of 85% at WSCC were also "engaged" in care—defined as having had at least one HIV-related clinic visit within the past 12 months—compared to just 45% at PLP during the same period. Although virtual care was offered during the COVID-19 pandemic, restricted access to the hospital likely contributed to missed visits and lower engagement at PLP. In more recent years, engagement rates at PLP have increased, ranging between 50% and 65%.

The "on ARVs" (i.e., HIV medications) indicator is based on an antiretroviral therapy (ART) medication prescription on file in the patient record but does not reliably reflect medication adherence (i.e., that the patient is taking the prescribed medication or taking the medication as prescribed). However, ART adherence to is closely linked to viral suppression. Today's ART regimens are highly effective at suppressing HIV in the blood stream, making viral suppression the most important marker of successful management and treatment. Suppression rates at WSCC ranged from 44% to 65%, while PLP rates were lower—between 37% and 47%.

Table 1. HIV Care Cascade Outcomes at Positive Living Program (PLP) and Westside Community Clinic (WSCC)

	PLP (#)	WSCC (#)	PLP (%)	WSCC (%)
Year 2019/2020				
Total Clients	**931**	**812**	**100**	**100**
Active	435	678	47	84
Engaged in Care	118	535	27	79
On ARVs	291	424	67	63
Virally Suppressed	205	354	47	52
Year 2020/2021				
Total Clients	**941**	**894**	**100**	**100**
Active	445	712	47	80
Engaged in Care	237	561	53	79
On ARVs	251	468	56	66
Virally Suppressed	206	463	46	65
Year 2021/2022				
Total Clients	**1004**	**984**	**100**	**100**
Active	507	692	41	70
Engaged in Care	282	603	16	87
On ARVs	227	514	53	74
Virally Suppressed	157	303	46	44
Year 2022/2023				
Total Clients	**1032**	**1055**	**100**	**100**
Active	439	733	43	70
Engaged in Care	285	584	65	80
On ARVs	222	531	51	72
Virally Suppressed	116	341	37	47
Year 2023/2024				
Total Clients	**1103**	**1140**	**100**	**100**
Active	513	670	47	59
Engaged in Care	274	550	53	82
On ARVs	266	498	52	74
Virally Suppressed	220	305	43	46

1.2.3 Summary of Findings

The HIV cascade of care outcomes are essential metrics for assessing the success of HIV prevention and treatment within a population or clinical setting. For instance, the high engagement rates observed among patients receiving care at WSCC illustrate the responsiveness of its care model, especially when compared with engagement rates at PLP. This finding suggests that the model plays a significant role in determining patient engagement in HIV care. However, WSCC's high engagement rates, paired with relatively low viral suppression rates, underscore the complexity of managing HIV patient populations.

Viral suppression is strongly influenced by the social determinants of health—including literacy, housing, income, transportation, age, ethnicity, and gender (National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (US), 2010; Ontario HIV Treatment Network (OHTN) Rapid Response Service, 2025; Papageorgiou et al., 2021). Poorer social conditions are associated with lower suppression rates and higher transmission risk. HIV management is a medically complex process affected by many intersecting factors. A key strength of WSCC's accessible, integrated team-based model is its ability to manage comorbidities in a single patient visit. Conversely, PLP's strength lies in its specialist care and its dedicated HIV-focused support team. Despite these strengths, persistently low suppression rates at both sites indicate that non-medical supports are required to meet the needs of this vulnerable population and move closer to achieving the UNAIDS' 95-95-95 global targets.

Workstream 2: Surveying Patients' Experiences

The objective of Workstream 2 was to compare the experiences of SCC patients to those receiving care at other healthcare facilities in Saskatoon. This comparison offers valuable insights into the distinct features of care delivered at SCC, highlighting both strengths and opportunities for improvement. It also contributes to a clearer understanding of how well patient needs and expectations are being addressed across different care settings.

2.1 Methodology

To collect and compare these patient experiences, we developed a survey instrument informed by established questionnaire models used by research institutions and agencies. The survey (see Annex II) consisted of four sections: (i) socioeconomic and social determinant characteristics; (ii) healthcare service utilization and needs; (iii) experience and satisfaction with the quality of care and access at the main primary care setting; and (iv) experience with providing feedback to the patient's primary care clinic.

To administer the survey and collect responses, we worked with the Canadian Hub for Applied and Social Research (CHASR), using the Qualtrics survey platform. The survey was conducted in two phases. In the first phase, SCC co-operative members (but not the broader patient population) were invited to participate via email. Posters and flyers with QR codes were displayed at both SCC clinic sites to encourage participation. In the second phase, after collecting SCC surveys, CHASR administered the same survey to a panel of non-SCC respondents in Saskatoon, selected based on age, sex at birth, and income level. In both phases, responses were filtered to include only respondents residing in Saskatoon, determined by postal code. Table 2 provides an overview of the two survey phases, including administration dates and the number of surveys collected.

Table 2. Phases of the Survey

Survey Phases	Dates	Number of Surveys
Phase 1 – SCC Respondents	Nov 26 to Dec 9	151 valid responses
Phase 2 – Non-SCC Respondents	Dec 12 to Jan 31	300 valid responses

Among the 151 SCC respondents, 135 identified the Downtown (2nd Avenue) site as the primary care clinic they visited most often in the past 12 months, 11 identified the Westside site, and five did not specify a site. This distribution reflects our survey dissemination strategy, which involved direct e-mail communication with co-op members, who tend to be primarily Downtown patients. As a result, the Downtown site is more heavily represented. These factors do not affect the original objective of the survey: to compare the experiences of SCC patients with those of a comparable panel of non-SCC patients. However, the results of this survey should not be considered representative of the broader SCC experience, and the sample size is insufficient to allow separate analysis by site.

Based on survey results, we performed chi-square tests[7] for each question to check whether there was a statistically significant association between the variables, with a significance level of 0.05. Where the results for a question are not statistically significant, this will be clearly indicated in the results section. Finally, due to rounding, the percentages in the tables and figures may not sum exactly to 100%.

2.2 Results

This section provides a summary of the main findings for Workstream 2. More detailed results and corresponding tables can be found in Annex III.

2.2.1 Patients' Demographics and Health Conditions

As explained previously, respondents from both panels were matched according to their sex at birth, age, and income. Both panels were thus identical for these three dimensions. Tables 3, 4, and 5 show the distribution of respondents for each matching criterion.

Table 3. Respondents' Distribution by Sex at Birth

Sex at Birth	Distribution
Male	28%
Female	72%
	100%

Table 4. Respondents' Distribution by Age

Age	Distribution
18-25	1%
25-34	0%
35-44	8%
45-54	7%
55-64	16%
More than 65	68%
	100%

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[7] The chi-square test of independence is a statistical method used to test whether two categorical variables are related to each other. It compares the observed data with what would be expected if there were no connection between the variables.

Table 5. Respondents' Distribution by Income

Income	Distribution
Less than 25,000	9%
25,000 to 50,000	20%
50,000 to 75,000	20%
75,000 to 100,000	19%
100,00 to 150,000	21%
150,000 to 200,000	7%
More than 200,000	4%
	100%

In terms of other demographic characteristics, SCC respondents were about four times more likely than non-SCC respondents to report a gender identity different from their sex assigned at birth. While this difference is not statistically significant—likely due to the small number of cases—it is nonetheless notable, particularly given SCC's specialization in care for transgender and gender-diverse populations. This trend, combined with the demographic profile of survey respondents (which skews older and may underrepresent those identifying as "other"), points to a potentially meaningful difference. SCC respondents also self-reported a higher level of education compared with the non-SCC panel (Table 27 in Annex III).

SCC respondents reported poorer overall health than non-SCC respondents (Figure 17 in Annex III). However, when all respondents without a regular primary care provider were excluded, the difference in self-reported general health between the two groups was no longer statistically significant. In contrast, across the full sample (N = 451), self-reported general health status was statistically associated with whether a respondent had a family doctor.

In addition to general health, SCC respondents reported a higher prevalence of chronic disease (Figure 5 below) than non-SCC respondents, and this difference remained statistically significant even when considering only those with a regular primary care provider. These findings—indicating a greater burden of chronic disease among SCC patients—were consistent with those observed in Workstream 1.
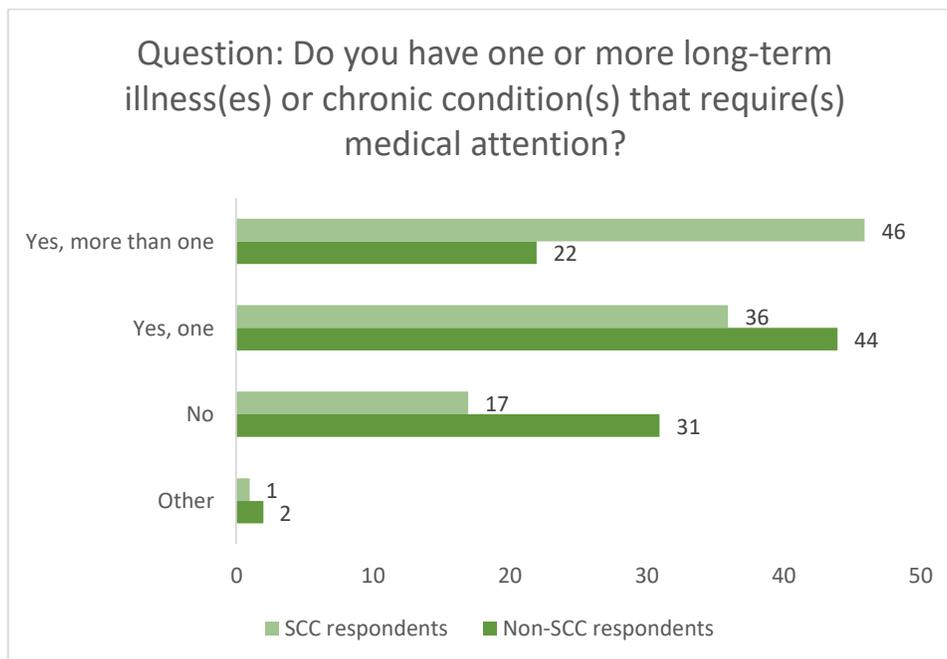
Figure 5. Prevalence of Long-term Illness or Chronic Conditions

2.2.2 Healthcare Services Utilization

This section of the questionnaire explored respondents' use of healthcare services. When asked whether they had a regular primary care provider (defined as a family physician or nurse practitioner), 99% of SCC respondents answered yes, compared with 84% of the non-SCC panel. This difference likely reflects the recruitment process—SCC respondents were contacted by the clinic and are, by default, attached to a provider. As this factor may influence subsequent findings, it is consistently considered and explicitly noted where relevant.

When asked about their overall use of the healthcare system (Figure 18 in Annex III), SCC respondents were more likely to report serious health problems and more frequent use of healthcare services—findings that align with the earlier findings on general health condition. Even when controlling for the presence of a regular primary care provider, (i.e., limiting the analysis to those who have a regular primary care provider), this significant statistical relationship persists, although it is somewhat less pronounced.

Respondents were then asked, *"In the last 12 months, where did you mostly go when you needed a check-up, wanted advice about a health problem, or got sick or hurt?"* To reduce bias, we limited the comparison to those who reported having a regular primary care provider. Among this group, 95% of SCC respondents identified their primary care provider's clinic as their main source of care, compared with just 61% of non-SCC respondents. The remaining 39% of non-SCC respondents identified walk-in clinics (26%), hospital emergency rooms (12%), or pharmacies (1%) as their primary source of care.

Respondents were then asked to identify the primary care clinic they had used most in the past 12 months. As noted earlier, most SCC respondents named the SCC Downtown site (2nd Avenue), whereas

non-SCC respondents identified a wide range of clinics, all in Saskatoon. All subsequent questions in the survey focused on respondents' experiences with their identified clinic.[8]

Compared with non-SCC respondents, those from SCC reported using the identified primary clinic as their source of care for a longer period (Figure 19 in Annex III) and visiting more frequently in the past 12 months (Figure 20 in Annex III). This higher visit frequency can be partly attributed to the greater prevalence of chronic illnesses among SCC patients. When we excluded respondents without any reported chronic conditions, the association between SCC affiliation and higher clinic-visit rates was weaker but remained statistically significant. Additionally, the diverse range of services offered at SCC—including physiotherapy, footcare, mental health counselling, and lab work—likely contributed to more clinic visits to meet varied healthcare needs.

2.2.3 Satisfaction with Healthcare Services

SCC respondents reported higher overall satisfaction with the healthcare services they received at their primary care clinic compared with non-SCC respondents. In response to the question *"On a scale from 0 to 10, where 0 is the worst possible experience and 10 is the best possible experience, how would you rate your overall care experience at that primary care clinic?"* SCC respondents had an average score of 9/10, while non-SCC respondents had an average of 8/10. This difference is statistically significant[9] and holds even when limiting the analysis to those who have a regular primary care provider.[10] Among SCC respondents with more than one chronic condition, the average satisfaction score drops to 8/10. We thus investigated whether, among SCC patients, there was a relationship between satisfaction level and the presence or absence of one or more chronic condition, but we did not find any statistically significant association that would account for why the average satisfaction score is slightly lower for SCC patients with one or more chronic conditions than it is for those who have none.[11]

SCC respondents also reported slightly higher satisfaction with how well their preferences and concerns were acknowledged, with a greater proportion indicating that this was "always" the case (Figure 21 in Annex III). They also expressed higher satisfaction with the time spent with their physician (Figure 6 below): 57% of SCC respondents rated it as "excellent" compared to 31% of non-SCC respondents. These findings are consistent with the qualitative data collected during the interviews, where both patients and family physicians indicated that the length of the appointment was satisfying.

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[8] In the questionnaire, the name of the clinic identified by the respondent was automatically inserted into subsequent questions using the piped text function, allowing for personalized content based on previous responses.

[9] The analysis was conducted by grouping certain responses to meet the conditions for performing a chi-squared test. The responses were grouped in various ways, and in each case, the relationship between the variables remained significant.

[10] As with the other analyses, we excluded SCC and non-SCC respondents who reported not having a regular primary care provider to see if this influenced their satisfaction. It appears that the "primary care provider" variable did not significantly impact respondents' satisfaction.

[11] Notably, not all conditions for running a chi-squared test were met in these analyses, as some variables had fewer than five occurrences.
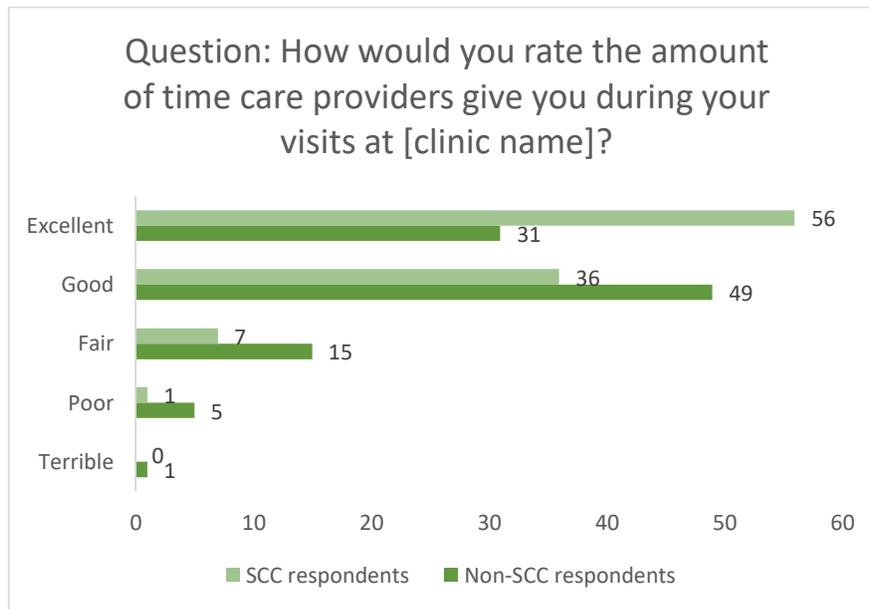
Figure 6. Amount of Time with Care Providers

SCC respondents were more likely than their non-SCC counterparts to agree that their clinic's care model helped them manage their health more than other clinics they have visited[12] (Figure 22 in Annex III). However, the follow-up question asking why the care was better or worse than elsewhere did not yield any statistically significant differences, and no particular factor stood out for the SCC group. SCC respondents expressed slightly stronger agreement than non-SCC respondents that healthcare professionals at their clinic shared information and collaborated effectively[13] (Figure 23 in Annex III). They also believed their care was well coordinated with the rest of the healthcare system[14] (Figure 24 in Annex III).

When asked to select changes that could improve their experience at their clinic, respondents chose from a list of potential improvements. Table 6 below presents the percentage that selected each item. As can be seen, SCC respondents (54%) most frequently cited "Less waiting time to make appointments," with 25% indicating they had "no complaints." More non-SCC respondents cited multiple improvement items, with only 10% indicating they had no complaints.

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[12] For this question, a first chi-square analysis was conducted on all responses, and a second analysis excluded respondents who answered, "I haven't been to another clinic." In both cases, there was a statistically significant dependency between the two variables.

[13] For this question, the chi-square analysis was conducted on all responses, and a second analysis excluded respondents who answered, "Not relevant – I only saw one provider at that clinic" or "I don't know." In both cases, there was a statistically significant dependency between the two variables.

[14] For this question, the chi-square analysis was conducted on all responses, and a second analysis excluded respondents who answered, "Not applicable – I did not require coordination with other parts of the healthcare system." In both cases, there was a statistically significant dependency between the two variables.

Table 6. Changes to Improve Patient Experience

What changes do you think could improve your experience at [clinic name]? Choose all that apply.	SCC Respondents	Non-SCC Respondents
Less waiting time to make appointments	54%	33%
Less time in the waiting room	9%	45%
More time with the care provider	19%	42%
Home visits	7%	35%
Greater listening by doctors and health professionals	11%	41%
Better continuity between appointments	15%	27%
Greater curiosity – I need my health professionals to ask me more questions	9%	23%
Offering more services – Please specify	14%	1%
None – I have no complaints	25%	10%

To conclude the satisfaction section, we asked respondents how likely they would be to recommend their clinic to friends and family, using a scale from 0 to 10. As with the satisfaction question at the beginning of this section, SCC respondents' average score was 9/10, while non-SCC respondents scored 8/10. The relationship between satisfaction and clinic affiliation (SCC or non-SCC) was statistically significant.[15]

In addition to analyzing average satisfaction scores, we calculated the Net Promoter Score (NPS) for each group to gain a more nuanced understanding of feedback distribution. The NPS measures the difference between the proportion of promoters (ratings of 9 to 10) and detractors (ratings of 0 to 6), offering a clearer picture of patient satisfaction. For the SCC group, the NPS was 72.85, indicating a very high level of satisfaction with a clear predominance of promoters, suggesting that SCC patients were not only satisfied but also rarely critical. For the non-SCC group, the NPS was 23, indicating more moderate satisfaction and greater variability in feedback, despite a relatively high average satisfaction score. These findings suggest that while both groups were generally satisfied, SCC patients exhibited a much stronger positive perception, while non-SCC patients had a broader range of responses.

2.2.4 Governance and Participation

In the last section of the survey, we aimed to understand the extent to which respondents provided feedback on their experience to their clinic and whether they believed it made a difference. Although SCC respondents (46%) were slightly more likely to give feedback than non-SCC respondents (41%), the chi2 test did not show a significant relationship between these variables.

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[15] The analysis was conducted by grouping certain responses to meet the conditions for performing a chi-squared test. The responses were grouped in various ways, and in each case, the relationship between the variables remained significant.

Among SCC respondents who provided feedback, the most common methods were responding to a patients' experience survey (36%), having a one-on-one conversation with a healthcare provider (20%), discussing their views with a staff representative (14%), or attending a membership meeting (13%). Fewer SCC respondents reported posting on social media (1%) or submitting anonymous feedback (3%), compared with non-SCC respondents, who had higher rates of social media posts (18%) and anonymous feedback submissions (15%).

Finally, respondents were asked whether they believed their clinic considered patients when deciding what kind of services to offer and how to deliver them. SCC respondents were more likely to say that their feedback was taken into account, although a larger proportion of them chose "wasn't sure/didn't know" (Figure 25 in Annex III). When asked whether they believed their feedback or opinions had influenced the services or care provided by their clinic, SCC respondents again expressed stronger agreement that this was the case (Figure 26 in Annex III). However, SCC respondents also more often selected "I never provide feedback," which contrasts with earlier results showing they were more likely to give feedback. This inconsistency complicates further interpretation, making it difficult to draw clear conclusions from these findings.

2.3 Summary of Findings

Overall, SCC patients reported a higher prevalence of chronic conditions than non-SCC respondents. SCC respondents reported higher healthcare utilization, with nearly all having a regular primary care provider compared to a lower proportion of non-SCC patients. They also relied on their clinic as their main source of care more frequently and visited more often. Satisfaction with care was notably higher among SCC respondents, who rated their experiences more positively, particularly in areas like provider engagement, appointment length, and overall coordination of care. SCC patients most frequently cited long appointment wait times as an area needing improvement. While SCC patients were only slightly more likely to give feedback, the ways they provided it—survey participation, direct conversations with providers or staff, at membership meetings—differed from non-SCC respondents, who favoured social media posts or anonymous means. While SCC respondents were more likely to believe their feedback influenced clinic services, inconsistencies in responses regarding feedback engagement make conclusions on governance and participation somewhat unclear. Overall, both groups were generally satisfied with their experiences, though SCC patients had a significantly stronger positive perception, while non-SCC patients expressed more varied responses.

Workstream 3: Qualitative Analysis of SCC Models of Care and Governance

The aim of Workstream 3 was to better understand and account for the central aspects of SCC's care and governance models, to identify the related strengths and challenges, and to capture the experiences of the stakeholders, mainly employees (management and staff), Board members, service users, and members.

3.1 Methodology

This research relied on qualitative methods to fully capture the complexity and entirety of the studied reality. Three data collection techniques were employed: (i) document analysis, (ii) semi-structured interviews, and (iii) non-participative observations.

