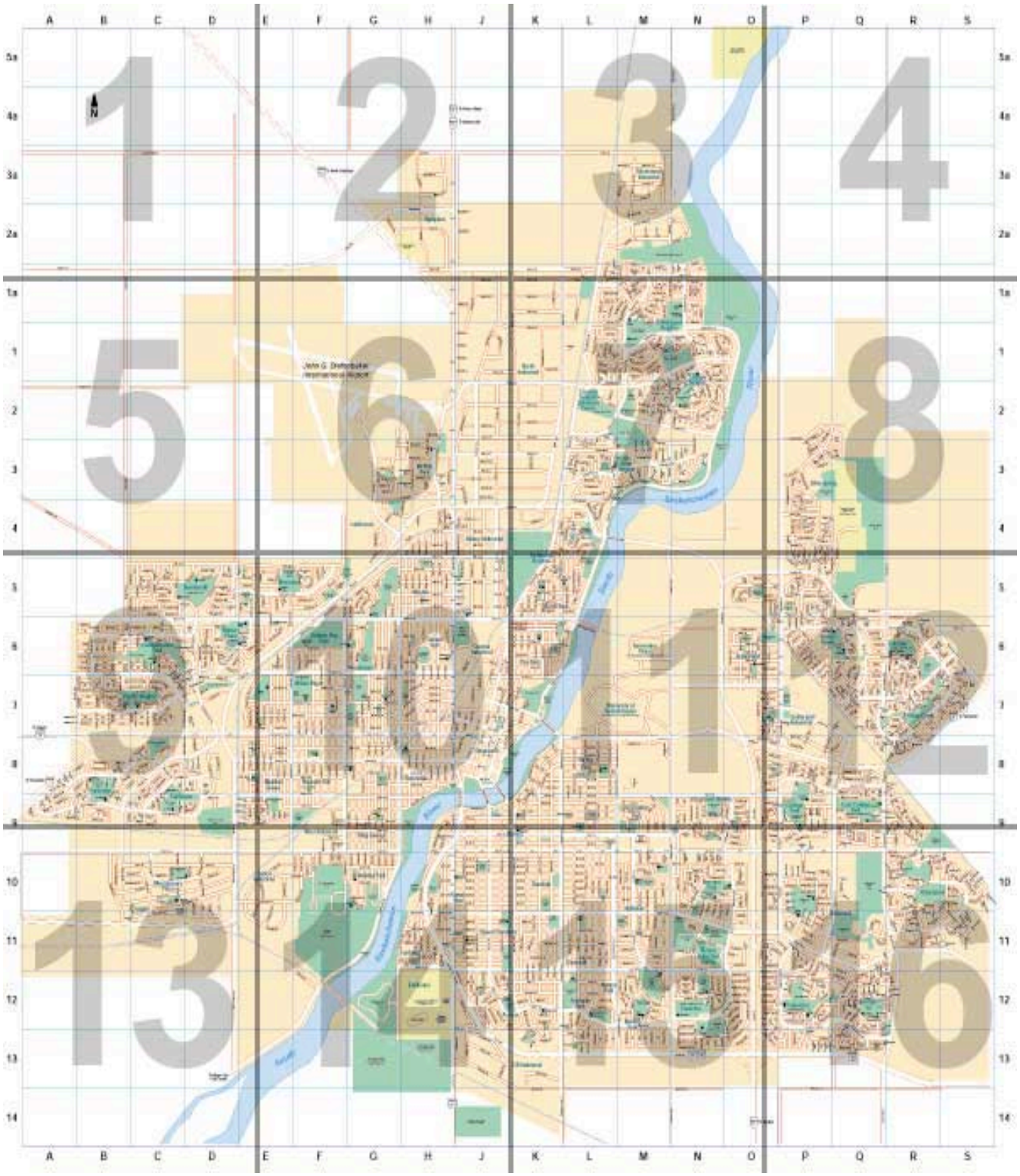
Standing on the Shoulders of Giants:

A Summary of Needs Assessment Research with Recommendations for the SWITCH clinic

October 15, 2005

Table of Contents

Saskatoon City Map



Neighbourhood Index

Adelaide Park	15	King George	14
Agriplace	2	Massey Place	9
Arbor Creek	12	Mayfair	10
Avalon	14	McNab Park	6
Avalon	15	Meadow Green	10
Brevoort Park	15	Montgomery Place	13
Briarwood	16	Mount Royal	10
Buena Vista	14	North Industrial	7
Caswell Hill	10	North Park	11
Central Industrial	10	Nutana	11
Churchill	15	Nutana	15
City Park	11	Nutana Park	15
CN Industrial	15	Nutana Suburban Center	15
College Park	12	Pacific Heights	9
Confederation Park	9	Parkridge	9
Downtown	10	Pleasant Hill	10
Dundonald	9	Queen Elizabeth	14
East College Park	12	Richmond Heights	7
Easview	15	Richmond Heights	11
Erindale	12	River Heights	7
Exhibition	14	Riversdale	10
Fairhaven	9	Sedco Industrial	14
Forest Grove	12	Silverspring	8
Furdale	14	Silverwood Heights	7
Greystone Heights	11	Silverwood Industrial	3
Grosvenor Park	11	Sutherland Industrial	12
Haultain	15	University of	11
Holiday Park	14	Saskatchewan	11
Holliston	15	Varsity View	10
Hudson Bay Park	10	West Industrial	14
Innovation Place	11	West Industrial	10
John G. Diefenbaker	6	Westmount	10
Airport	6	Westview	16
Kelsey Industrial	10	Wildwood	
King George	16		
Lakeridge	16		
Lakeview	6		
Larkhaven	7		
Lawson Heights	7		
Lawson Heights Suburban Center			

Executive Summary

The Student Wellness Initiative Toward Community Health (SWITCH) is a interprofessional, student-driven approach to delivering integrated health care services. As a group, the members of SWITCH believe that there is unmet need for health care services in Saskatoon's core neighborhoods and that we, as future health professionals, have a vital role to play in meeting this need. In October of 2004, third year medical students conducted research to better understand the strengths and needs of the residents in Saskatoon's core. This document will summarize the various papers prepared for SWITCH.

Saskatoon's core neighborhoods differ from the city as a whole in important ways. In the core:

- There is a higher proportion of Aboriginal peoples and new immigrants
- The population is on average significantly younger
- The crude birth rate and fertility rate are higher, and women are having babies at a younger age
- There is a higher incidence of low birth weight newborns
- Mortality rates are higher and life expectancy lower for both men and women
- Infant mortality rates are three times higher
- There is a higher proportion of single parent families
- Average family income levels are lower and unemployment rates are higher
- There is a higher rate of mobility of residents with a shorter period in one dwelling
- More residents rent and fewer own real estate, and fewer own a means of