First, we analyzed documents that formally describe the clinic's governance and organizational structure or provide evidence of its evolution and implementation (e.g., reports, organizational charts). This document analysis helped us gain an understanding of the clinic's background and context, which informed the design of the interview guides and framing of the observations. Second, we conducted semi-structured interviews (N = 42, see Table 7 below) with Board members, employees, and patients/members. The interviews were primarily conducted between November 2023 and April 2024, with five pilot interviews conducted in February and March 2023.

Table 7. Number of Interviews per Category

Interviewee Categories		Number of Interviews
Board members (=BM)		9
Employees		
	Management staff (=MS)	11
	Healthcare staff (=HS)	9
	Allied health professionals (=AHP)	8
Patients and members (=PM)		4
Affiliate/Partners (=A/P)		1
Total		**42**

Interview guides (see Annex IV) were tailored for each category of participants. The interviews aimed to explore the relationship between the interviewee and SCC: their experiences in their respective roles; their understanding of SCC governance and care models; and their characteristics and outputs. Interviewees were recruited using a combination of convenience and snowball sampling methods. An invitation was sent to Board members and employees to target those willing to participate, followed by the opportunity for participants to recommend others, ensuring a diversity of viewpoints. The interviews were continued until methodological saturation was achieved for most sub-themes across the majority of groups interviewed.

The interviews were transcribed verbatim using Microsoft Word and subsequently reviewed by a researcher. The transcripts were then returned to the interviewees, giving them an opportunity to verify the content and/or make changes or add further information if necessary. The transcripts were analyzed thematically using NVivo software. Coding categories were developed both inductively (based on insights from the fieldwork and interviews) and deductively (informed by the existing literature and relevant theoretical frameworks).

Next, we conducted non-participative observations (N = 13, see Table 8 below) during various meetings where the clinic's approach to care and governance model were discussed. The goal of these observations was to examine how stakeholders work together, share information, and make decisions. These observations were essential for providing contextual depth and a nuanced understanding of the data, placing the interview data into perspective and enriching the analysis by highlighting behaviours, interactions, and environmental factors that may not be captured in interviews alone. This triangulation of data sources strengthens the overall robustness and validity of the study.

Table 8. Number of Observations per Type

Observation Types	Number of Observations
Membership meetings	2
Board meetings (public part)	2
Leadership team meetings	2
Leadership team huddles[16]	2
Other committee meetings	1
Westside healthcare staff huddles	4
Total	**13**

3.2 Results

Throughout the interviews, participants expressed a high degree of satisfaction with the clinic, regardless of their role or perspective. Many interviewees conveyed a sense of pride in working for or being associated with SCC. However, rather than presenting an idealized portrayal of the clinic, they also acknowledged the clinic's challenges. Interviewees provided a balanced perspective, pointing out areas where improvements are needed and identifying specific obstacles the organization faces.

In the following section, we present a three-part summary of the analysis of the qualitative data. This analysis highlights the key themes and trends that emerged from data collection, addressing both the

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[16] Short management team meeting to share information between departments on any issues or projects that could influence the current week's operations.

positive aspects and the challenges identified by the interviewees. Interview excerpts are used throughout the report to illustrate and support the survey findings. The information in parentheses following each excerpt allows the reader to identify the interviewee and their category, e.g., HS3 is everything attributed to healthcare staff #3 of the 9 interviewed (refer to Table 7 above for acronyms).

The first part explores how different stakeholders (staff, leadership team, Board members, co-op members, and patients) experienced SCC's model of care. The second part addresses organizational and governance, emphasizing how these were perceived by stakeholders. The third part examines staff's experience working at SCC, highlighting factors that frequently contributed to their satisfaction and dissatisfaction.

3.2.1 Model of Care

Interviewees unanimously emphasized the unique role of SCC in Saskatoon's primary healthcare landscape, citing its multidisciplinary approach—bringing together professionals from different specialties—salaried providers, and free access to a wide range of services. These features, according to interviewees, contribute to higher quality care, facilitating a more holistic approach and improving access, particularly for underserved populations such as low-income individuals, those experiencing homelessness, the underinsured, minorities, and refugees.

This section examines how collaborative practices developed in the clinic, going beyond the simple co-location of different professionals. Based on interviewee experiences, we focus on the key factors that they said facilitate or hinder *interdisciplinary work* and a team-based approach to care at SCC. A second sub-section addresses other critical challenges facing SCC's model of care, with particular attention to the unique circumstances of the clinic's sites.

Interdisciplinarity and Team-Based Care Practices

Multidisciplinary care refers to the involvement of professionals from multiple disciplines, who may not necessarily work toward shared goals in an integrated or coordinated manner; in contrast, interdisciplinarity involves joint, coordinated action aimed at achieving a shared goal (Choi & Pak, 2006). This distinction can be viewed as a continuum, ranging from basic multidisciplinary co-location to a fully integrated, interdisciplinary, team-based approach to patient care. The latter may extend to transdisciplinary collaboration, where professionals work beyond traditional disciplinary boundaries, though this concept is beyond the scope of this report. For clarity, we use "multidisciplinary" to describe SCC's overall model of care, which involves co-located services provided by different professionals, even if collaborative practices are not always developed. Where coordination and teamwork are emphasized, we refer to the model of care as interdisciplinary and team based.

Although interdisciplinary care and team-based work have always been core principles of SCC, its model of care has evolved over time. Collaborative practices have changed in response to both internal dynamics and external pressures, such as shifting community needs, the interests and passions of providers, funding opportunities, and organizational constraints: As one participant noted, *"Interdisciplinary has meant different things all throughout the time that I've been with the clinic, and we've added different teams and different partnerships and different types of providers"* (MS8).

Collaboration practices within the organization also vary, among both different professional groups and individual practitioners, each with their own approach to care. A key distinction is found between the models of care at the Downtown and Westside sites: Downtown was often seen as following a more traditional model, primarily serving a middle-class population, with Westside operating within an "opportunistic care" model, where every patient visit is seen as an opportunity to address other multiple health concerns and screen for additional health issues. This model is particularly focused on serving an underserved inner-city population.

If we envision a continuum ranging from simple multidisciplinary co-location to fully integrated team-based care, interviewees unanimously acknowledged that SCC is far beyond mere co-location. However, there were differing opinions among staff on where SCC stands on this continuum. Some argued that SCC has reached an early form of interdisciplinarity with the introduction of certain collaborative practices but that its professionals still largely work in silos. Others contended that SCC has made significant progress in adopting team-based practices, suggesting a more advanced level of integration and collaboration among professionals. These differing perspectives reveal variation in how team-based care is defined and implemented at SCC, highlighting both the strengths of its current model and the need for greater cohesion and integration.

Despite these differences, most interviewees agreed that SCC's model of care is far ahead of others they have encountered in the healthcare system. In the interviews, we sought to explore how the interdisciplinary, team-based approach unfolds within the clinic, as well as enablers and barriers. These factors are grouped into seven themes: organizational environment, funding model, professional autonomy, workflows and work practices, organizational culture, tools and technologies, and leadership.

(i)   **Organizational Environment**

The co-location of different care providers in the same space is a key factor in facilitating exchanges and coordinating care. Interviewees noted that this physical proximity enables healthcare professionals to collaborate more easily and exchange information in real time, thereby enhancing the efficiency of care. Shared workspaces, where doctors and nurse practitioners often work side by side, encourages informal discussions, information sharing, and even the rapid resolution of clinical problems—all of which improve the quality of care offered to patients:

> *Before that, some of my physician colleagues, I would maybe see them, you know, during the workday them going in and out of the room while I'm going in and then give them a wave but… there wasn't much opportunity for informal case conference unless you like sought it out. But here, we're all sitting in the same room, and something pops up on our screen that is confusing. It's very easy just to turn around and say, "Hey, look at this like, what do you think?" So that's been really, really, really valuable. (HS3)*

According to the interviewees, new recruits particularly value these shared workspaces, which offer greater opportunities for peer interactions and support in their learning process. The size of the organization also plays a role. Respondents highlighted that "SCC's reasonable size" enables interpersonal connections and knowledge exchange. This factor is viewed as a key difference in teamwork dynamics between the

Downtown and Westside sites, with the latter being smaller and thus promoting easier team interactions and stronger personal relationships.

(ii)   **Funding Model**

At the organizational level, the health authorities' funding methods were frequently seen as problematic, as many are still physician-centric and can clash with the collaborative approach at the heart of SCC's model of care. Often, funding focuses on adding the number of family physicians through FTEs, without offering sufficient support to other staff members, which puts pressure on clinic practices:

> *We are very grateful for that physician funding, but when it doesn't come attached with any funding for support staff, it's actually creating a lot of challenges in the organization because... a physician cannot do their work without a team. [...] You're essentially creating more work for everyone else in the organization. So, you're creating more referrals to OT and PT and mental health, and you're creating more requisitions for lab work and you're creating more tasks that a nurse [has] to do because we've added four physicians this summer, but we were not able to add any of that support staff because we didn't have funding for it. (MS4)*

This discrepancy in funding creates an imbalance in capacity among different professional categories, putting pressure on the clinic's operations. This physician-centric funding model also introduces an accountability system primarily driven by numerical indicators, such as the number of physicians or patient visits. The emphasis on metrics places pressure on the organization to increase access, sometimes at the expense of collaborative practices, risking overshadowing the multidisciplinary approach central to SCC's model of care and straining the balance between quality of care and access.

(iii)   **Professional Autonomy**

A key factor in successful team-based care is the ability of healthcare professionals to collaborate effectively and accept a degree of interdependence in decision-making (D'Amour & Oandasan, 2005). However, in primary care, family physicians' professional autonomy—often seen as essential to their practice—may challenge this collaborative approach (Baker et al., 2011; Nugus et al., 2010). Historically, physicians held a dominant position in the healthcare system, and this dynamic continues to influence SCC's structure:

> *There's some, as there always is, I think, some hangovers from when the institution was created, where and it is, you know, sort of a sign of the times and the times are changing. But then, once you've got the structure in place, it's hard to make the changes, and we still are very physician oriented. They're still for the most part, the entry into the system. (BM2)*

This physician-centric hierarchy can complicate collaborative practices with other healthcare professionals. Interviewees highlighted that, at SCC, willingness to adopt the interdisciplinary model often varies, depending on the individual physician's interests and work habits. While some are highly collaborative, others may be more resistant, creating challenges in working effectively in teams: "*But that's, I think, a concrete issue within that I feel, within the clinic, where you just get doctors saying, 'Well no, I'm a doctor and I get to do this my way I get to do what I want to do'*" (BM2).

The providers' payment model, based on a salary rather than fee-for-service (which compensates per service), was seen as key to facilitating collaboration between family physicians and other healthcare professionals. This uniformity in payment methods aligns physicians' compensation structure with that of other healthcare providers, reduces competition, encourages collaboration that is not directly financially rewarding, and fosters a more cohesive, team-oriented environment: "*So, there's no like 'fee-for-service versus employee or salary' model. Then it... it's conducive to collaboration. I would say here it's very collaborative, it's very collegial*" *(HS5)*. By aligning payment structures, the clinic promotes shared responsibility and a collective focus on patient outcomes rather than individual financial incentives, strengthening partnerships within the healthcare team.

(iv)   **Workflows and Work Practices**

Interviewees recognized the importance of protecting dedicated time and space for team-based care. Westside staff, in particular, highlighted morning huddles as invaluable to delivering quality care and fostering team spirit:

> *So, we go through each doctor's schedule and then we'll kind of just bring up any questions or concerns that we have for that day and then kind of going our way. So, it's not anything too in-depth, but it's just something to start to get everybody on the same page and ready for the day just to kind of have a heads up. (HS6)*

Interviewees acknowledged, however, that the Downtown site could strengthen collaboration and team spirit by fostering an environment that supports teamwork and reinforces collective commitment.

The degree of standardization of workflows also plays a key role in facilitating collaboration. But it is not always easy to achieve an optimal balance between consistent workflows, the complex needs of patients, and the flexibility required to accommodate team members' diverse requirements, including the need for autonomy. While this balance is largely maintained at SCC, some interviewees shared experiences of variability in care practices, sometimes leading to misunderstandings and conflicts that can hinder effective collaboration and quality of care.

When it came to standardization of workflows, we observed differences between the two sites. Westside's staff often highlighted the importance of workflow flexibility, noting its role in being able to adjust quickly to emerging patient needs. For instance, during a visit with one provider, a patient with severe substance use disorder expressed the desire to seek treatment. The provider seized this opportunity to immediately call in a team member—a counsellor—to initiate a tripartite discussion. The flexibility inherent in Westside's opportunistic care model is key to meeting patients' needs promptly when the opportunity presents itself.

Another aspect of workflows and work practices is informal routines and habits. Multiple interviewees said informal encounters are critical in sharing updates about patients' care, facilitating collaboration, and building relationships between staff members. Several noted that these practices were weakened by social distancing and other protocols in response to the COVID-19 pandemic and the arrival of new staff during and after that period:

Being able to have those face-to-face conversations is really great too. COVID limited that. Like I think we became a little bit more siloed with COVID, there was less kind of that mingling that's happened. [...] I used to be up in the shared space and the doctors would come down to our space and you know... that still happens occasionally, but not as much as they used to. (MS7)

The difficulty in re-establishing these informal routines since the pandemic has meant that professional groups have been working more in silos, with several interviewees reporting feeling more "distant" from other professional groups than they had prior to the pandemic.

(v)   **Organizational Culture**

Staff consistently refenced their organizational culture—its values, mission, and identity—in their interviews. They highlighted it both as a key point of differentiation from other organizations and as a major factor influencing their job satisfaction:

So at least there's that awareness, you know. Whereas like when I worked at X, people would say things like "why don't they just get a job?" or [...] "why don't you just quit using drugs?" You know, like really ignorant thoughts like that. [...] So here at least there's that camaraderie about "we all know what sucks, we're all doing everything we can to help people within this system that's inefficient." So, it's like we're all on the same page, in the same boat and that's a good feeling to at least, you know [...] sharing values and sharing a desire to make things better. (HS8)

According to the interviewees, the organizational culture is about much more than co-location. Providers at SCC share a mission and a common set of values that facilitate an interdisciplinary approach: "*I feel like we're kind of collectively working towards something. I'm not just coming in, seeing patients leaving. Like, I feel like I'm kind of part of a bigger thing a little bit.*" (HS4)

This sense of belonging creates cohesion and strengthens the bonds among staff, directly influencing the way they work. Notably, however, interviewees had different views on this point. Some staff members and patients with a longer history with the organization said their identity has slowly but fundamentally shifted, and they no longer recognize the original co-operative values rooted in the model. For them, this spirit and identity have a much weaker influence on work practices than they did a few decades ago. Additionally, staff from the two sites differed in their views on cohesion, with a unique discourse found at Westside, where common values and a strong sense of shared identity were expressed.

Staff members also emphasized trust and familiarity, with knowledge of each other's roles and skills seen as key to effective teamwork. However, as the organization has grown and evolved—especially during the pandemic—some noted a decline in these values, particularly a weakening sense of familiarity across different professional groups.

(vi)   **Tools and Technologies**

The interviewees unanimously agreed on the benefits of the electronic medical records (EMR) system, which has enhanced collaboration and communication between the different groups of professionals:

So, the fact that all the different healthcare providers are using the same record to chart, that makes a big, big difference. Before you know it was a paper chart and you didn't necessarily... you weren't in the loop necessarily, you couldn't look back and see kind of how the counselling session went or what they said at physio last week or you know? It wasn't as good communication. (HS3)

Although the EMR system has facilitated more efficient and consistent communication, several staff members noted a downside: the system has replaced some spontaneous informal or detailed face-to-face discussions about patient care, which became more difficult to replicate in the digital space. Interviewees emphasized the need to remain mindful of this change and explore strategies to compensate for the loss of these in-person exchanges while reaping the benefits of the EMR.

(vii)   **Leadership**

Leadership in the clinic was identified as a critical factor in facilitating collaboration and ensuring that the voices of all providers are heard, especially through managers who serve as mediators and advocates. This role is particularly crucial when overcoming blockages arising from both formal and informal hierarchies between professional groups, such as those between nurses and family physicians:

We [the nurses] are also really good at being able to have that conversation directly with the provider too. But every once in a while, it doesn't happen that way. And so, she [the nurses' manager] is our kind of extended support. [...] She has that authority to say: "OK, the nurses can't take any more patients today" or something like that. Like "they already have too much on their plate" because it's a lot harder for us to just say no to seeing a patient or doing something. (HS6)

Other Challenges for the Model of Care

Like the rest of the healthcare sector, the clinic's main challenge in the current crisis is access. Healthcare providers feel the strain between the push to increase capacity—whether driven by patient demand, membership needs, or the organization's internal objectives—and their commitment to maintaining quality care. Many providers reported that the pressure to improve access is already compromising essential aspects of care due to limited time for team-based approaches, training, or even time with patients. This tension forces them to balance competing priorities, where the drive for efficiency threatens to undermine patient-centred care. This pressure is experienced at SCC's two sites but manifests differently:

The physicians just feel really a lot of pressure around [access] too. [...] Both [patient] populations are pushing. You know, they're pushing and I would argue the Westside clinic, they're pushing and they're swearing at people and yelling and you know, like they're going to be very aggressive and all these things. But at the main clinic there's a lot of push for access too, so I know that the organization wants to respond to that. (MS8)

Interviewees indicated that the access issue is not specific to SCC and is a consequence of the broader primary care crisis. They identified lack of resources (time, staff, space, and capacity) as the main source of the problem. Despite the broader systemic challenges, interviewees identified a number of issues specific

to SCC's functioning. Several expressed concern that some positions are left unfilled for extended periods after staff departures or prolonged absences, with little communication from the management team. This lack of transparency creates a sense of confusion and frustration among staff, as the delay in recruitment results in increased workloads for the remaining employees and limited access for patients.

A second issue, more specific to the Downtown site, is the need for a more efficient triage system. Interviewees noted that better triage could help manage both emergencies and same day appointments. It would also help prevent unnecessary visits to family doctors when another professional might be more appropriate. This would streamline care delivery and ensure that patients receive the right care at the right time.

While the access issue affects both sites, each faces its own site-specific challenges. For the Downtown clinic, one key challenge is maintaining agility and the ability to innovate. The clinic has evolved considerably since its inception, and some interviewees said that the initial model of care—pioneering at the time of its creation—has slightly diminished over time:

> *I think the biggest challenge for the clinic part, is for the main clinic to remain at the forefront of what's going on. [...] I mean, the clinic was set up in 1962, so it's been around a long time. So, it's a traditional way that medicine was practiced. I mean, it's different than Doctor Smith having his clinic, right? But it's probably losing some of that innovation part. (HS10)*

In the same vein, several interviewees expressed a fear the Downtown site could lose the qualities that once set it apart and "look like any other primary care clinic."

These concerns were not raised in relation to the Westside location, although according to interviewees, this site better embodies the clinic's principles. It is viewed as more adaptive—able to respond flexibly to patients' needs—and more reflective—willing to examine and evolve its practices. As a result, Westside is seen as more closely aligned with some of SCC's core values—providing care that is team-based, welcoming, and non-judgmental.

At the same time, Westside faces its own distinct challenges. The site was described in interviews as severely understaffed and serving patients with highly complex needs, many of whom live in precarious conditions and face multiple social determinants of health challenges, such as housing instability and food insecurity. Patients often miss appointments or vanish for weeks at a time. Meeting their needs requires a model of care that is not only flexible and responsive but also opportunistic and personalized. Visits are often longer and demand extensive coordination between different health and social care professionals— both within and beyond the clinic. In a broader context of increasing standardization, preserving this flexibility remains a key challenge.

Compounding this situation is the growing complexity of patient needs, without a corresponding increase in resources. As one participant put it,

> *The work at Westside is amazing and brave and... and it's so important. But it has been underfunded and under resourced by the government. And we could see that happening when the expanded*

programming happened and so... and the level of complexity in the inner-city work has... has just, you know, the level of difficulty has skyrocketed. And there are talented staff there that just burn out and go. Because the work is too brutal, and they are too unsupported. (AHP2)

Many other interviewees echoed the sentiments expressed here, highlighting persistent shortages of staff, space, and resources at SCC, especially at Westside. The emotional demands of the work at Westside were frequently described as intense, with major impacts on staff morale—an issue examined in greater detail in Section 3.2.3.

3.2.2 Organizational and Governance Dimensions

This section focuses on three key aspects of SCC as an organization and its distinctive governance practices: governance structure and decision-making processes, the challenges of operating as a co-operative, and the organization's evolution over time.

Governance Structure and Decision-Making Processes

When it was established in 1962, the clinic adopted a co-operative organizational model that emphasized collective ownership, collaborative governance, and member control (Gruending, 1974). According to interviewees, SCC's governance structure—characterized by both independence from health authorities and participatory decision-making—has been a key factor in enabling the organization to remain innovative and responsive to community needs. This structure, along with the salaried payment model for physicians and the clinic's small size, has supported flexibility and adaptation.[17] The participatory model has provided a platform for both community members and a diverse range of healthcare providers, helping the organization identify emerging needs and adjust its practices accordingly.

Since its inception, SCC has grown substantially, expanding both its services and staff. Over time, this transformation has also led to an evolution and institutionalization of its governance model, aimed at addressing the changing needs and challenges of the organization and its environment. Today, the clinic's governance structure, as outlined in official documents, consists of five main layers:

(i)   Membership – Members are responsible for electing the Board of Directors and can pass resolutions that help shape the clinic.

(ii) Board of Directors – Comprised of SCC's co-operative members, the Board is responsible for the overall strategic vision of the organization and keeping the policies and procedures guiding the organization running and up to date.

(iii) Executive Director (ED) and Medical Directors – Appointed by and accountable to the Board of Directors, the ED oversees the implantation of the strategic vision and supervises staff. Two medical directors (one for each clinic site) are responsible for supervising family physicians. Medical directors are also accountable to the Board.

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[17] The small size of the organization was often mentioned in interviews, although SCC is much larger than most private clinics.

(iv)   Management Team[18] – Comprised of SCC's other directors, officers, and department heads, this layer is accountable to the ED and oversees day-to-day operations within their respective departments.

(v)   Staff – This layer includes frontline service providers such as physicians, nurse practitioners, social workers, and others responsible for delivering care to patients.

Interviewees frequently described the organizational structure as relatively flat for an entity of its size. However, familiarity with the governance structure and its processes varied significantly among staff. While management and long-serving employees tended to have a solid grasp of the roles and responsibilities of different stakeholders, others struggled to understand SCC's decision-making structure. For example, numerous staff members expressed confusion about the Board of Directors' role, its members, and the impact of its decisions on the clinic's operations. This lack of clarity was most apparent when they were discussing interactions between the ED, management team, and the Board. For many, these roles and processes remained somewhat abstract, making it difficult to understand how strategic decisions are made and how they shape day-to-day operations:

> *[When making a proposition], it gets taken to the Board, which none of us have ever met, and we don't know who they are. This is like, Board mysterious, Board members, right? And then they're like, "Oh, no, that's not part of our values or our mission." (HS4)*

Despite the flat organizational structure, a clear gap exists between the operational and strategic levels. This divide is reinforced by the limited interaction between staff and the Board of Directors, contributing to a sense of detachment and a perceived lack of transparency in decision-making and communication—an issue raised by several interviewees. Staff members often reported difficulty understanding the rationale behind management decisions, with some suggesting that this opacity runs counter to the co-operative values the organization promotes. These perceptions varied across departments and appear closely tied to individual department heads' management styles and communication practices.

As strategic decision-making centres have moved further from the operational level, the role of intermediate managers has become increasingly important. These managers are key conduits, translating strategy into practice and maintaining information flow and organizational trust. The widening gap between hierarchical levels appears not only to reflect the clinic's growth but also a shift in the Board's role. Once more directly involved in operations, the Board now follows the Carver Model of governance[19], focusing on high-level policy and strategy while delegating day-to-day operational management to executive leaders. In some ways, the Board is more dependent than it used to be on the ED, not only for operational matters but also for strategic decisions.

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[18] At SCC, they use the term "Leadership Team" to refer collectively to the ED and Medical Directors (governance layer iii) and management team (iv).

[19] The Carver Model of Governance, also known as Policy Governance, is a framework for board leadership developed by John Carver. It clearly separates the roles of the board, who sets the organization's goals and policies, and of the executive management, who is responsible for achieving those goals operationally within established limits.

In this configuration, the ED—along with the two medical directors—plays a central role in bridging the strategic and operational domains. Organizational knowledge flows from these leaders, shaping and informing the decision-making process. As one Board member explained,

> *We are not experts in the clinic. She's [the ED] the expert in the clinic. And so having her being able to really focus and identify her needs, her thoughts, the clinics' needs, has been really, really helpful. (BM9)*

Another interviewee pointed out that the ED now has more influence than in the past:

> *I think that over the years that the administrator, whatever they call... executive director. I mean they changed the name, which also goes along with the rest of the change in the power structure too. So that the executive director and that has a lot more control [...] you know, at the earlier times that the Board was far more directive. (HS10)*

Interviewees unanimously emphasized the critical importance of the relationship between the ED and the Board within the current governance configuration—and agreed that, at present, this relationship is functioning well. However, while mutual trust and communication are vital, the long-term sustainability of this dynamic may depend on developing more robust mechanisms to ensure the Board maintains sufficient autonomy and does not become overly dependent on the ED for all strategic guidance. Strengthening the Board's own expertise and decision-making processes will be key to maintaining a healthy balance of power and long-term organizational resilience. As one Board member reflected,

> *I think we maybe have become more deferential to the executive [director]... Because I don't think we're the ones that are coming up with sort of the strategic vision of the clinic going into the future. And I am not sure if that's because, you know, we don't have the depth or the vision ourselves? Or... And I would be interested, and I think this is, this is probably worth exploring with other Board members... like to what extent, what drove you to want to be part of the Board, part of the clinic? (BM5)*

For some, this shift in power distribution—along with other changes—has contributed to a growing sense of distance between staff and management decision-making, and has, in some ways, hindered participative decision-making throughout the organization. Longer-serving employees and co-operative members argued that decision-making has gradually become more centralized at the management level. Some perceived this centralization as an inevitable response to the growing complexity of the organization, making more centralized control necessary to ensure efficiency. Others viewed this trend as regrettable, as it reduces the space for bottom-up input and widens the gap between staff and management. Despite this evolution, numerous interviewees described the clinic's governance model as still very participative:

> *We have so many committees that has to go through first. It isn't just one person making a decision. The Board has to approve it, you know, and then has to go through the managers and then it has to go through, say, maybe another committee. And I know quite often our manager will come and say,*

> *"what do you guys think of this?" or "would you have any input on this matter?" The ED will send us a message or whatever. (AHP1)*

When referring to decision-making, interviewees frequently compared SCC to other healthcare organizations, consistently highlighting how much more accessible and responsive it is. Staff members and even patients find it easier to have their voices heard, and decisions are perceived to move through the system more quickly than in larger, more bureaucratic organizations, such as hospitals or health authorities like SHA. This responsiveness distinguishes the more engaging and dynamic environment at SCC from rigid and hierarchical systems: *"I feel like majority of the stuff that I've put towards my manager, whoever [it has been] … it gets moved forward in there, yeah, it moves quicker, way quicker than anywhere else. In my opinion" (HS1).* This level of responsiveness is particularly appreciated by staff, who identified it as a key source of job satisfaction.

On the other hand, some interviewees described the decision-making process at SCC as slow and difficult to navigate. This concern was especially pronounced among family physicians, whose point of comparison is often private practice, where they enjoy full autonomy. As one physician explained, *"In some ways it's more cumbersome [at SCC] because it requires more meetings and more planning and more people approving and more people that can say 'no, it's a bad idea'" (HS3).* This perspective was echoed by several managers and staff members who, while valuing SCC's demographic approach, nonetheless view the decision-making process as overly diffuse—sometimes characterising it as "too shared." They argue it requires too much time to reach conclusions, hampering decision-making, responsiveness, and innovation:

> *It's shared and shared and shared and shared to the point where you're sitting at the table and say, "somebody please make a decision." [...] Our pace of change is I think absolutely something that we could work on. And it's not because we're afraid of change and it's not because we're not innovative. It's just because we have some structures in our organization that require us to "bring it to one more meeting" or "bring it to that committee" or this other committee. Not saying that any of that is a bad thing, we just need to be much more, I think, this is just my personal opinion, we need to be a little more nimble with the decision-making process. (MS5)*

At the same time, interviewees frequently emphasized that SCC's participative and organic structure—flexible and decentralized—has enabled it to be "territorially anchored," that is, attuned and responsive to the needs of the populations it serves and centred on patients and the community. Thus, the organization's strengths in promoting collective values and inclusivity can sometimes be at odds with the need for more agile and decisive action. While the organization is valued for its innovation and shared decision-making, these attributes can slow down decision-making, prompting some to call for streamlining cumbersome processes.

These tensions point to a fundamental challenge: how to sustain a collaborative, community-centred ethos while also ensuring timely, efficient decision-making. Striking this balance is challenging. Bureaucratic structures that emphasize productivity and control may be less conducive to creativity (Thompson, 1965) and inclusivity (Chen & Mandiberg, 2023), yet they are often necessary during the implementation stage of ideas (Zaltman et al., 1973, as cited in Bland et al., 2018).

The Co-operative Challenge

A foundational characteristic of the clinic—its co-operative structure—was instrumental in establishing an alternative care model, distinct from conventional healthcare organizations.[20] This co-operative framework, with its roots in community-driven governance, has fostered a patient-centred approach to care, grounded in the needs and voices of its members.

However, opinions among interviewees on the significance of this co-operative model and its impact on the clinic's operations were sharply divided. For some, the co-operative structure remains a cornerstone of the clinic's identity, embodying core values:

> *I think it is foundational to the 'why' of the Community clinic. The co-operative model from 60 years ago, Saskatchewan born, neighbour-helping-neighbour, you know? "What is good for a man is good for all men" like that notion of... and "nobody left behind," is still at the root of that co-operative model. And I think that that is foundational to where the clinic does its work. So, I think it's still incredibly important. (MS5)*

These values are the driving force behind the clinic, carrying substantial weight in decision-making processes, at both the Board of Directors and management levels. Beyond these core values, the co-operative structure allows patient members to directly contribute to shaping the organization and the operation of the clinic's care model, identifying problems and needs and proposing avenues for improvement or even new care programs. It is this structure that has enabled the existence of certain services at the clinic and explains why SCC remains so attuned to the needs of the populations it serves, fostering a patient-centred model of care and community-centred governance:

> *Being patient-centred is a good idea and it's beautiful when it's... [when] we talk about it. But it's not necessarily implemented. I think that because it's a co-op, it has more of that model in its heart. [...] because the governance is from members that are part of the community and have the community's best interest in mind. (HS5)*

Many believe that the co-operative structure ensures patients and community interests are central to decision-making, whether in relation to care practices, the scope of services offered, or the processes through which care is delivered. However, many other interviewees said that the influence of the co-operative model has eroded over time and now has a more limited impact on the clinic's operations. Although the model initially helped establish the clinic's independence from health authorities, they view its effect today as minimal. While it still has a voice, they do not perceive it as driving the organization's agenda.

Some interviewees attributed this shift to the Board's adoption of the Carver Model, which is seen to have weakened the Board's role and distanced it from operational management, reducing membership's ability to shape the agenda over time. Other interviewees expressed concerns about the nature of membership meetings and the relationship with the membership, suggesting that SCC no longer maintains the

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[20] The co-operative clinics were originally set up as community solutions to the impending doctors' strike in response to the introduction of Medicare.

transparency and engagement expected in a co-operative setting. They believe the organization is presenting a polished version of its activities rather than encouraging open dialogue: *"Unless you know what's going on at the Community Clinic, you're going to get sort of a very sanitized view of things when you go to those meetings"* (PM2).

Several interviewees also mentioned Robert's Rules of Order[21] as a barrier to inclusive, creative discussions. Although they acknowledged that these rules can help maintain order and efficiency, they are seen as stifling engagement both in (semi) annual membership meetings and Board meetings, as illustrated by this interviewee:

> *I think there's people around the table that have some real strengths that don't get to use them as much because of the Robert's Rules very official way of doing. [...] Robert's Rules maintain the order very nicely in the meeting, but I do feel like it creates a reality where people just want to agree to move things forward [...] rather than to really understand where people are at and to generate meaningful discussion. (BM6)*

Thus, it seems that the formal structure of meetings limits open dialogue, reducing the potential for meaningful contributions, undermining the collective nature of decision-making, and jeopardizing the organization's commitment to inclusivity and collective input. The organization and conduct of meetings, often overlooked, play a crucial role in shaping the quality of discussions, decisions, and overall member engagement.

In addition to this emphasis on rules, two significant challenges are facing SCC's co-operative structure: lack of participation and inadequate representation of the membership. Many interviewees pointed to a decline in meaningful participation, with the organization struggling to engage members, particularly younger individuals, in membership meetings:

> *I think this stems too from a generational thing. You know, our seniors are really the biggest volunteer group in the whole country. And the next generation less so. And the generation after that maybe even less so. So that whole spirit of co-operation, I think is being lost. (MS9)*

Apart from this generational effect, others also pointed to a lack of awareness about existing participation processes among members, noting that these processes can sometimes feel intimidating:

> *Now that I'm on the board, I realize that members actually have quite a bit of an ability to have a voice and raise things to the Community Clinic, but I don't think many people know how to exercise them. [...] It's pretty intimidating to try to write a resolution. You know, like what language? You kind of put yourself out there that you can like submit something to a semi-annual meeting for example, and have it reviewed by the membership. But it could be turned down. And I think that puts people at the... you know, you kind of put people in a difficult place in a way. (BM6)*

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[21] Robert's Rules of Order is a widely used system of parliamentary procedure designed to facilitate orderly and efficient meetings. It provides a structured framework for conducting meetings, debates, and voting, promoting fairness, efficiency, and participation.

Interviewees also acknowledged that language and cultural barriers prevent certain categories of SCC patients from participating in meetings or even becoming members. These challenges led some interviewees to suggest possibly increasing awareness about SCC's processes, offering training, or rethinking some aspects of the clinic to facilitate greater participation.

On the other hand, the membership no longer represents certain patient groups, such as Indigenous patients, newcomers, or other equity-deserving groups, raising questions about how the clinic can stay responsive to these communities and, by extension, to its broader patient base. Many interviewees suggested that responsiveness to these patient populations derives less from membership and more other mechanisms, such as advisory groups, strong connections with local associations, or employee spokespeople:

> *You know, without any member or representation, how are we doing what we're doing? [...] I do think it's the people. It's the employees who are advocating on behalf of the voices that they hear. So again, I hope that we can move forward with more mechanisms and formalization of that actual voice being heard and represented. But I also think like we have very... particularly at the Westside Community Clinic, we have strong linkages with our partners and our partners are community-based and also member-based and also deeply embedded in the communities. And so, those partnerships really inform what we do and how we do it too. (MS8)*

Despite these alternative mechanisms that enable SCC to remain responsive to its constituents' needs, the issue of representation is crucial for many, prompting some to question the model itself. This raises concerns about the legitimacy of membership in making decisions for the entire organization when the voices of certain groups are not adequately represented:

> *I guess the problem is that we're missing those voices at the table. So, the problem is that people that are voting, there's not appropriate representation by those populations, and maybe the risk and the problem is that we're making harmful decisions or unfair or unequitable decisions. Even if our intentions are right, we may unconsciously be biased in certain ways, or naive or consciously biased. (BM8)*

The co-operative structure remains the cornerstone of SCC's identity, for decades enabling the organization to offer community-focused care, foster innovation, and embody values of solidarity. However, the challenges ahead are complex and numerous. A common challenge for co-operatives is lack of member involvement at scale, with the engagement of younger generations being particularly problematic in an era of profound cultural shifts (Birchall, 2011; Yu, 2024). To address this challenge, co-operatives must adapt their strategies to better align with the values and aspirations that resonate with young people (Birchall, 2011). Additionally, modernizing participation practices, improving the representation of patient groups in decision-making, and strengthening communication mechanisms are key solutions. These challenges offer opportunities to reinvent the co-operative model, adapting it to current realities while remaining true to its founding values of solidarity and community-centred care.

The Evolution of the Organization: An Identity Crisis?

Previous developments at SCC prompted some interviewees to ask, "Who are we?" As noted, SCC's co-operative structure has faced challenges and gradually weakened over time. At the same time, the clinic's social mission has grown more prominent, especially since the opening of Westside and the addition of other programs aimed at providing care for specific, often underserved, populations:

> *Unusual for a co-operative in the sense that even if we look at other community clinics here in Saskatchewan that follow a co-operative model, they are very much traditional, focused on services to members. Patient-members. Whereas here, [...] we have the traditional clinic here in Downtown, but then we have the Westside clinic, which is much more, you know, involved in sort of progressive social causes, disenfranchised communities. It is a very different mission and a very different group of patients than we have here in Downtown. (BM5)*

These two missions have coexisted within SCC for several decades, but interviewees' perceptions of their relationship diverge. Many argued that the social mission and the co-operative structure have historically complemented and supported each other, forming the foundation of SCC's success over the decades. Others perceived growing tensions, particularly around issues of access, exacerbated by the shortage of primary care physicians. Concerns also emerged about how SCC will select new patients when opportunities to expand arise. The following excerpt illustrates another issue: the location of the clinic, where the divergent interests of the two sites could complicate decision-making:

> *My thought on where they're conflicting is... So, for example, we talked about location. [...] For example, we would really have a hard time if we moved that Downtown clinic to a more core Westside location. Because the members, they wouldn't want to go there. Like they would resist that, they would... So, it's kind of like a... it's that whole "not in my backyard mentality." [...] I expect that would be the challenge. (BM8)*

The stakes of certain decision-making processes are particularly high given that some populations are severely underrepresented in these governance bodies. As a result, the realities, needs, and interests of these populations are not directly expressed by these formal governance mechanisms.

The discrepancy between the conflicting missions of the Downtown and Westside locations was also reflected in the accounts of interviewees, who pointed to a disconnect between the two sites, with a noticeable gap between Westside and Downtown staff in terms of work reality and mission. Belonging to Westside elicits a stronger sense of identity compared with the Downtown site:

> *The Westside was maybe a little more independent. [...] I think, most of the people that worked at the at the Westside were more politically active people. They, you know, kind of gravitated there because of their politics to a certain extent. Because of the issues that we're dealing with. So, you know, they would be more willing to be involved. (HS10)*

This gap led some interviewees to question SCC's management needs, with some suggesting that maintaining a unified management structure is becoming increasingly difficult. The shift from a shared

medical director to site-specific medical directors was made to address these growing differences and ensure more effective leadership at each location:

> *They do have a Medical Group for the Westside and a Medical Group for the main clinic. And I mean that makes a lot of sense to me because the issues are so different. [...] The issues that you deal with on a day-to-day to day basis are really drastically different. (HS10)*

Some interviewees went further, questioning the shared management structure for other services. While they acknowledged the benefits, they argued that the specific realities of Westside are sometimes overlooked in decision-making, especially when the manager in question is less inclined to divide their presence evenly between the two sites.

3.2.3 Staff Experience: (Dis)satisfaction and Well-Being

Overall, staff interviewees[22] expressed a high level of satisfaction with SCC as a workplace and with their roles. Many even expressed a sense of pride in working for an organization like SCC. Despite this overall satisfaction with various aspects of their work and the organization, several major challenges were also raised. This section explores the factors most frequently mentioned that contribute to both staff satisfaction and dissatisfaction.

An Environment Fostering Higher Quality Work

Most interviewees noted that working at SCC allows them to deliver higher-quality work than they could elsewhere, largely because the clinic's wide range of in-house services reduces barriers to access and enhances patient support:

> *There's a big gap in services that are available to people [in the larger system]. With the services we have here with our physiotherapy, occupational therapy or counseling department or nutritionist, having lab, X-ray, pharmacy in on site... like I can't imagine working somewhere and being like "you could really use some counselling. Good luck." (HS3)*

Knowing their patients have access to quality care is a source of satisfaction for staff, particularly family physicians. Physicians also expressed reassurance and relief because they do not need to "wear 10 different hats" and because it is easier to "connect the dots" in patient care:

> *Connecting the dots for people can be challenging. Like you refer them out to outside physio, but you don't know if they go, do they go? [...] I don't want to call it stress-free, but it's those stressors that typically the community clinic alleviates from physicians. (MS8)*

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[22] It is important to note a limitation: certain worker categories, such as medical office assistants, were not interviewed. According to the interviewees, these workers face more significant challenges regarding well-being and workplace tensions, which could present a different perspective on satisfaction within the organization.

For family doctors, providing better healthcare services is also closely tied to the salary-based payment model, allowing them to adjust appointment durations based on patient' needs and deliver higher-quality care:

> *I find family medicine has become very complex. We have older patients; we have patients with very complex needs. It's very hard for family doctors to do it all within the time constraints that people have in private practice. So having an opportunity to work in a salaried position where I can have a longer appointment if I need, doesn't matter to me as I'm salaried. I can have a longer [appointment], it doesn't matter. (MS9)*

Enjoying Greater Autonomy

Several interviewees linked their satisfaction at work to the greater autonomy they enjoy in contrast with the prevailing practices in other contexts. With fewer barriers in terms of treatment duration or session limits, providers can provide care that is more responsive and tailored to individual patient needs:

> *We have a capacity here to see people in whatever way they need to be seen. And so, we're not in the health region, you know, [where] you're allowed to six to 10 sessions [with a patient...] which is ludicrous because mental health does not respond to that, except in the most superficial ways. [...] [at the clinic] if you're not done the work with them after 10 sessions, you keep going. So, the beauty of the work here is that there has been the freedom to work in whatever ways fit for our patients. (AHP2)*

This ability to provide care without rigid constraints fosters a sense of professional fulfillment among providers, as they can focus on delivering meaningful outcomes for their patients, aligning their work with their professional values and patient-centred goals.

More generally, some staff members indicated that they feel more autonomous in the decisions they can make as part of the team. They also said they feel empowered to present requests and suggestions—such as new programs or procedures—to their superiors, some of which may be adopted:

> *I feel like if I'm wanting change in SCC, that the people that I'm communicating with, my manager or anyone else, is wanting to actually help me and assist me, and we are moving forward and trying to make that change. (HS1)*

This increased autonomy allows staff to adapt their approach to meet the needs of their patients while actively contributing to decision-making processes at the clinic. This involvement not only enhances their sense of self-worth but also boosts their job satisfaction.

The only professional group to report a loss of autonomy was family physicians, though their experiences vary widely. For some, this loss and diminished ability to make organizational decisions was disheartening, even prompting them to consider resigning. But others tempered this view, acknowledging the loss of autonomy while highlighting several compensatory benefits. For most, the security of a fixed income, relief from fluctuating overhead costs, and freedom from administrative and recruitment tasks significantly enhanced their job satisfaction: *"I just get paid my salary and do my job. So, I like that. I like not having to worry about running a business. Or paying overhead, about running, hiring, and firing staff" (HS3).*

Overall, family physicians highlighted that SCC's model supports a better work-life balance, offering benefits such as sick leave, maternity leave, or holidays—allowing them to "truly" disconnect during time off. Many also emphasized the strong sense of support they experience from working in a team. Some even feel empowered by working at SCC, as the multidisciplinary care model allows them to ensure better patient follow-up and improved quality of care—contributing to greater job satisfaction. Furthermore, SCC's model enables them to expand their roles beyond patient care, engaging in activities such as advocacy, program development, and interdisciplinary collaboration, further enhancing their professional fulfillment. Finally, they acknowledged enjoying a significant degree of autonomy of a different kind—to pursue professional interests, specialize in certain areas, or focus on specific patient populations:

> *[At SCC] you are able to do some of the specialty care that in other systems, it would be very hard to do. Like, say, refugee health. As a fee-for-service physician it would be nearly impossible to do refugee. Because the structure isn't conducive for it, because it's 15-minute appointments and all of that. (HS7)*

This level of flexibility, not possible in other models, directly contributes to family physicians' sense of fulfillment and professional satisfaction.

Contributing to a Meaningful Mission

Numerous interviewees emphasized the alignment of the clinic's values with their own and the opportunity to contribute to a meaningful mission as great sources of job satisfaction. As noted, interviewees expressed pride in working for an organization that serves underserved and marginalized populations: *"I'm proud that I am myself providing to some of those populations and … I'm happy to be part of a clinic who does overall offer that, even if it's not my area of expertise" (HS4)*. Even those who do not work directly with these populations said they felt proud and fulfilled belonging to SCC, highlighting the importance of programs that are consistent with their values.

In addition, the dedication of the staff and the values that guide both staff and management were frequently cited as sources of satisfaction, particularly compared with experiences in other organizations. Providers said they find great fulfillment in working in an environment where service quality and genuine care are prioritized and where the team shares a collective commitment to patient-centred care and kindness:

> *I would want somebody to do that for my family member, my loved ones, you know? So, it just… I find that all the staff here have that. You know, they want to make sure that they're looked after […] We kind of we all have our fields, but we still have that… here at the clinic, have that dedication to the patient. And it's nice to know that. (AHP1)*

This alignment of personal and professional values enhances staff's sense of belonging and motivation.

Dealing with an Emotional Burden

Alongside these factors that contribute positively to staff experience, other aspects tend to undermine their overall sense of satisfaction. One notable challenge, particularly for the staff at Westside, is the

emotional burden associated with the job. This is partly due to the environment and context in which staff work, where they are constantly confronted with difficult situations:

> *You know, it's not an easy place to work and you see a lot of awful stuff. People [that] are sexually abused, drug addicts, people strung out. [...] You walk out the door, you see people shooting up, right? I mean, you walk through the back lane to go into the building when you start your day and there's people sleeping out there and it's 20 below or whatever. I mean… that's not even just all of the other stuff that you see, the trauma particularly… stuff that women come in with and the stuff you have to see. It's hard. (HS10)*

Patients cared for at Westside often live in precarious situations, with primary needs such as housing and nutrition unmet—and the staff sometimes feel powerless to help them:

> *I always left there a bit more emotionally tired at the end of the day and feeling like… You know, the stuff I'm trained to deal with and then work with patients on was like… such a small part of what they actually needed, in terms of, you know, the social determinants of their health. That I felt like… I don't know if I actually did anything to help to change someone's direction of their health. (HS3)*

These feelings are intensified by the staff's strong commitment to their work. Their dedication to serving vulnerable populations, coupled with rising patient needs, creates additional pressure. This devotion often deepens the emotional burden, as staff often feel responsible for meeting demands that exceed available resources and capacity:

> *I think the staff at the Community Clinic are kind of the cream of the crop. They are the people that really, really care, that sign up to work with difficult populations under difficult challenging work. And there is like a non-stop floodgate of people coming their way and because they… we take that on almost as an identity, it makes them feel really worn out and I think it makes them feel like all the weight of care for refugees and for everybody living with HIV, you know, that has drug addictions and stuff like that's all on them. They're carrying that. (BM6)*

Added to this burden of care is a growing concern, expressed by both staff and patients, about physical and psychological security at the Westside site area. Because of such concerns, essential service providers have suspended services or are deserting the area. For instance, in late 2023, Affinity Credit Union gave notice they would be closing their St. Mary's Branch (across the street from Westside clinic) in response to an increasing frequency of incidents that gave rise to "significant safety concerns and operational challenges" (Affinity Credit Union & Zinkowski, 2023). University of Saskatchewan officials attributed "safety concerns" to their January 2024 decision to relocate the university dental clinic (formerly housed at the Westside site) to the university campus, 5 km away—creating multiple access barriers for Westside patients (McLernon, 2024). Then in May 2024, Canada Post suspended postal delivery to, specifically, the north side of the block on which Westside sits while a "delivery safety assessment" was conducted—requiring the clinic and all businesses, service providers, and residents to travel to an off-site depot pick up mail and deliveries (Dayal, 2024). The result is a feeling of injustice and abandonment, along with increased barriers and vulnerability.

Finally, as noted previously, a lack of resources is a big part of the problem. Waning support from public authorities tends to reinforce employees' sense of powerlessness and lack of support: *"It's just been a real disappointment this year some of the decisions, like harm reduction and such that have been made, they feel them on a personal level, not just on a conceptual level"* (BM6).

The continuous exposure of staff to complex and often distressing situations, the rise in demand, and the lack of support significantly impact the well-being of staff, leading to feelings of helplessness and frustration. Over time, this emotional strain negatively affects morale, increasing stress levels and contributing to burnout. All of this pressure leads to high staff turnover, burdening the remaining employees and creating a vicious circle that makes the situation worse. Many interviewees expressed concern that this dynamic is not well understood or appreciated:

> *I feel like there needs to be a recognition for the staff that work in this model that like they do really hard things, and they are really important, and that they can't take it all on. I don't know how to say it, but I just worry that they try to do more and more and more and it's... you know, it's really difficult. (BM6)*

Some interviewees highlighted the need for better support systems and resources to alleviate these pressures on the staff. Possible solutions include offering a leave or a shift to another position or role—allowing the employee to recharge their batteries. However, the interviewees appreciated the limits of these solutions, not least because of staff shortages and organizational constraints. They also recognized that not all employees can afford to take career breaks and absorb a reduction in salary.

Communication and Transparency

As noted previously, some interviewees expressed concern about what they perceive as a lack of communication or transparency in certain SCC decision-making processes—a situation that can lead to tension and distrust. For some, this breakdown in communication disrupts departmental processes, particularly when information about events that directly affect employees is not clearly or promptly conveyed.

> *Most people I talk to here, they say... just that the communication is kind of an issue here. That it could be better, you know? Like I didn't know that Elena was leaving her position. Florence didn't know until after she left. That could have been communicated better. (HS8)*

Others pointed to the one-sided way in which communication takes place, with staff finding it increasingly difficult to raise certain issues or concerns:

> *I think it's like the point is about the communication. It's like that lack of communication. It's very unilateral, like it's only coming from top down. And maybe that's intended, or maybe that's how it should be. But I don't personally feel like that's aligned with the clinic model. (AHP7)*

As the following excerpt illustrates, some interviewees also associated this lack of communication with feelings of being unappreciated and underrecognized:

There's a lot of staff shortages in different areas, but then people are just expected to pick up the slack and it... to a lot of people, it feels like there's not a lot of communication from management on how hard they're working on, you know, filling these positions or coming out and saying "we appreciate how hard you're working to fill this need this role," even though, you know, we don't have anyone in the works for these five doctor's positions or these nursing positions, or this position or that position. (AHP5)

3.3 Summary of Findings

Interviewees described SCC's care model as a "one-stop shop," ensuring access to a broad range of health and social services and enabling more holistic patient care than is available elsewhere. They portrayed the organization as patient-centred, deeply rooted in the community, and highly responsive to the evolving needs and dynamics of its population through its user-driven and community-focused approach. Interviewees also described the clinic as forward-thinking and innovative, continuously seeking to improve and adapt its practices, and supported by a highly dedicated staff.

Despite the many strengths of SCC's care model, several pressing challenges have emerged as the organization evolves. Many of these challenges are linked to broader issues within the care system, such as shortages of certain healthcare professionals and resource limitations, including funding, human resources, and space. These challenges pose obstacles to achieving SCC's care mission, making advocacy and partnerships essential to overcoming them. Another key challenge related to SCC's care model involves developing team-based care approaches and implementing more collaborative care practice—for example, harmonizing collaborative practices, increasing case conferencing, or providing more space for collective reflection—especially at the Downtown site. Spanning both the clinic's care model and broader organizational issues, one of SCC's main challenges is remaining current, responsive, and innovative. Addressing this challenge requires dedicated space for reflection on how to adapt services and practices to meet evolving patients' needs while fostering a culture that stays true to SCC's founding values.

In terms of the governance model, interviewees identified several concerns, including diminished member participation and influence, reduced patient representation, and tensions stemming from identity challenges between the two clinic locations. One challenge is that healthcare co-operatives are often expected to serve both members and non-members, undermining a core incentive of co-op membership (Birchall, 2011). Another lies in navigating the complex intersections of public and professional interests, which can heavily influence operations and at times conflict with members' priorities. As a result, many healthcare co-operatives tend to evolve into non-profit organizations or become more people- or community-oriented rather than strictly member-oriented. Over time, their governance structures often move from a membership-based to a community-based model (Birchall, 2011). These issues highlight the unique difficulties faced by co-operatives in the healthcare sector.

The departure from the co-operative model raises concerns because the co-operative governance structure offers notable advantages. In particular, it promotes more democratic decision-making and encourages patient participation in organizational governance, both pivotal for increasing healthcare organizations' responsiveness to local community needs (De Weger et al., 2018; Janamian et al., 2016). Moreover, the co-operative structure goes beyond merely encouraging participation; it ensures patients have a substantial role in governance processes. This is especially important in a healthcare system, where

despite decades of advocacy for patient involvement, patients continue to be seen primarily as service recipients rather than active agents, partners, and decision-makers. Addressing power imbalances in decision-making remains a major obstacle to meaningful patient and community engagement (De Weger et al., 2018).

Finally, another challenge for SCC is how to continue to grow as an organization to meet the needs of the populations it serves and fulfill its co-operative and social missions. However, the question of expansion raises many concerns, particularly about how growth impacts the structural attributes of an organization, such as the degree of centralization in decision-making. As an organization grows, its size and complexity often lead to greater centralization, which can undermine its innovative character and responsiveness to member needs. Indeed, as the degree of centralization increases, the adoption of innovations compatible with local perspectives and needs tends to decrease (Moch & Morse, 1977). The risks associated with expansion, such as centralization and formalization of processes, call into question the feasibility of scaling up. These challenges underscore the importance of adopting a strategic approach to growth that preserves the organization's identity. Alternative solutions may emerge, such as dissemination—providing information and technical expertise to other community members; affiliating and networking—forming coalitions with other organizations committed to similar objectives; or branching—creating local sites that maintain a greater degree of autonomy (Dees et al., 2004) and focus on "scaling across" rather than "up."

General Conclusion

This report has highlighted several important findings about the SCC. One of the primary findings is that SCC serves a more complex and vulnerable patient population than the average Saskatoon clinic. Workstream 1 data reveal higher incidence rates for SCC patients across numerous disease categories, while Workstream 2 survey results confirm that SCC patients report more chronic conditions and greater use of—and need for—healthcare services. Correspondingly, Workstream 1 analysis shows higher overall costs per patient for SCC patients—particularly for hospitalization—although physician costs are lower.

These trends contrast with findings from a comparable 1983 study (Saskatchewan Health, 1983), where SCC's patients incurred higher total costs despite fewer hospitalizations. While further analysis is needed to explain this shift, one plausible explanation is the clinic's marked evolution over the past decades. The Westside site, though open since 1975, was initially much smaller. The clinic has since expanded in scale and scope, and now serves an increasingly complex population through programs targeting refugees, newcomers, individuals experiencing homelessness, and people with substance use disorders.

A second key finding is higher patient satisfaction at SCC compared to a comparable panel of non-SCC patients. This finding is notable given the poorer overall health of SCC patients. Patients describe the clinic's model of care in positive terms, expressing appreciation for being listened to, the time dedicated by primary care providers, and the coordination of their care.

The third part of this report—which explored the internal functioning of SCC—also highlighted interesting findings. Interviewees praised SCC's holistic, patient-centred model of care, its deep community roots, its responsiveness to evolving community needs, and its commitment to continuous innovation. However, this model also faces challenges, including resource limitations, workforce shortages, and the need to strengthen team-based care practices, particularly at the Downtown site. From a governance perspective, the organization navigates tensions in maintaining its co-operative identity while adapting to a more community-oriented approach—exemplified by the development, over time, of two clinic sites with different identities. Although expansion is perceived as necessary to meet the growing needs of the community, it carries the risk of centralization and reduced responsiveness. Addressing these challenges will require a balanced approach that preserves the clinic's core values while promoting thoughtful, sustainable growth.

The SCC occupies a vital role within Saskatoon's healthcare landscape. It provides a wide range of services to a diverse and often underserved patient population, achieving high levels of patient satisfaction despite the complexity of care. Yet the clinic also faces substantial challenges. This report contends that SCC deserves greater recognition and support to ensure it can continue to function at its best, meeting the needs of its community and delivering exceptional care. Moving forward, prioritizing research and quality-improvement initiatives will be essential to help the clinic respond to these challenges and enhance its impact on the health of the population it serves.

References

Affinity Credit Union, & Zinkowski, T. (2023, November 30). *Closure of St. Mary's Advice Centre effective April 5, 2024*. Affinity Credit Union. https://www.affinitycu.ca/meet-affinity/news/2023/11/30/closure-of-st.-mary%27s-advice-centre-effective-april-5-2024

Angus, D. E., & Manga, P. (1990). *Co-op consumer sponsored health care delivery effectiveness*. Canadian Co-operative Association.

Baker, L., Egan-Lee, E., Martimianakis, M. A., & Reeves, S. (2011). Relationships of power: Implications for interprofessional education. *Journal of Interprofessional Care*, *25*(2), 98–104. https://doi.org/10.3109/13561820.2010.505350

Birchall, J. (2011). *People-centred businesses. Co-operatives, mutuals and the idea of membership*. Palgrave.

Bland, J. T., Bruk, B., Kim, D., & Lee, K. T. (2018). Enhancing public sector innovation: Examining the network-innovation relationship. *Leading-Edge Research in Public Sector Innovation: Structure, Dynamics, Values and Outcomes*, *15*(3), 209–231.

Chen, K. K., & Mandiberg, J. M. (2023). Legitimizing organizations via research: Facilitating possibilities through the study of relational, emergent, transformative, and change-oriented organizations (RETCOs). *Public Integrity*, *26*(3), 1–14. https://doi.org/10.1080/10999922.2023.2262212

Choi, B. C. K., & Pak, A. W. P. (2006). Multidisciplinarity, interdisciplinarity and transdisciplinarity in health research, services, education and policy: 1. Definitions, objectives, and evidence of effectiveness. *Clinical and Investigative Medicine*, *29*(6), 351–364.

CIHI. (2019). *Benchmarking Canada's health care systems: International comparisons*. https://www.cihi.ca/sites/default/files/document/oecd-benchmarking-canadas-health-system-2019-en-web.xlsx

D'Amour, D., & Oandasan, I. (2005). Interprofessionality as the field of interprofessional practice and interprofessional education: An emerging concept. *Journal of Interprofessional Care*, *19*(SUPPL. 1), 8–20. https://doi.org/10.1080/13561820500081604

Dayal, P. (2024, May 17). Canada Post suspends mail delivery, citing 'unsafe conditions' on a block of 20th Street West. *CBC News*. https://www.cbc.ca/news/canada/saskatoon/canada-post-suspends-mail-delivery-to-1500-block-of-20th-1.7207002

Dees, B. G., Anderson, B. B., & Wei-skillern, J. (2004). Strategies for spreading social innovations. *Stanford Social Innovation Review*, *1*(4), 24–32. https://doi.org/10.1007/s10614-005-6245-1

De Weger, E., Raap, S., Knibbe, M., Van Vooren, N., Luijkx, K., Drewes, H., Horstman, K., & Baan, C. (2018). Empowering communities: Drawing on evidence to build successful community engagement initiatives. *International Journal of Integrated Care*, *18*(s2), 133. https://doi.org/10.5334/ijic.s2133

eHealth Saskatchewan. (2022). Person Health Registration System (PHRS). Health Research Data Platform – Saskatchewan. eHealth (2024). https://www.scpor.ca/hrdp-sk-available-data

Ford, E. S. (2015). Hospital discharges, readmissions, and ED visits for COPD or bronchiectasis among US adults. *Chest*, *147*(4), 989–998. https://doi.org/10.1378/chest.14-2146

Gruending, D. (1974). *The first 10 years*. Saskatoon: Community Health Services Association. https://www.saskatooncommunityclinic.ca/wp-content/uploads/2017/03/the-first-ten-years.pdf

Janamian, T., Crossland, L., & Wells, L. (2016). On the road to value co-creation in health care: The role of consumers in defining the destination, planning the journey and sharing the drive. *Medical Journal of Australia*, *204*(7), S12–S14. https://doi.org/10.5694/mja16.00123

Marchildon, G. P., & Schrijvers, K. (2011). Physician resistance and the forging of public healthcare: A comparative analysis of the doctors' strikes in Canada and Belgium in the 1960s. *Medical History*, *55*(2), 203–222. https://doi.org/10.1017/S0025727300005767

McLernon, W. (2024, January 20). Concerns around dental care access after U Sask moves clinic out of Saskatoon's core. *CBC News*. https://www.cbc.ca/news/canada/saskatchewan/u-sask-dental-clinic-relocation-1.7089044

McPhee, J. L. (1973). *Community Health Association Clinics: An evaluation of the hospital utilization of community health association clinics*. Research and Planning Branch, Saskatchewan Department of Public Health.

Moch, M. K., & Morse, E. V. (1977). Size, centralization and organizational adoption of innovations. *American Sociological Review*, *42*(5), 716–725. https://www.jstor.org/stable/2094861

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (US). (2010). *Establishing a holistic framework to reduce inequities in HIV, viral hepatitis, STDs, and tuberculosis in the United States: An NCHHSTP white paper on social determinants of health*. https://stacks.cdc.gov/view/cdc/11585

Nugus, P., Greenfield, D., Travaglia, J., Westbrook, J., & Braithwaite, J. (2010). How and where clinicians exercise power: Interprofessional relations in health care. *Social Science and Medicine*, *71*(5), 898–909. https://doi.org/10.1016/j.socscimed.2010.05.029

Ontario HIV Treatment Network (OHTN) Rapid Response Service. (2025). *Social and structural determinants of health influencing HIV risk and participation across the HIV care cascade*. https://www.ohtn.on.ca/wp-content/uploads/2025/03/RR185_Social-and-structural-determinants-of-health-influencing-HIV-risk-and-participation-HIV-care-cascade.pdf

Papageorgiou, V., Davies, B., Cooper, E., Singer, A., & Ward, H. (2021). Influence of Material Deprivation on Clinical Outcomes Among People Living with HIV in High-Income Countries: A Systematic Review and Meta-analysis. *AIDS and Behavior*, *26*, 2026–2054. https://doi.org/10.1007/s10461-021-03551-y

Rands, S. (1994). *Privilege and policy: A history of community clinics in Saskatchewan*. Community Health Cooperative Federation.

Saskatchewan Health. (1983, July). *Community clinic study*.

Saskatoon Community Clinic. (2024). *2023–2024 Annual report*. https://saskatooncommunityclinic.ca/wp-content/uploads/2024/06/2023-2024-Annual-Report-Web.pdf

Saskatchewan Ministry of Health. (2022). Discharge Abstract Database (DAD). Health Research Data Platform – Saskatchewan. MOH (2024). https://www.scpor.ca/hrdp-sk-available-data

Saskatchewan Ministry of Health. (2022). Medical Service Branch – Physician billing (MSB). Health Research Data Platform – Saskatchewan. MOH (2024). https://www.scpor.ca/hrdp-sk-available-data

Saskatchewan Ministry of Health. (2022). National Ambulatory Care Reporting System (NACRS). Health Research Data Platform – Saskatchewan. MOH (2024). https://www.scpor.ca/hrdp-sk-available-data

SHA, P. H. (2024, February). *Saskatoon 5 Core/Downtown Network Highlights*. Saskatchewan Health Authority.

Smith, R. E. (2010). *The relationship between Saskatchewan's co-operative community clinics and the government of Saskatchewan. Toward a new understanding* [Doctoral dissertation, University of Saskatchewan]. https://harvest.usask.ca/server/api/core/bitstreams/f628ccc5-77e7-45ff-8d0e-928e6951bc11/content

Tenny, S., & Boktor, S. W. (2025). Incidence. In *StatPearls*. StatPearls Publishing. http://www.ncbi.nlm.nih.gov/books/NBK430746/

Thompson, V. A. (1965). Bureaucracy and innovation linked references are available. *Administrative Science Quarterly*, *10*(1), 1–20.

Warkentin, L., Adibnia, E., Chojecki, D., Ueyama, M., & van Katwyk, S. (2024, December). *Current and future investments for reaching the UNAIDS 95-95-95 HIV targets in Canada: Evidence review & cost analysis*. https://www.ihe.ca/advanced-search/hiv-targets-in-canada

Yu, S. (2024). *Top Co-op Issues 2023*. https://usaskstudies.coop/documents/pdfs/ccsc_2023_top-co-op-issues-report.pdf

Annexes

Annex I: Workstream 1 Detailed Results

Table 9. Frequency Distribution of Patients by Sex and Type (2016–2021)

Year	Sex	Total	Non-SCC Patients	SCC Patients	p-value
2016	Female	90662	85156 (93.9)	5506 (6.1)	<.0001
	Male	76361	73772 (96.6)	2589 (3.4)	
2017	Female	92375	86813 (93.98)	5562 (6.02)	<.0001
	Male	78404	75713 (96.57)	2691 (3.43)	
2018	Female	92440	86982 (94.1)	5458 (5.9)	<.0001
	Male	78163	75467 (96.55)	2696 (3.45)	
2019	Female	93139	87398 (93.84)	5741 (6.16)	<.0001
	Male	78900	75990 (96.31)	2910 (3.69)	
2020	Female	91365	85759 (93.86)	5606 (6.14)	<.0001
	Male	75511	72639 (96.2)	2872 (3.8)	
2021	Female	93199	87455 (93.84)	5744 (6.16)	<.0001
	Male	77944	74969 (96.18)	2975 (3.82)	

Table 9 provides a detailed breakdown of patient type rates by sex over a six-year period from 2016 to 2021. For female patients, the total number ranged from 90,662 in 2016 to 93,199 in 2021, with non-SCC patients consistently comprising around 93.8% to 94.1% and SCC patients around 5.9% to 6.16%. Male patients, on the other hand, had totals ranging from 75,511 in 2016 to 78,944 in 2021, with a significantly higher percentage of non-SCC patients (96.2% to 96.6%) and a lower percentage of SCC patients (3.4% to 3.82%). The P-values, all reported as <.0001, indicate that the observed differences in the rates between male and female patients are statistically significant and not due to random chance. Over the six years, the data reveal a consistent trend: there were fewer male SCC patients than female patients, with a stable gap of about 2.7% to 2.8% in the rates.

Table 10. Mean and Median Age of Patients (2016–2021)

Year	Case	N	Mean	Std Dev	Std Err	Median	Range	Quartile Range	t-statistics	p-value
2016	Non-SCC Patients	158928	47.6284	18.6177	0.0467	46.08	89.25	29.34	-9.05	<.0001
	SCC Patients	8095	49.6249	19.3971	0.2156	49.41	85	30.59		
2017	Non-SCC Patients	162526	47.7936	18.6233	0.0462	46.09	90.21	29.42	-7.74	<.0001
	SCC Patients	8253	49.4727	19.2661	0.2121	49.08	85.99	30.42		
2018	Non-SCC Patients	162449	48.1665	18.6496	0.0463	46.58	88.63	29.58	-8.66	<.0001
	SCC Patients	8154	50.0495	19.1941	0.2126	49.83	84.92	30.5		
2019	Non-SCC Patients	163388	48.4391	18.69	0.0462	46.75	88.8	29.67	-5.82	<.0001
	SCC Patients	8651	49.6647	19.111	0.2055	49	86.13	30.66		
2020	Non-SCC Patients	158398	49.0259	18.7968	0.0472	47.41	88.76	29.92	-3.35	0.0008
	SCC Patients	8478	49.7381	19.1035	0.2075	49	86.92	30.76		
2021	Non-SCC Patients	162424	49.0983	18.8369	0.0467	47.41	89.33	30.16	-2.82	0.0048
	SCC Patients	8719	49.6936	19.207	0.2057	48.58	87.91	31		

Table 10 presents a comparative analysis of mean values and statistical significance between the age of non-SCC and SCC patients from 2016 to 2021. Across all years, SCC patients consistently exhibited higher mean ages than non-SCC patients. In 2016, the mean age for non-SCC patients was 47.63, while SCC patients had a mean age of 49.62. This trend continued through 2021, with non-SCC patients having a mean age of 49.10 and SCC patients of 49.69. The differences in mean ages between the two groups were statistically significant ($p < 0.05$) for all years, as indicated by the p-values (e.g., $p < 0.0001$ in 2016, 2017, 2018, and 2019; $p = 0.0008$ in 2020; and $p = 0.0048$ in 2021). These results indicate that SCC patients are, on average, slightly older than non-SCC patients, with a consistent and significant difference across the observed years.

Table 11. Annual Incidence Rates of Hospitalization for Cardiovascular Disease by Patient Type (2016–2021)

Year	Person-Years			Incident Cases			Incidence Rate per 1,000 Person-Years		
	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients
2016	157288.32	8030.94	8020.48	1270	73	50	8.07	9.09	6.23
2017	160436.28	8149.38	8157.82	1396	92	88	8.70	11.29	10.79
2018	160444.09	8073.09	8060.05	1401	111	83	8.73	13.75	10.30
2019	161526.46	8582.25	8550.86	1585	98	89	9.81	11.42	10.41
2020	157088.15	8425.84	8407.66	1447	110	79	9.21	13.06	9.40
2021	160419.3	8605.66	8606.89	1490	87	76	9.29	10.11	8.83
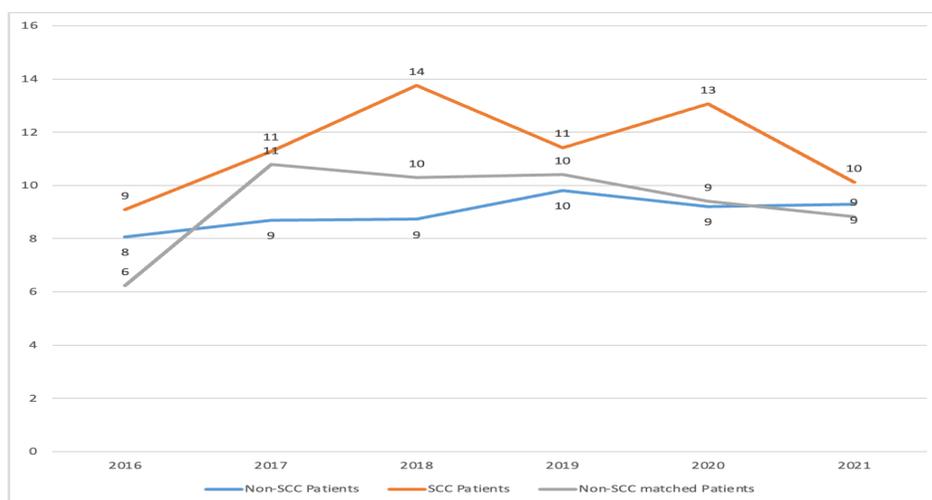
Figure 7. Trends in Annual Incidence Rates of Cardiovascular Disease Hospitalization by Patient Type (2016–2021)

Table 11 and Figure 7 present the annual hospital admission rates for cardiovascular disease among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients consistently had the highest rates, peaking at 13.75 per 1,000 person-years in 2018, compared to 8.73 for non-SCC patients and 10.30 for non-SCC-matched patients. The rates for non-SCC-matched patients were generally lower than those of SCC patients but higher than or close to those of non-SCC patients, for example, 8.83 in 2021 compared to 10.11 for SCC patients and 9.29 for non-SCC patients.

Table 12. Annual Incidence Rates of Hospitalization for Metabolic Disorders[23] by Patient Type (2016–2021)

Year	Person-Years			Incident Cases			Incidence Rate per 1,000 Person-Years		
	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients
2016	157288.3	8030.94	8020.48	1756	137	86	11.16	17.06	10.72
2017	160436.3	8149.38	8157.82	2125	171	116	13.25	20.98	14.22
2018	160444.1	8073.09	8060.05	2305	194	133	14.37	24.03	16.50
2019	161526.5	8582.25	8550.86	2480	203	140	15.35	23.65	16.37
2020	157088.2	8425.84	8407.66	2500	171	147	15.91	20.29	17.48
2021	160419.3	8605.66	8606.89	2748	222	169	17.13	25.80	19.64

Figure 8. Trends in Annual Incidence Rates of Hospitalization for Metabolic Disorders by Patient Type (2016–2021)

Table 12 and Figure 8 present annual hospital admission rates for metabolic disease among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients consistently exhibited the highest incidence rates, peaking at 25.80 per 1,000 person-years in 2021, compared to 17.13 for non-SCC patients and 19.64 for non-SCC-matched patients. In 2018, the rate for SCC patients, at 24.03, was significantly higher than that of 14.37 for non-SCC patients and that of 16.50 for non-SCC-matched patients. The rates for non-SCC-matched patients were generally lower than SCC patients but higher than

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[23] Metabolic disorders include diabetes, thyroid dysfunction, and other endocrine system conditions affecting metabolism and hormone regulation.

non-SCC patients—for example, in 2020, when their rate was 17.48 compared to 20.29 for SCC patients and 15.91 for non-SCC patients.

Table 13. Annual Incidence Rates of Hospitalization for Neurological Disorders by Patient Type (2016–2021)

Year	Person-Years			Incident Cases			Incidence Rate per 1,000 Person-Years		
	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients
2016	157288.3	8030.94	8020.48	1.000	144	57	6.36	17.93	7.11
2017	160436.3	8149.38	8157.82	1075	141	51	6.70	17.30	6.25
2018	160444.1	8073.09	8060.05	1070	163	60	6.67	20.19	7.44
2019	161526.5	8582.25	8550.86	1135	189	50	7.03	22.02	5.85
2020	157088.2	8425.84	8407.66	1126	208	66	7.17	24.69	7.85
2021	160419.3	8605.66	8606.89	1258	227	63	7.84	26.38	7.32

Figure 9. Trends in Annual Incidence Rates of Hospitalization for Neurological Disorders by Patient Type (2016–2021)

Table 13 and Figure 9 present the annual hospital admission rates for neurological disorders among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients consistently exhibited the highest rates, peaking at 26.38 per 1,000 person-years in 2021, compared to 7.84 for non-SCC patients and 7.32 for non-SCC-matched patients. Similarly, in 2020, the rate for SCC patients, at 24.69, was significantly higher than that of 7.17 for non-SCC patients and that of 7.85 for non-SCC-matched

patients. The rates for non-SCC-matched patients were generally lower than those of SCC patients but slightly higher than or comparable to non-SCC patients, for example, such as 7.11 in 2016 compared to 17.93 for SCC patients and 6.36 for non-SCC patients.

Table *14. Annual Incidence Rates of Hospitalization for Respiratory Disease by Patient Type (2016–2021)*

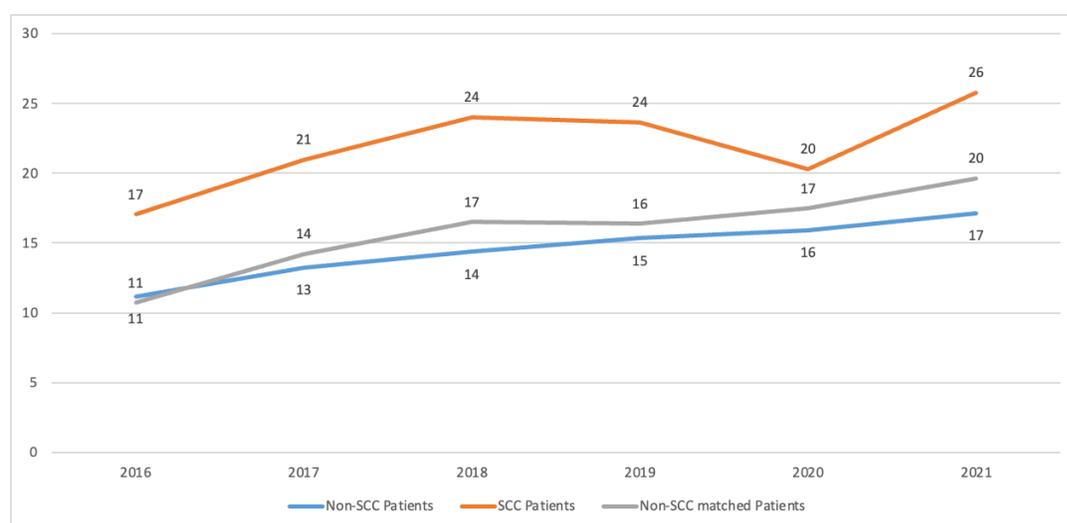| Year	Person-Years			Incident Cases			Incidence Rate per 1,000 Person-Years		
	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients
2016	157288.3	8030.94	8020.48	796	55	37	5.06	6.85	4.61
2017	160436.3	8149.38	8157.82	1040	80	52	6.48	9.82	6.37
2018	160444.1	8073.09	8060.05	1046	84	49	6.52	10.40	6.08
2019	161526.5	8582.25	8550.86	962	91	44	5.96	10.60	5.15
2020	157088.2	8425.84	8407.66	749	72	42	4.77	8.55	5.00
2021	160419.3	8605.66	8606.89	970	76	52	6.05	8.83	6.04

Figure 10. Trends in Annual Incidence Rates of Hospitalization for Respiratory Disease by Patient Type (2016–2021)

Table 14 and Figure 10 present the annual hospital admission rates for respiratory disease among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients consistently had higher rates than non-SCC and non-SCC-matched patients across all years. For example, in 2019, the rate for SCC patients was 10.60 per 1,000 person-years, significantly higher than 5.96 for non-SCC patients and 5.15 for non-SCC-matched patients. Similarly, in 2021, the rate for SCC patients was 8.83, compared to 6.05 for non-SCC patients and 6.04 for non-SCC-matched patients. The rates for non-SCC-matched patients were generally lower than rates of SCC patients but close to or slightly higher than those of non-SCC patients, for example 6.37 in 2017 compared to 9.82 for SCC patients and 6.48 for non-SCC patients.

Table 15. Annual Incidence Rates of Hospitalization for Sensory Processing Disorders[17] by Patient Type (2016–2021)

Year	Person-Years			Incident Cases			Incidence Rate per 1,000 Person-Years		
	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients
2016	157288.3	8030.94	8020.48	313	22	22	1.99	2.74	2.74
2017	160436.3	8149.38	8157.82	378	28	15	2.36	3.44	1.84
2018	160444.1	8073.09	8060.05	362	25	17	2.26	3.10	2.11
2019	161526.5	8582.25	8550.86	388	29	7	2.40	3.38	0.82
2020	157088.2	8425.84	8407.66	294	21	13	1.87	2.49	1.55
2021	160419.3	8605.66	8606.89	340	25	20	2.12	2.91	2.32

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[17] Sensory system disorders include diseases or disorders of the ear, nose, mouth, and throat, as well as craniofacial anomalies.
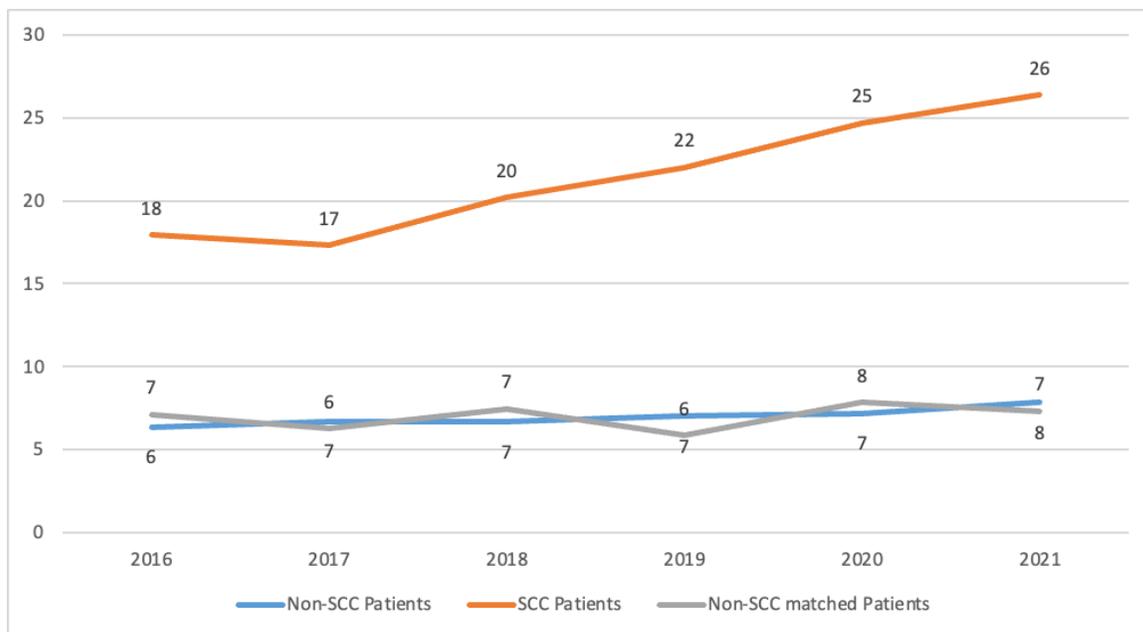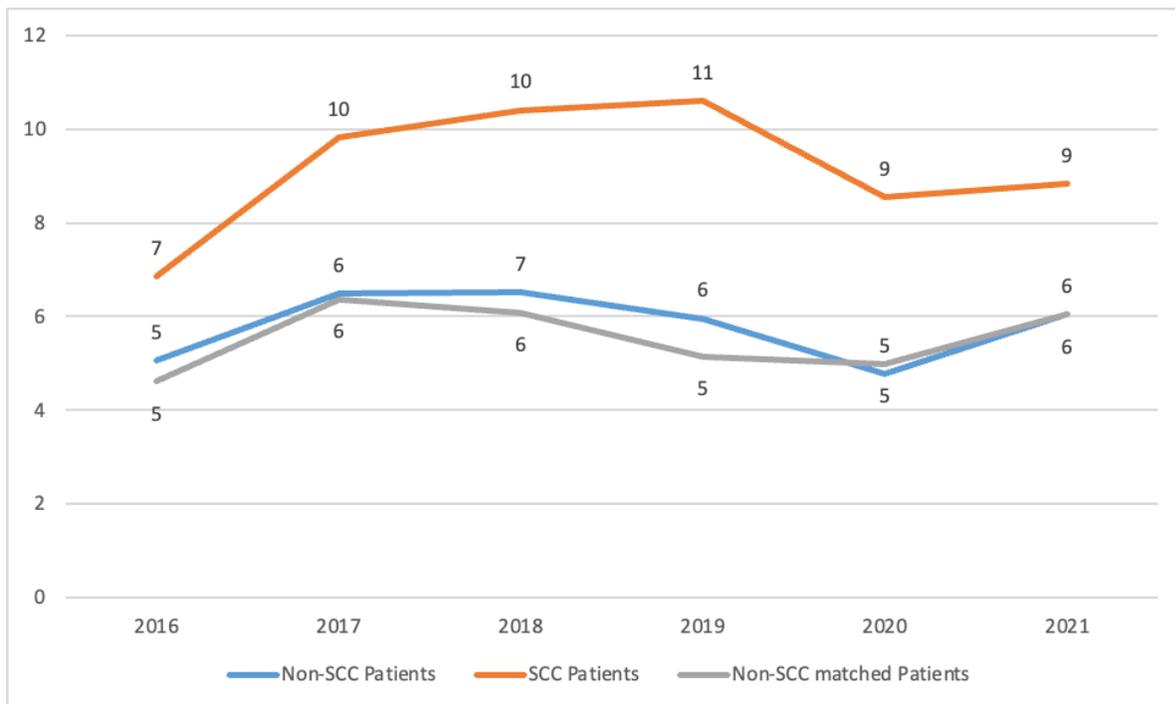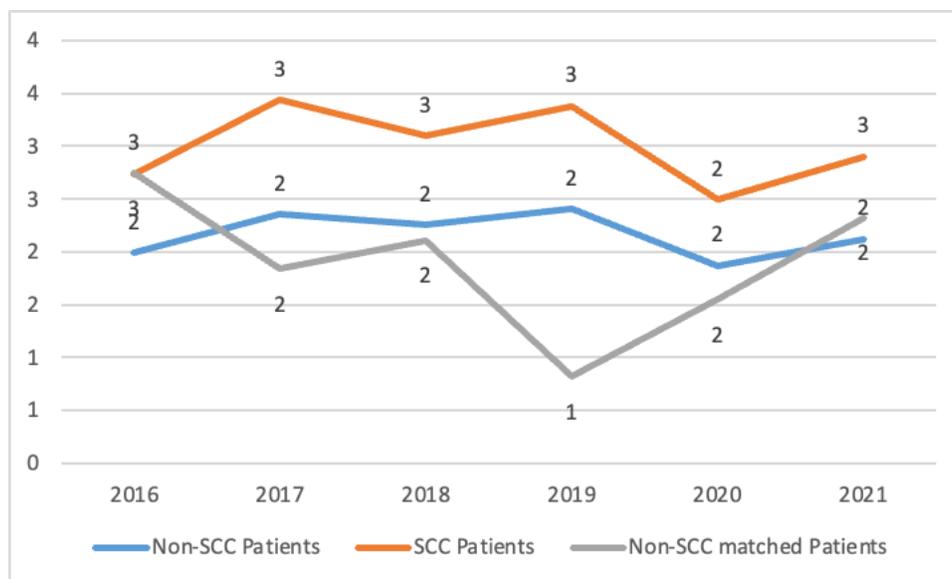
Figure 11. Trends in Annual Incidence Rates of Hospitalization for Sensory Processing Disorders by Patient Type (2016–2021)

Table 15 and Figure 11 present the annual hospital admission rates for sensory processing disorders among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. In most years, SCC patients consistently exhibited slightly higher incidence rates than non-SCC patients and non-SCC-matched patients. For instance, in 2019, the incidence rate for SCC patients was 3.38 per 1,000 person-years, surpassing the 2.40 for non-SCC patients and 0.82 for non-SCC-matched patients. Similarly, in 2021, SCC patients exhibited an incidence rate of 2.91, compared to 2.12 for non-SCC patients and 2.32 for non-SCC-matched patients. The rates for non-SCC-matched patients were generally lower than or close to those of non-SCC patients, for example, such as 1.84 in 2017 compared to 3.44 for SCC patients and 2.36 for non-SCC patients.

Table 16. Annual Incidence Rates of Hospitalization for Trauma[18] by Patient Type (2016–2021)

Year	Person-Year Observations			Incidence Cases			Incidence Rate per 1,000 Person-Years		
	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients
2016	157288.3	8030.94	8020.48	1043	100	55	6.63	12.45	6.86
2017	160436.3	8149.38	8157.82	1370	104	82	8.54	12.76	10.05
2018	160444.1	8073.09	8060.05	1386	123	64	8.64	15.24	7.94
2019	161526.5	8582.25	8550.86	1257	127	59	7.78	14.80	6.90
2020	157088.2	8425.84	8407.66	1372	141	81	8.73	16.73	9.63
2021	160419.3	8605.66	8606.89	1378	155	60	8.59	18.01	6.97

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[18] Trauma refers to physical injuries caused by falls, accidents, blows, or weapons, including cuts, bruises, and fractures, internal bleeding, or traumatic brain injury, as well as poisoning and toxic effects of drugs.

Figure 12. Trends in Annual Incidence Rates of Hospitalization for Trauma by Patient Type (2016–2021)

Table 16 and Figure 12 present the annual hospital admission rates for trauma among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients consistently had the highest rates across all years, peaking at 18.01 per 1,000 person-years in 2021, compared to 8.59 for non-SCC patients and 6.97 for non-SCC-matched patients. Similarly, in 2020, SCC patients had an incidence rate of 16.73, significantly higher than the 8.73 for non-SCC patients and 9.63 for non-SCC-matched patients. The rates for non-SCC-matched patients were generally lower rates than those of SCC patients but close to or slightly higher than those of non-SCC patients, for example, 10.05 in 2017 compared to 12.76 for SCC patients and 8.54 for non-SCC patients.

Table 17. Annual Incidence Rates of Hospitalization for Digestive Disease[19] by Patient Type (2016–2021)

Year	Person-Years			Incident Cases			Incidence Rate per 1,000 Person-Years		
	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients
2016	157288.3	8030.94	8020.48	3479	228	186	22.12	28.39	23.19
2017	160436.3	8149.38	8157.82	4573	318	255	28.50	39.02	31.26
2018	160444.1	8073.09	8060.05	5107	346	281	31.83	42.86	34.86
2019	161526.5	8582.25	8550.86	4977	380	299	30.81	44.28	34.97
2020	157088.2	8425.84	8407.66	4389	343	249	27.94	40.71	29.62
2021	160419.3	8605.66	8606.89	4923	400	289	30.69	46.48	33.58

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[19] Digestive diseases and disorders include those of the digestive and hepatobiliary systems, with conditions related to the intestines, liver, or pancreas transplant status.
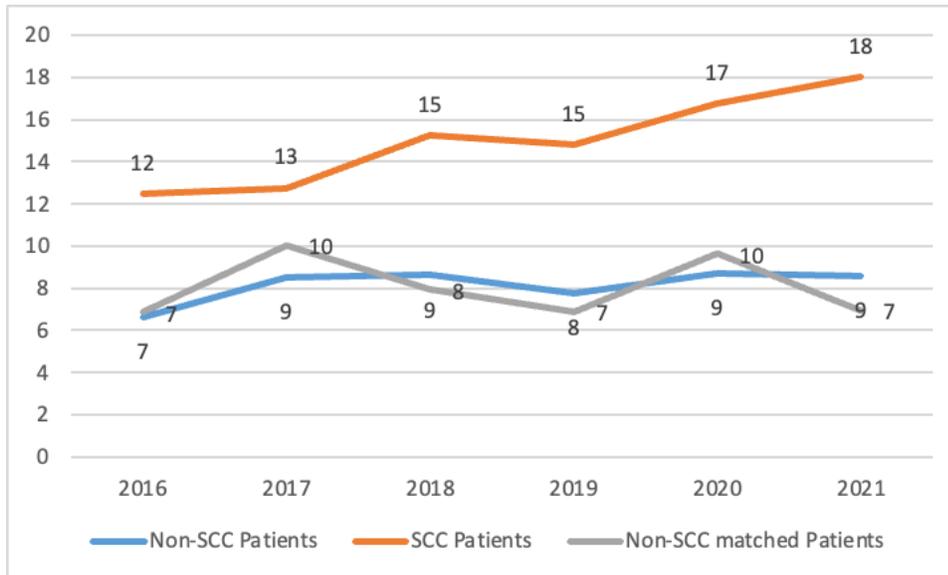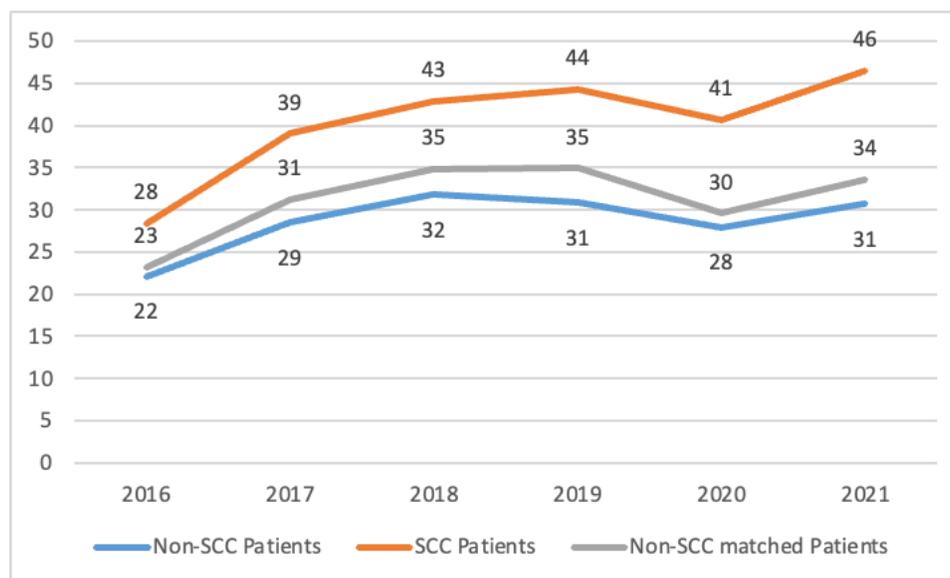
Figure 13. Trends in Annual Incidence Rates of Hospitalization for Digestive Disease by Patient Type (2016–2021)

Table 17 and Figure 13 present the annual hospital admission rates for digestive diseases among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients consistently had the highest rates across all years, peaking at 46.48 per 1,000 person-years in 2021, compared to 30.69 for non-SCC patients and 33.58 for non-SCC-matched patients. Similarly, in 2019, SCC patients had a rate of 44.28, significantly higher than the 30.81 for non-SCC patients and 34.97 for non-SCC-matched patients. The rates of non-SCC-matched patients were generally lower than those for SCC patients but higher than those for non-SCC patients, for example, 31.26 in 2017 compared to 39.02 for SCC patients and 28.50 for non-SCC patients.

Table 18. Annual Incidence Rates of Hospitalization for Dermatosis[20] by Patient Type (2016–2021)

Year	Person-Years			Incident Cases			Incidence Rate per 1,000 Person-Years		
	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients
2016	157288.3	8030.94	8020.48	225	31	16	1.43	3.86	1.99
2017	160436.3	8149.38	8157.82	300	38	22	1.87	4.66	2.70
2018	160444.1	8073.09	8060.05	314	39	17	1.96	4.83	2.11

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[20] Dermatosis refers to diseases and disorders involving the skin, subcutaneous tissue, and, in some classifications, the breast.

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2019	161526.5	8582.25	8550.86	264	54	20	1.63	6.29	2.34
2020	157088.2	8425.84	8407.66	297	60	25	1.89	7.12	2.97
2021	160419.3	8605.66	8606.89	308	51	17	1.92	5.93	1.98

Figure 14. Trends in Annual Incidence Rates of Hospitalization for Dermatosis by Patient Type (2016–2021)

Table 18 and Figure 14 present the annual hospital admission rates for dermatosis among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients consistently exhibited the highest rates across all years, peaking at 7.12 per 1,000 person-years in 2020, compared to 1.89 for non-SCC patients and 2.97 for non-SCC-matched patients. Similarly, in 2019, SCC patients recorded a rate of 6.29, significantly higher than 1.63 for non-SCC patients and 2.34 for non-SCC-matched patients. The rates for non-SCC-matched patients were generally lower than those of SCC patients but higher than those of non-SCC patients, for example, 2.70 in 2017 compared to 4.66 for SCC patients and 1.87 for non-SCC patients.

Table 19. Annual Incidence Rates of Hospitalization for Hematological Diseases[21] by Patient Type (2016–2021)

	Person-Years	Incident Cases	Incidence Rate per 1,000 Person-Years

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[21] Hematological diseases, including anemia, leukemia, and lymphoma, are a group of disorders that affect the blood and blood-forming organs.

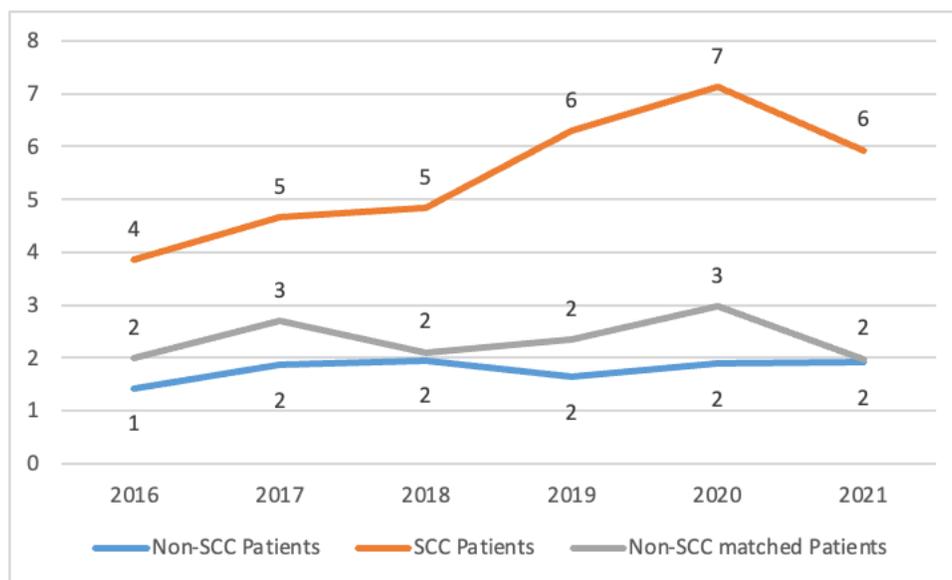| Year	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients
2016	157288.3	8030.94	8020.48	684	33	38	4.35	4.11	4.74
2017	160436.3	8149.38	8157.82	747	47	46	4.66	5.77	5.64
2018	160444.1	8073.09	8060.05	830	51	50	5.17	6.32	6.20
2019	161526.5	8582.25	8550.86	809	55	49	5.01	6.41	5.73
2020	157088.2	8425.84	8407.66	798	51	51	5.08	6.05	6.07
2021	160419.3	8605.66	8606.89	893	58	46	5.57	6.74	5.34

Figure 15. Trends in Incidence Rates of Hospitalization for Hematological Diseases by Patient Type (2016–2021)

Table 19 and Figure 15 present the annual hospital admission incidence rates for hematological diseases among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients consistently had slightly higher rates than non-SCC and non-SCC-matched patients in most years. For example, in 2021, the rate for SCC patients was 6.74 per 1,000 person-years, higher than the 5.57 for non-SCC patients and 5.34 for non-SCC-matched patients. Similarly, in 2019, the rate for SCC patients was 6.41, compared to 5.01 for non-SCC patients and 5.73 for non-SCC-matched patients. The rates for non-SCC-matched patients were generally close to or slightly higher than those of non-SCC patients, such as 6.20 in 2018 compared to 6.32 for SCC patients and 5.17 for non-SCC patients.

Table 20. Annual Incidence Rates of Hospitalization for Infectious Diseases[22] by Patient Type (2016–2021)

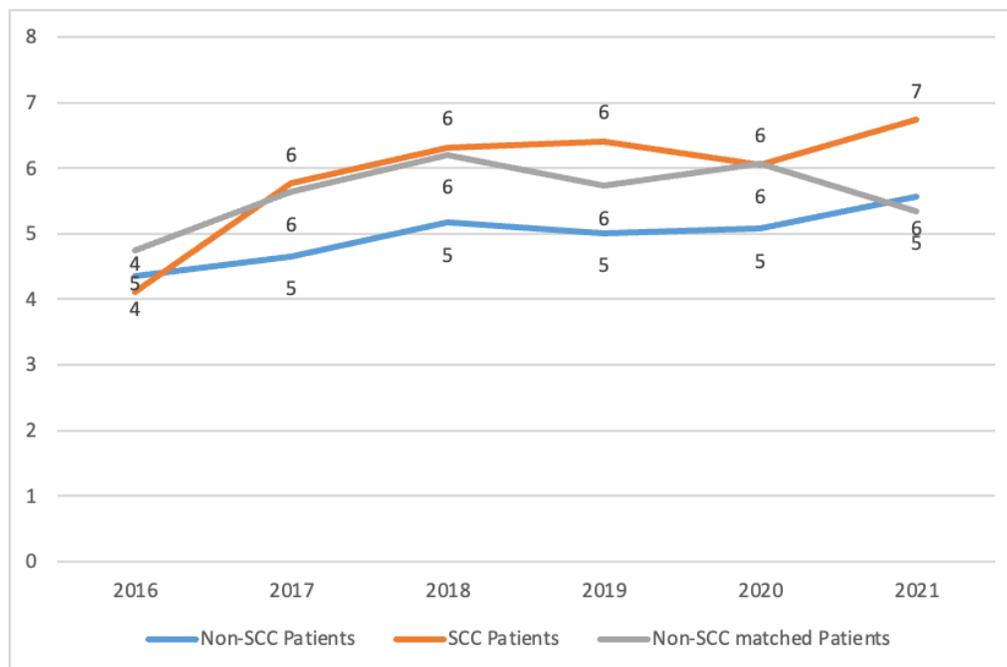| Year	Person-Years			Incident Cases			Incidence Rate per 1,000 Person-Years		
	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients	Non-SCC Patients	SCC Patients	Non-SCC-Matched Patients
2016	157288.3	8030.94	8020.48	329	46	14	2.09	5.73	1.75
2017	160436.3	8149.38	8157.82	457	49	27	2.85	6.01	3.31
2018	160444.1	8073.09	8060.05	450	125	24	2.80	15.48	2.98
2019	161526.5	8582.25	8550.86	401	93	17	2.48	10.84	1.99
2020	157088.2	8425.84	8407.66	389	85	18	2.48	10.09	2.14
2021	160419.3	8605.66	8606.89	389	85	28	2.42	9.88	3.25
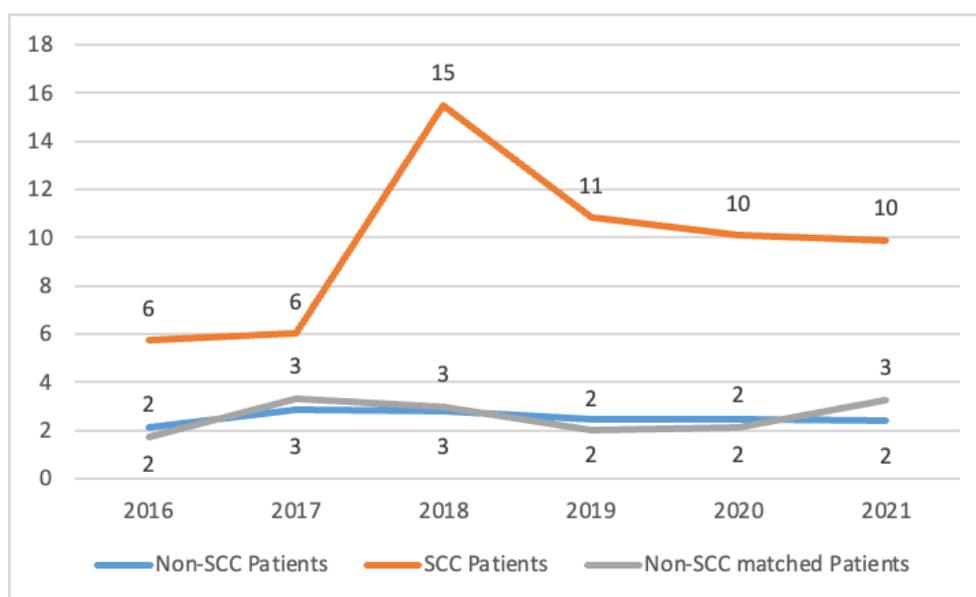
Figure 16. Trends in Annual Incidence Rates of Hospitalization for Infectious Diseases by Patient Type (2016–2021)

Table 20 and Figure 16 present the annual incidence rates of infectious diseases among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients consistently had the highest rates across all years, peaking at 15.48 per 1,000 person-years in 2018, compared to 2.80 for non-SCC patients and 2.98 for non-SCC-matched patients. Similarly, in 2020, the rate for SCC patients was 10.09, significantly higher than the 2.48 for non-SCC patients and 2.14 for non-SCC-matched patients. The rates for non-SCC-matched patients were generally lower than rates for SCC patients but close to or slightly higher than those for non-SCC patients, for example, 3.31 in 2017 compared to 6.01 for SCC patients and 2.85 for non-SCC patients.

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[22] Infectious diseases are conditions caused by pathogenic microorganisms, including bacteria, viruses, fungi, and parasites. The term encompasses infections, including HIV and parasitic diseases.

Table 21. Descriptive Statistics of Physician Costs by Patient Type (2016–2021)

Year	Cases	N	Mean	Std Dev	Std Err	Median	Range	Quartile Range	t-statistics	p-value
2016	Non-SCC Patients	151412	396.2	427	1.0973	253.8	11707.27	432.85	-1.28	0.2001
	SCC Patients	6207	403.2	417.9	5.3049	279.45	5880.13	400.6		
	Non-SCC-Matched Patients	7767	424.3	437.8	4.968	284.8	4483.7	446.32	2.89	0.0038
2017	Non-SCC Patients	154421	397.7	425.4	1.0825	255	6535.16	435.95	-2.98	0.0028
	SCC Patients	6202	414.6	437.6	5.5571	290.53	7429	417.25		
	Non-SCC-Matched Patients	7863	424.3	430.8	4.8581	287.5	3959.7	465.05	1.32	0.1864
2018	Non-SCC Patients	154338	396.7	422.7	1.0759	255.7	10867.63	436	-0.35	0.7273
	SCC Patients	6226	398.6	406.1	5.1465	276.9	5741.95	406.48		
	Non-SCC-Matched Patients	7764	428.8	446.2	5.0641	289.175	10867.63	464.9	4.19	<.0001
2019	Non-SCC Patients	155203	396.5	417.7	1.0602	258.8	9796.2	433.4	2.2	0.0277
	SCC Patients	6488	385.5	395.5	4.9106	269.725	4745.6	406.175		
	Non-SCC-Matched Patients	8263	418.3	422.4	4.6471	284.6	4882.33	449.9	4.85	<.0001
2020	Non-SCC Patients	151234	355.1	389	1.0004	227.19	8703.19	385.59	-0.87	0.3861
	SCC Patients	5801	359.2	351	4.6089	259	6149.25	368.01		
	Non-SCC-Matched Patients	8130	383.1	415.7	4.6108	247.6	8255.23	409	3.67	0.0002
2021	Non-SCC Patients	155679	439.7	502	1.2723	282.6	16885.1	478.09	2.7	0.007
	SCC Patients	6325	423.1	479.8	6.0327	287.42	10833.5	442.45		
	Non-SCC-Matched Patients	8396	456.2	490.6	5.3545	303.775	10280.2	498.54	4.1	<.0001

Table 21 presents the descriptive statistics physician costs among non-SCC, SCC, and non-SCC-matched patients from 2016 to 2021. The results reveal significant differences in mean physician costs across the groups over the years. For instance, in 2016, non-SCC-matched patients had significantly higher mean costs (424.3) than SCC patients (403.2) with a p-value of 0.0038. Similarly, in 2018, non-SCC-matched patients had higher mean costs (428.8) than SCC patients (398.6) with a p-value of <.0001. In 2021, non-SCC-matched patients also had significantly higher mean costs (456.2) compared to SCC patients (423.1) with a p-value of <.0001.

Table 22. Descriptive Statistics of Hospitalization Costs by Patient Type (2016–2021)

Year	Cases	N	Mean	Std Dev	Std Err	Median	Range	Quartile Range	t-statistics	p-value
2016	Non-SCC Patients	8010	491.5	930.3	10.3941	191	25360.1	422.1	-4.34	<.0001
	SCC Patients	725	729.2	1449.2	53.8209	255.4	16153.7	590.7		
	Non-SCC-Matched Patients	439	530.7	1144.5	54.6242	195.8	17000.2	407.2	-2.59	0.0097
2017	Non-SCC Patients	8065	465.3	807.8	8.995	189.5	12307.5	406	-4.25	<.0001
	SCC Patients	706	640.9	1072.1	40.3496	278.35	13970	666.5		
	Non-SCC-Matched Patients	437	463	771.8	36.9189	203	9647.1	406	-3.25	0.0012
2018	Non-SCC Patients	8259	476.8	860.4	9.468	181.8	22926.8	404.3	-5.29	<.0001
	SCC Patients	779	678	1028.8	36.8623	284.2	9228.8	651.4		
	Non-SCC-Matched Patients	454	490.9	858.1	40.2727	203	8309.6	428.65	-3.43	0.0006
2019	Non-SCC Patients	8074	374.1	622.2	6.9246	156.7	11280	329.75	-3.87	0.0001
	SCC Patients	827	487.7	820.1	28.5192	203	8676.3	438.7		
	Non-SCC-Matched Patients	504	330.1	490.6	21.8551	137	3726.8	324.1	-4.39	<.0001
2020	Non-SCC Patients	7166	339.4	609.2	7.1964	128	12687.2	289	-4.27	<.0001
	SCC Patients	749	461	753.9	27.5476	201.2	8806.8	407.4		
	Non-SCC-Matched Patients	421	312.5	509.4	24.8263	120	4486.05	281.65	-4.01	<.0001
2021	Non-SCC Patients	7546	359.8	656.5	7.5576	139.1	13720.6	308.2	-4.28	<.0001
	SCC Patients	767	489.9	815	29.4271	195.8	11678.8	462.4		
	Non-SCC-Matched Patients	405	367.6	573.2	28.4805	139.1	4703.9	346	-2.99	0.0029

Table 22 presents the descriptive statistics of hospitalization costs among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients consistently had significantly higher mean hospital costs compared to non-SCC patients across all years, with all p-values being <.0001. For example, in 2016, the mean hospital cost for SCC patients was 729.2, significantly higher than the 491.5 for non-SCC patients. Similarly, in 2021, SCC patients incurred higher costs (489.9) compared to non-SCC patients (359.8). Non-SCC-matched patients generally had lower mean costs than SCC patients but higher than or close to non-SCC patients, such as 530.7 in 2016 compared to 729.2 for SCC patients and 491.5 for non-SCC patients.

Table 23. Descriptive Statistics of Outpatient Costs by Patient Type (2016–2021)

Year	Cases	N	Mean	Std Dev	Std Err	Median	Range	Quartile Range	t-statistics	p-value
2016	Non-SCC Patients	40209	341.2	580.8	2.90	186.41	11646.21	344.2	-4.18	<.0001
	SCC Patients	2899	388.2	584.8	10.86	215.75	8132.22	404.16		
	Non-SCC-Matched Patients	2166	333.9	493.7	10.61	191.7	8309.15	350.4	-3.57	0.0004
2017	Non-SCC Patients	41018	347	587.8	2.90	191.85	12403.6	348.8	-4.12	<.0001
	SCC Patients	2844	392.8	571.8	10.72	229.155	8040.91	440.615		
	Non-SCC-Matched Patients	2182	355.4	615.5	13.18	187.5	8739.3	342.35	-2.2	0.0278
2018	Non-SCC Patients	40513	354.7	619.4	3.08	191.7	13153.4	359.55	-3	0.0027
	SCC Patients	2945	387.8	576.2	10.62	232.4	8557.49	420		
	Non-SCC-Matched Patients	2095	348.1	544.1	11.89	201.4	9052.93	368.35	-2.49	0.0128
2019	Non-SCC Patients	40759	356.5	615.3	3.05	192.45	12770.43	355.46	-1.03	0.3014
	SCC Patients	3169	367	546.2	9.70	205.65	11251.78	374.05		
	Non-SCC-Matched Patients	2250	380.5	684.6	14.43	201.575	8572.65	369.31	0.78	0.4363
2020	Non-SCC Patients	33114	342.3	630.6	3.47	175.43	12317.2	345.8	4.27	<.0001
	SCC Patients	2596	299.2	483	9.48	164.9	9094.5	322.59		
	Non-SCC-Matched Patients	1829	332.4	576.9	13.49	170.4	8627.35	345.5	2.01	0.044
2021	Non-SCC Patients	38064	392.7	649.9	3.33	203	11818.25	428.715	1.67	0.0959
	SCC Patients	2854	372.7	614.8	11.51	200.9	9173.7	409.48		
	Non-SCC-Matched Patient	2008	392.6	632.5	14.12	200.125	8749.4	424.145	1.09	0.2746

TTable 23 presents the descriptive statistics of outpatient costs among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients generally had higher mean outpatient costs compared to non-SCC patients in most years, with significant differences observed in 2016 (p = <.0001), 2017 (p = <.0001), and 2018 (p = 0.0027). For example, in 2016, the mean outpatient cost for SCC patients was 388.2, significantly higher than the 341.2 for non-SCC patients. However, in 2020, non-SCC patients had significantly higher mean costs (342.3) compared to SCC patients (299.2), with a p-value of <.0001. The costs for non-SCC-matched patients were generally lower than or close to those of SCC patients, for example, 333.9 in 2016 compared to 388.2 for SCC patients and 341.2 for non-SCC patients.

Table 24. Descriptive Statistics of Costs for Emergency Department Visits by Patient Type (2016–2021)

Year	Cases	N	Mean	Std Dev	Std Err	Median	Range	Quartile Range	t-statistics	p-value
2016	Non-SCC Patients	12035	109.1	121.1	1.10	69.1	1759.02	94	-6.43	<.0001
	SCC Patients	1107	143.5	174.3	5.24	92.4	1676.6	123.3		
	Non-SCC-Matched Patients	674	104.6	108.2	4.17	69.1	988.7	94	-5.82	<.0001
2017	Non-SCC Patients	12193	107.2	127.2	1.15	69.1	5736.67	94	-6.2	<.0001
	SCC Patients	1102	136.6	152.7	4.60	85.15	1771.2	122		
	Non-SCC-Matched Patients	684	102.2	99.898	3.82	69.1	902.8	93.3	-5.75	<.0001
2018	Non-SCC Patients	11755	109	119.1	1.10	69.1	1868.22	94.2	-6.95	<.0001
	SCC Patients	1142	143.8	165	4.88	89.05	1652.4	139.9		
	Non-SCC-Matched Patients	632	109.4	111.4	4.43	69.1	814.57	99.65	-5.22	<.0001
2019	Non-SCC Patients	11417	103.7	124.8	1.17	64.2	5171.42	94	-5.69	<.0001
	SCC Patients	1162	127.3	135.3	3.97	79.55	986.1	121.2		
	Non-SCC-Matched Patients	701	102.4	104.9	3.96	66.7	1158.3	94	-4.44	<.0001
2020	Non-SCC Patients	10236	98.0611	106.6	1.05	61.2	2027.57	94	-5.78	<.0001
	SCC Patients	1092	123	138	4.18	76.7	1380.9	103.4		
	Non-SCC-Matched Patients	595	95.8476	109	4.47	56.7	1112.8	90.1	-4.43	<.0001
2021	Non-SCC Patients	11268	108	114.9	1.08	67.3	1698.67	103.4	-6.38	<.0001
	SCC Patients	1161	137	150.4	4.41	84.4	1637.3	130.7		
	Non-SCC-Matched Patients	615	101.5	105.4	4.25	62.4	903.2	95.4	-5.79	<.0001

Table 24 presents the descriptive statistics of costs for emergency department visits among non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients consistently had significantly higher mean emergency costs compared to both non-SCC patients and non-SCC-matched patients across all years, with all p-values being <.0001. For example, in 2016, the mean emergency cost for SCC patients was 143.5, significantly higher than the 109.1 for non-SCC patients and 104.6 for non-SCC-matched patients. This trend persisted throughout the study period, with SCC patients reaching their highest mean cost in 2018 at 143.8, compared to 109 for non-SCC patients and 109.4 for non-SCC-matched patients. Similarly, in 2021, SCC patients had a mean cost of 137, significantly higher than the 108 for non-SCC patients and 101.5 for non-SCC-matched patients.

Table 25. Descriptive Statistics of Diagnostic Costs by Patient Type (2016–2021)

Year	Cases	N	Mean	Std Dev	Std Err	Median	Range	Quartile Range	t-statistics	p-value
2016	Non-SCC Patients	107297	248.9	454.1	1.39	146.2	12975.65	262	-7.26	<.0001
	SCC Patients	5706	298.8	509.2	6.74	193.1	11498.58	290.74		
	Non-SCC-Matched Patients	5727	248	389.8	5.15	155.6	9120.69	268.3	-5.99	<.0001
2017	Non-SCC Patients	109526	252.4	450.2	1.36	150.1	15391.33	268.7	-8.2	<.0001
	SCC Patients	5771	305.8	484.6	6.38	202.3	8788.2	296.25		
	Non-SCC-Matched Patients	5778	264	449.3	5.91	162.05	9634.43	282.95	-4.81	<.0001
2018	Non-SCC Patient	109138	255.9	465.9	1.41	153.3	17796.45	268	-7.75	<.0001
	SCC Patients	5854	305.6	477.8	6.24	200.475	10258.46	294.65		
	Non-SCC-Matched Patients	5649	270.7	455.5	6.06	168.75	8749.65	284.9	-4	<.0001
2019	Non-SCC Patients	110730	259.6	474.8	1.43	153.365	22779.19	268.93	-5.93	<.0001
	SCC Patients	6205	295.6	465.1	5.90	191.3	9395.08	288.1		
	Non-SCC-Matched Patients	6003	270.6	491.1	6.34	167.5	9699.93	276.3	-2.88	0.004
2020	Non-SCC Patients	96240	240.7	455	1.47	146.2	17496.91	237.385	-4.95	<.0001
	SCC Patients	5496	273.3	476.8	6.43	170.75	12631.1	279.14		
	Non-SCC-Matched Patients	5337	255.9	454.5	6.22	160.1	10773.49	259.28	-1.95	0.0509
2021	Non-SCC Patients	104267	270.5	479.9	1.49	163.66	15957.36	271	-5.2	<.0001
	SCC Patients	5856	306.4	516	6.74	188.425	11176.09	295.825		
	Non-SCC-Matched Patients	5782	275.8	488.4	6.42	170.65	13914.91	279.3	-3.29	0.001

Table 25 presents the descriptive statistics of diagnostic costs for non-SCC patients, SCC patients, and non-SCC-matched patients from 2016 to 2021. SCC patients consistently had significantly higher mean diagnostic costs compared to both non-SCC patients and non-SCC-matched patients across all years, with all p-values being <.0001. For example, in 2016, the mean diagnostic cost for SCC patients was 298.8, significantly higher than 248.9 for non-SCC patients and 248 for non-SCC-matched patients. This trend continued throughout the study period, with SCC patients reaching their highest mean cost in 2021 at 306.4, compared to 270.5 for non-SCC patients and 275.8 for non-SCC-matched patients. Similarly, in 2019, SCC patients had a mean cost of 295.6, significantly higher than the 259.6 for non-SCC patients and 270.6 for non-SCC-matched patients.

Table 26. Average Overall Cost per Patient, by Patient Type (2016–2021)

Year	Non-SCC Patients	SCC Patients	Non-SCC- Matched Patients	SCC Cost Premium (Matched Sample)
2016	$1,586.90	$1,962.90	$1,641.50	16.37%
2017	$1,569.10	$1,990.90	$1,669.10	16.16%
2018	$1,594.10	$1,913.80	$1,706.90	10.81%
2019	$1,490.40	$1,662.10	$1,504.90	9.46%
2020	$1,375.50	$1,525.70	$1,380.70	9.50%
2021	$1,570.70	$1,729.10	$1,593.70	7.83%

Annex II: Workstream 2 Patient Experience Survey Questionnaire

Patients experience survey

Thank you for taking part in our survey! Your responses are valuable and will help us greatly. This questionnaire will take approximately 10 minutes to complete. Your answers will remain anonymous and confidential.

THEME 1 – DEMOGRAPHICS

Q1 – What are the first three digits of your postal code? _____

Q2 – What is your age? _____

Q3 – What sex were you assigned at birth?

○ Male

○ Female

○ Intersex

○ Prefer not to say

Q4 – What is your gender identity?

○ Male

○ Female

○ Non-binary

○ Two-Spirit

○ Prefer to self-describe: _____

○ Prefer not to say

Q5 – What is the highest level of education that you have completed?

○ Less than high school diploma or its equivalent

○ Secondary/high school diploma or equivalent

○ Apprenticeship or other trades certificate or diploma

○ College, CEGEP or other non-university certificate or diploma

○ Undergraduate/bachelor's degree

○ Master's, Professional degree, or doctorate

Q6 – Which one of the following categories best describes the total annual income, before taxes, of all members of your household?

○ Less than $25,000

○ $25,000 to just under $50,000

○ $50,000 to just under $75,000

○ $75,000 to just under $100,000

○ $100,00 to just under $150,000

○ $150,000 to just under $200,000

○ $200,000 or more

Q7 – In general, how is your health?

○ Excellent

○ Very good

○ Good

○ Fair

○ Poor

Q8 – Do you have one or more long-term illness(es) or chronic condition(s) that require(s) medical attention? Chronic disease or condition – a long-term condition which is expected to last or has already lasted six months or more (e.g., asthma, hepatitis, depression)

○ Yes, more than one

○ Yes, one

○ No

○ I don't know

○ Prefer not to answer

THEME 2 – HEALTH CARE SERVICES UTILIZATION

Q9 – Do you have a regular primary health care provider (family doctor or nurse practitioner)? By this, we mean one health professional that you regularly consult with when you need care or advice for your health.

○ Yes

○ No

○ I don't know

Q10 – Which of the following best described how you have used the healthcare system in the last 12 months?

○ I have no health issues, and hardly every use healthcare services.

○ I had minor health issues that were fixed quickly and weren't life threatening, or I only used routine health care services. This might include a routine visit or check-up.

○ I had a more serious health issue that might have required surgery, a hospital stay, or care and treatment from a specialist.

○ I have serious ongoing or long-term health issues, which require regular use of the healthcare system, and that affect my quality of life.

Q11 – In the last 12 months, where did you mostly go when you needed a check-up, wanted advice about a health problem, or got sick or hurt?

○ My primary care provider's clinic

○ Any walk-in clinic

○ A specific walk-in clinic

○ Hospital Emergency Room

○ Pharmacy (excludes visits that did not involve a consultation)

○ A telephone health line (e.g., HealthLine 811, Telehealth)

○ Other, please specify:_____

Q12 – In the last 12 months, what primary care clinic did you use most? *If your clinic's name does not appear, please type it in.*

_____

Q13 – How long have you been using [clinic]'s services?

○ Less than 6 months

○ At least 6 months but less than 1 year

○ At least 1 year but less than 3 years

○ At least 3 years but less than 5 years

○ 5 years or more

Q14 – In the last 12 months, how often did you use [clinic]'s services?

○ Once

○ 2-3 times

○ 4-6 times

○ 7-10 times

○ More than 10 times

Q15 – Does [clinic's name] offer the following services? *Choose all that apply*

	Yes	No	I don't know
Family Physician/Nurse Practitioner services	○	○	○

Mental health services	○	○	○
Preventive care (e.g., vaccinations, screenings)	○	○	○
Physio or physical therapy	○	○	○
Occupational therapy	○	○	○
Nutrition services (e.g., dietician, nutritionist)	○	○	○
Health education or wellness programs (e.g., healthy eating or peers programs)	○	○	○
Imaging services (e.g., X-rays, ultrasounds)	○	○	○
Laboratory services (e.g., bloodwork, diagnostic tests)	○	○	○
Other - please specify	○	○	○

Q16 – How often do you use these services that [clinic's name] offer?

	Often	Sometimes	Rarely	Never
[only items answered with "yes" to Q15 appear]	○	○	○	○

THEME 3 – SATISFACTION WITH HEALTH CARE SERVICES

Q17 – On a scale from 0 to 10, where 0 is the worst possible experience and 10 is the best possible experience, how would you rate your overall care experience at [clinic's name]?

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ○ 7
- ○ 8
- ○ 9
- ○ 10

Q17.1 – Can you explain why your experience was good or bad?

_____

Q18 – Do you feel that your preferences and concerns are taken into account in decisions about your care at [clinic's name]?

- ○ Always
- ○ Usually
- ○ Not very often
- ○ Never
- ○ I don't know

Q19 – How would you rate the amount of time care providers give you during your visits at the [clinic's name]?

- ○ Excellent

○ Good

○ Fair

○ Poor

○ Terrible

Q20 – To what extent do you feel that the different healthcare professionals you see at [clinic's name] share information and collaborate effectively for your care?

○ I strongly agree

○ I agree

○ I disagree

○ I strongly disagree

○ Not relevant – I saw only one provider at that clinic

○ I don't know

Q21 – Do you feel that [clinic name]'s care model helps you manage your health better compared to other clinics you have visited?

○ Yes, much better

○ Yes, somewhat better

○ About the same

○ Worse than other clinics

○ I have not been to other clinics

Q21.1 [asked only if "yes, much better" or "Yes, somewhat better" at Q21] – Why is it better? Choose all that apply

☐ Easy to make appointments and access care

☐ Good communication with healthcare providers

☐ Timely and prompt care delivery

☐ Access to a multidisciplinary care team

☐ Comprehensive healthcare

☐ Availability of preventive services or health education

☐ Compassionate and personalized care

☐ Patient voice being taken into account in decision-making

☐ Other - please specify: _____

Q21.2 [asked only if "worse than other clinics" at Q21] – Why is it worse? _____

The following question is about **care coordination**. Care coordination refers to health care that is provided in a planned way that meets the needs and preferences of the patient. When care is coordinated well, the patient and their doctors, nurses, other health care providers all know who is responsible for different parts of the patient's care, and they communicate with each other so that everyone has the information they need.

Q22 – In the last 12 months, how well did your healthcare team at [clinic's name] seem to coordinate your care with other parts of the healthcare system (e.g. specialists, hospital or tests)?

○ Excellent – My healthcare team consistently coordinated my care with other parts of the healthcare system effectively

○ Very Good – My healthcare team usually coordinated my care well, with minor gaps

○ Good – My healthcare team coordinated my care adequately, but there were occasional issues

○ Fair – My healthcare team struggled with coordination, leading to noticeable delays or gaps

○ Poor – My healthcare team rarely coordinated my care well, often resulting in confusion or delays

○ Not Applicable – I did not require coordination with other parts of the healthcare system

Q23 – What changes do you think could improve your experience at [clinic's name]? Choose all that apply

☐ Less waiting time to make appointments

☐ Less time in the waiting room

☐ More time with the care provider

☐ Home visits

☐ Greater listening by doctors and health professionals

☐ Better continuity between appointments

☐ Greater curiosity - I need my health professionals to ask me more questions

☐ Offering more services - Please specify: _____

☐ Other - Please specify: _____

☐ None – I have no complaints

Q24 – On a scale of 0 to 10, how likely would you recommend the [clinic's name] to friends and family?

○ 0

○ 1

○ 2

○ 3

○ 4

○ 5

○ 6

○ 7

○ 8

○ 9

○ 10

THEME 4 – GOVERNANCE AND PARTICIPATION

Q25 – Have you ever provided feedback to [clinic's name] about your experience with the clinic or offered up suggestions for how things could be improved?

○ Yes

○ No

Q25.1 [asked only if "yes" at Q25] – How did you go about providing that feedback? Choose all that apply

☐ Submitted anonymous feedback (e.g., suggestion box, letter)

☐ Had a one-on-one conversation with health care provider(s)

☐ Posted about it on social media

☐ Participated in a round table discussion

☐ Met with someone on the Board of Directors

☐ Discussed with a client representative/staff person/manager at the clinic

☐ Attended a membership meeting

☐ Completed a patient experience survey

☐ Other - please specify: _____

Q25.2 [asked only if "no" at Q25] – Suppose you wanted to provide feedback or offer a suggestion, which of the following approaches are available at [clinic's name]? Choose all that apply

☐ Submit anonymous feedback (e.g., suggestion box, letter)

☐ Have a one-on-one conversation with health care provider(s)

☐ Participate in a round table discussion

☐ Meet with someone on the Board of Directors

☐ Discuss with a client representative/staff person/manager at the clinic

☐ Attend a membership meeting

☐ Complete a patient experience survey

☐ Other - please specify: _____

☐ I don't know how to provide feedback

Q26 – Do you think [clinic's name] takes patient feedback into account when deciding what kind of services they want to offer and how?

○ Yes, definitely

○ Yes, partly

○ No, not really

○ No, not at all

○ Not sure/I don't know

Q27 – Do you feel that your feedback or opinions have influenced the services or care provided by [clinic's name]?

○ Yes, definitely

○ Yes, somehow

○ No, not really

○ No, not at all

○ I never provide feedback

Q28 – Do you have any questions or comments about the questionnaire or have anything you would like to add?

_____

Annex III: Workstream 2 Tables and Figures

Table 27. Level of Education

Level of Education	SCC Respondents	Non-SCC Respondents
Less than high school diploma or its equivalent	3%	6%
Secondary/high school diploma or equivalent	12%	16%
Apprenticeship or other trades certificate or diploma	3%	16%
College, CEGEP, or other non-university certificate or diploma	20%	29%
Undergraduate/bachelor's degree	31%	31%
Master's, professional degree, or doctorate	31%	3%

Figure 17. General Health

Question: Which of the following best described how you have used the healthcare system in the last 12 months?

I have no health issues, and hardly every use healthcare services.
- SCC respondents: 2
- Non-SCC respondents: 25

I had minor health issues that were fixed quickly and weren't life threatening, or I only used routine health care services. This might include a routine visit or check-up.
- SCC respondents: 53
- Non-SCC respondents: 59

I had a more serious health issue that might have required surgery, a hospital stay, or care and treatment from a specialist
- SCC respondents: 19
- Non-SCC respondents: 9

I have serious ongoing or long-term health issues, which require regular use of the healthcare system, and that affect my quality of life.
- SCC respondents: 26
- Non-SCC respondents: 7

Figure 18. General Use of the Healthcare System

Question: How long have you been using that primary care clinic's services?

Less than 6 months
- SCC respondents: 0
- Non-SCC respondents: 23

At least 6 months but less than 1 year
- SCC respondents: 0
- Non-SCC respondents: 16

At least 1 year but less than 3 years
- SCC respondents: 3
- Non-SCC respondents: 24

At least 3 years but less than 5 years
- SCC respondents: 3
- Non-SCC respondents: 28

More than 5 years
- SCC respondents: 94
- Non-SCC respondents: 8

Figure 19. Clinic Length of Use
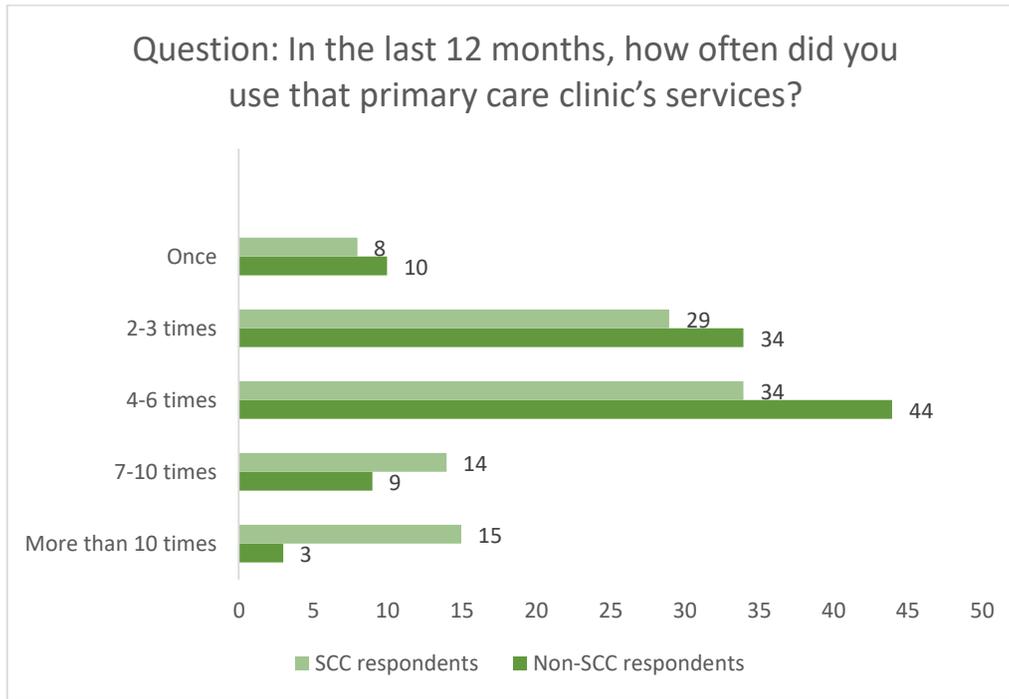
Figure 20. Clinic Use Frequency
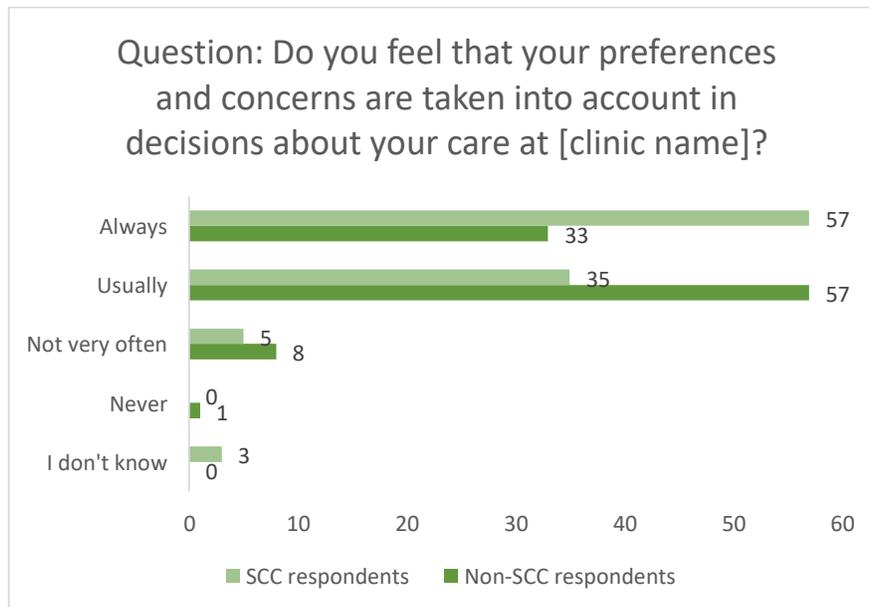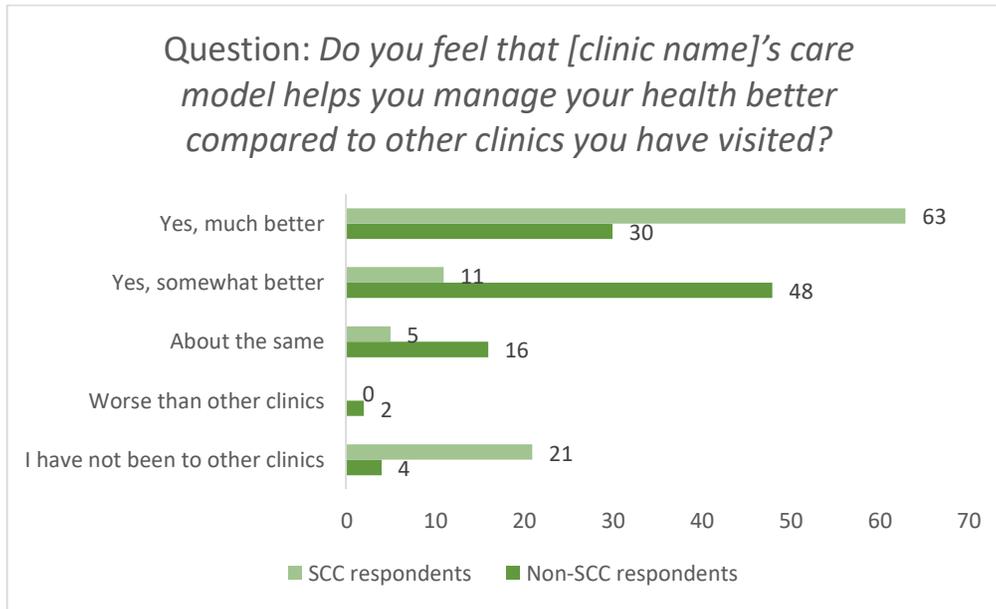

Figure 21. Preferences/Concerns Taken into Account

Question: *Do you feel that [clinic name]'s care model helps you manage your health better compared to other clinics you have visited?*

Yes, much better	63 / 30
Yes, somewhat better	11 / 48
About the same	5 / 16
Worse than other clinics	0 / 2
I have not been to other clinics	21 / 4

■ SCC respondents ■ Non-SCC respondents

Figure 22. Supportive Role of Clinic Care Models in Managing Health

Question: To what extent do you feel that the different healthcare professionals you see at [clinic name] share information and collaborate effectively for your care?

I strongly agree	36 / 20
I agree	44 / 59
I disagree	1 / 6
I strongly disagree	0 / 3
I don't know	16 / 4
Not relevant - I saw only one provider at the clinic	3 / 8

■ SCC respondents ■ Non-SCC respondents
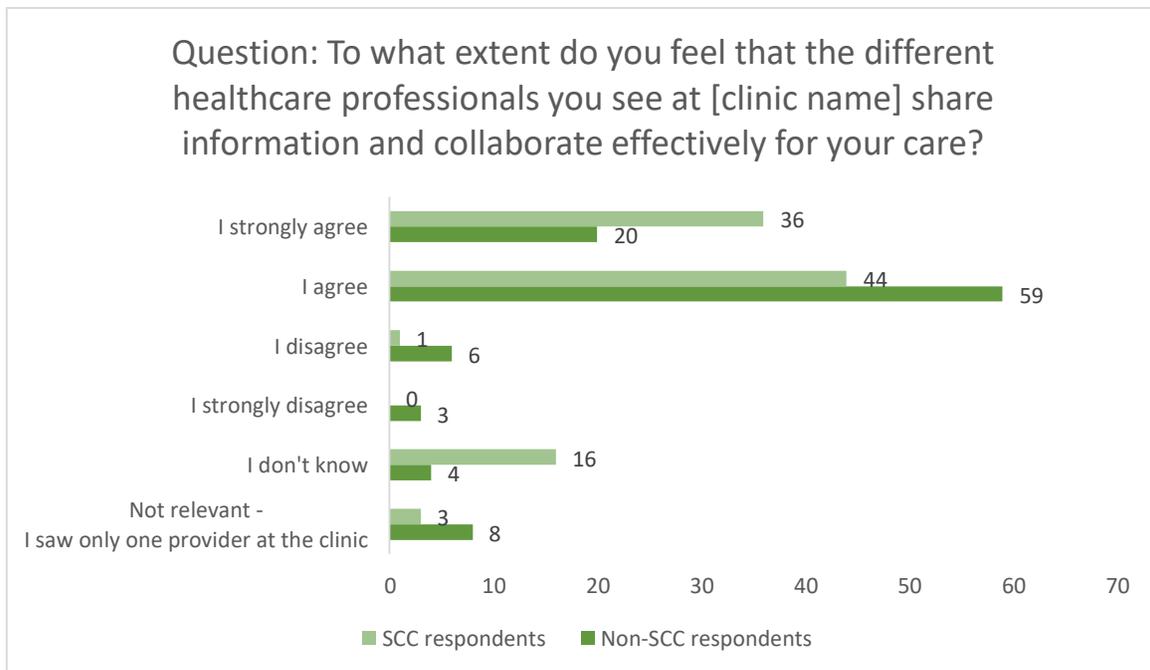
Figure 23. Sharing of Information and Collaborating Within the Clinic
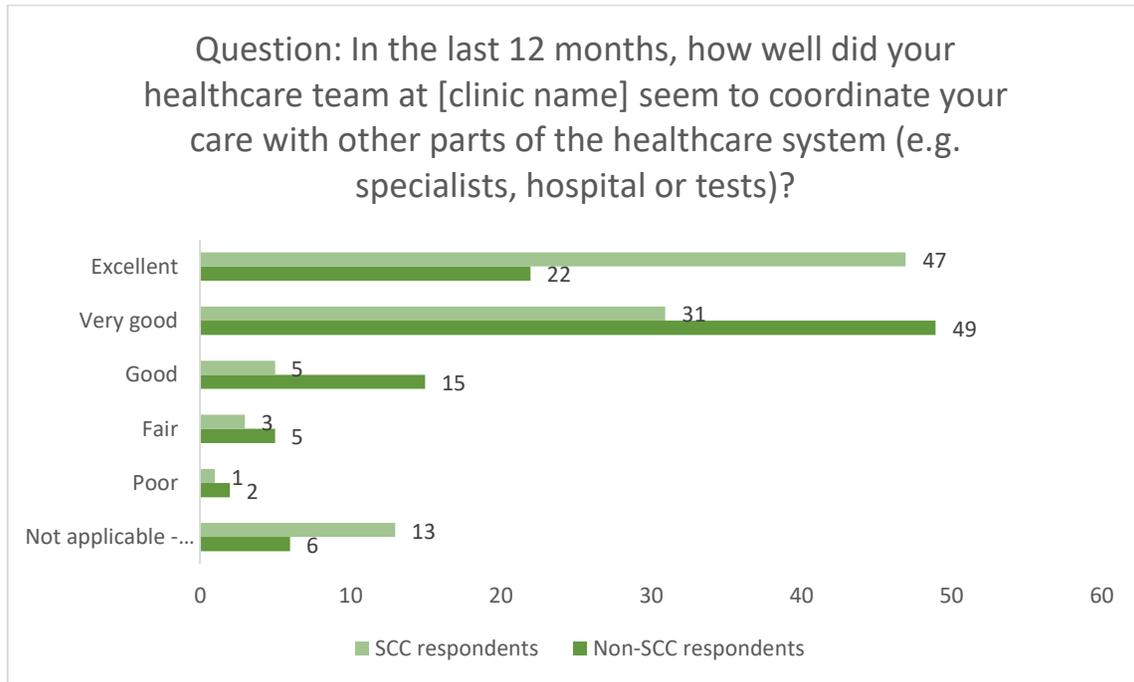
Figure 24. Coordination of Healthcare with External Services
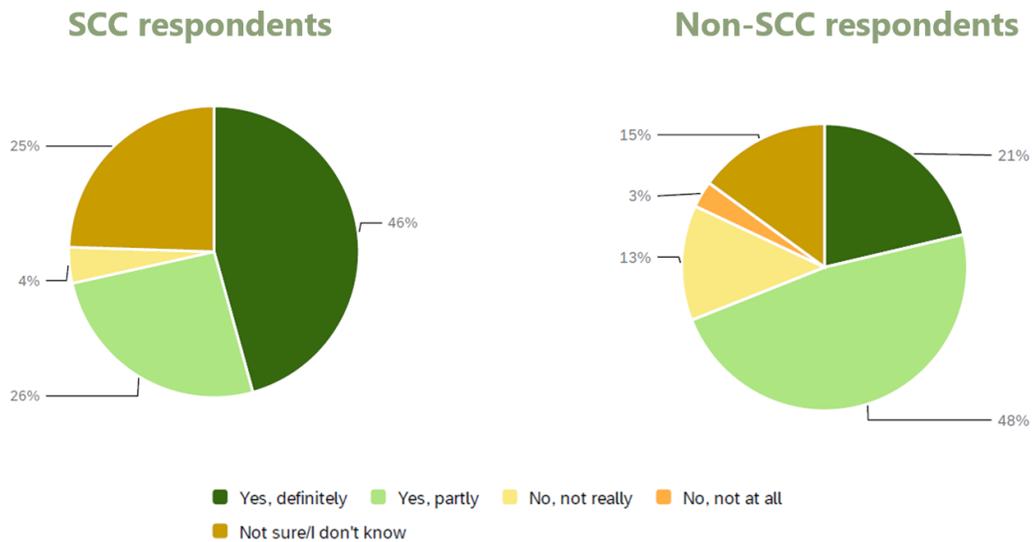
Figure 25. Clinic Taking Patient Feedback into Account

SCC respondents

Non-SCC respondents

16%
25%
1%
23%
36%

18%
2%
11%
26%
44%

- Yes, definitely
- Yes, somehow
- No, not really
- No, not at all
- I never provide feedback
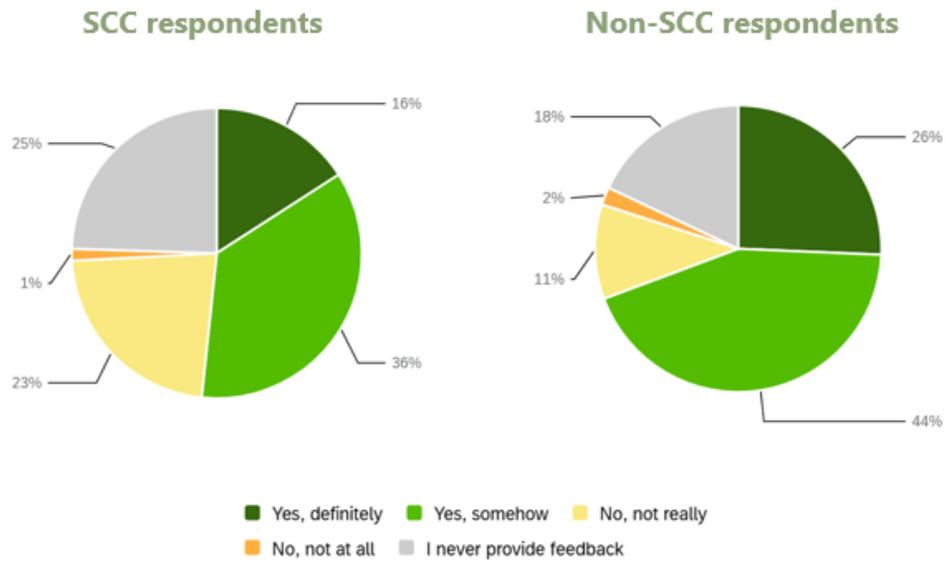
Figure 26. Feedback and Opinions Influence on Services or Care Provided

Annex IV: Workstream 3 Interview Guides

Note: the interview guides presented in Annex IV are examples of those used throughout this research. They were adapted to suit the various categories of interviewees encountered, as well as the progression of the study, incorporating new questions and reflecting the evolving themes.

Annex IV.A: Interview Guide for Employees

Presentation of (i) the research objectives, (ii) the researcher(s) leading the interview, and (iii) the consent form.	
Interviewee's presentation	
Background	- Training - Past professional activities - Current roles and responsibilities at the SCC - What led to this position
Membership	- Member of the SCC? Since when and why? - Participation in membership meetings - Do you feel the membership meetings are important? Why or why not? o *Probe if necessary*: Do the conversations and discussions at the AGM help shape the organization's agenda? If yes, can you provide an example?
Interviewee's experience with SCC	

General experience	- Describe your experience of providing primary care services at SCC (e.g., autonomy, quality of care provided …)
	- What's important to you in your practice and how satisfied are you with your practice as SCC?
	  o Is your job (dis)satisfaction linked to any characteristics specific to the SSC?
	- How would you characterize SCC's
	  o *atmosphere*
	  o *staff engagement/participation*
	  o *quality of care and services offered*

Co-operative model of organization	- Strengths and/or weaknesses of the co-operative model for healthcare - What differences does the co-operative model make in the operation of the clinic? - What differences, if any, have you observed between the way things work at SCC versus elsewhere? o *Do you attribute some of those differences to the co-op governance structure?*
Governance	- Strengths and/or weaknesses of SCC's current governance structure - Generally, where and how would you say decision-making takes place? Describe the type of decisions you make and the usual decision-making process

	- How is decision-making power shared at the clinic? Who gets to make what kind of decision?
	    o *IF MEMBER*: How easy is it to participate in decision-making as a member of the clinic? What are the channels? What is working well?
	- How would you characterize communication within SCC?
	    o Among governance bodies (e.g., the board, management, teams…)
	- Areas for improvement

Model of care	- Strengths and weaknesses of SCC's model of care - Who do you primarily work with? - What type of collaboration between providers? Information sharing? Any case conference practices? - What does "interdisciplinary team" or "team-based care" mean to you? o How does that take place within the clinic? *Tools/devices/practices?* - Areas for improvement for team-based care?

Salary-based model
 	
(only if adapted to the type of interviewee)
	- What are the strengths of the salary-based model for family physicians?
	- How does that impact
	    o how you practice? *(i.e., more flexible? less stressful? autonomy?)*
	    o your encounter with the patient *(i.e., more time? more personalized care?)*
	    o the quality of care/patients' outcomes?
	    o your wellbeing? *(i.e., work-life balance? workload?)*
	    o other effects?
	- What are the weaknesses/challenges of this model?

Comments or additional information	
- Is there anything else you'd like to add or discuss? - Is there anyone you'd recommend we meet for future interviews: who and why?	

Annex IV.B: Interview Guide for Board Members

Presentation of (i) the research objectives, (ii) the researcher(s) leading the interview, and (iii) the consent form.	
Interviewee's background	
Background	- Training - Past professional activities - Are you a patient of SCC? Since when? - Since when have you been a member of SCC? and why?
SCC governance	

Board of Directors' composition	- How did you come to sit on the SCC Board? - Describe the process behind your coming onto the board, 'shoulder tapped' or you put your name forward without solicitation? - More candidates than seats when you were running? - Does the board use any kind of skills matrix to support recruitment?
Board of Directors' role and responsibilities	- How would you describe the board's role? And yours? - How are you satisfied with your role as a Board member? - How do board meetings generally take place? What do you do at the meetings? - Would you say the decision-making process is smooth? How do you deal with disagreements?
Membership meetings	- Do you participate in all membership meetings (2x/year)? - Describe the goal of membership meetings. - Describe the general course of meetings. - Do you feel the membership meetings are important? Why or why not? o *Probe if necessary*: Do the conversations and discussions at the AGM help shape the organization's agenda? If yes, can you provide an example?

Decision-making processes	- What type of decision does the Board make?
	- How is decision-making power shared in the clinic? Who gets to make what kind of decision?
	- Generally, where and how does decision-making take place <u>in the organization</u>?
	    o *i.e., Membership? Board? Management?*
	    o *i.e. What is the weight of the executive/management staff in decision-making?*
	- How easy do you think it is to participate in decision-making when you're a member (not on the Board)?
	    o *What are the channels to take part?*

Communication processes	- How would you characterize communication across SCC?
	    o *Among governance bodies (e.g., the Board, management, teams…)?*
	    o *Towards members?*
	- What are the communication channels?

Co-operative model of organization	- Strengths and/or weaknesses of the co-operative model for healthcare? - What differences does the co-operative model make in the operation of the clinic? - What differences, if any, have you observed between the way things work at SCC versus elsewhere? o *Do you attribute some of those differences to the co-op governance structure?*
Care and services [if interviewee is a patient]	
Use of services	- Do you access a lot of different services within SCC?
Patient experience	- How would you characterize your experiences as a patient: o the care and services offered

	o the quality of care and the comprehensiveness of care.
	o your interactions with physicians and/or nurse practitioners.
	▪ *i.e., duration, feeling of being heard as a patient...*
	- How would you characterize the atmosphere of SCC? How do you feel when you are there?

| - If you compare SCC to other clinics (if you've been elsewhere), what would you say are the main differences? |
| - Where do you see room for improvement at SCC? |

| **Comments or additional information** |
| - Is there anything else you'd like to add or discuss? |
| - Is there anyone you'd recommend we meet for future interviews: who and why? |

Annex IV.C: Interview Guide for Patients

	Presentation of (i) the research objectives, (ii) the researcher(s) leading the interview, and (iii) the consent form.
Interviewee's background	
Background	- Since when have you been a patient at SCC?
Care and services	
- Do you access a lot of different services within SCC? - Describe your overall experience with the clinic.	
Appointments	- How easy is it to make appointments? Can you describe or illustrate the process? - Do you usually have to wait a long time?

Staff professionalism	- Generally, would you say the staff is friendly?
	- When you have an appointment with a Physician:
	  o Do you have the feeling that you have the time needed to talk about why you are there?
	  o Do you have the feeling that you are heard and listened to?
	  o Are your questions and concerns addressed to your satisfaction?
	  o Do you feel like you receive information clearly from your physician?
	- Interactions with other staff members
	  o Do you feel like the staff is attentive to your needs?

Quality of care	- Generally, are you satisfied with the medical care and treatment you receive? - Describe your interactions with physicians and/or nurse practitioners. o i.e.,. duration, feeling of being heard as a patient...

Atmosphere	- Is the clinic a nice and welcoming environment? How do you feel when you are there?

- Do you access care at any other health care clinics?
    - o If yes, for what type of care?
    - o What would you say are the main differences?
- Do you have any suggestions on how the patient experience could be improved at SCC?

Membership

- Member of the SCC? Since when and why?
- What motivated you to become a member?
- Have your expectations of membership been met?
- Has your reason for being a member of SCC changed since you became a member?
- What specific benefits or services have you found most valuable as a member?

Community and engagement	- Do you feel a sense of community and belonging within the co-operative clinic? Why or why not
	 - Generally, how would you say decision-making takes place?
	 - Do you know the channels and ways that members can participate in the decision-making processes of the clinic?
	 - How easy is it to participate in decision-making as a member?
	 - Do you consider yourself an active member?
	     o *If yes, what do you do? If not, why don't you participate?*
	 - Participation in membership meetings?
	 - Do you feel the membership meetings are important? Why or why not?
	     o *Probe if necessary*: Do the conversations and discussions at the AGM help shape the organization's agenda? If yes, can you provide an example?

- Is there anything specific you think that the co-operative clinic could do to enhance the member experience?

Comments or additional information

- Is there anything else you'd like to add or discuss?
- Is there anyone you'd recommend we meet for future interviews: who and why?

Canadian Centre for the Study of Co-operatives

About

The Canadian Centre for the Study of Co-operatives (CCSC) is an interdisciplinary research and teaching centre located on the University of Saskatchewan campus. Established in 1984, the CCSC is supported financially by major co-operatives and credit unions from across Canada and the University of Saskatchewan. Our goal is to provide practitioners and policymakers with information and conceptual tools to understand co-operatives and to develop them as solutions to the complex challenges facing communities worldwide.

We are formally affiliated with the Johnson Shoyama Graduate School of Public Policy at the University of Saskatchewan and the University of Regina. The connection strengthens the capacity of everyone involved to develop research and new course offerings dedicated to solving social and economic problems. Our most recent collaborative work has resulted in a new Graduate Certificate in the Social Economy, Co-operatives, and the Non-profit Sector.

Our Funders

The CCSC and the University of Saskatchewan acknowledge with gratitude the support and commitment of the Centre's funders.

These organizations provide the CCSC with resources and leadership, helping us to develop the knowledge needed to construct co-operative solutions to the increasingly complex challenges facing global communities.

Our co-op and credit union sector partners have contributed nearly $12 million to co-operative teaching, research, and outreach since the CCSC opened its doors in 1984.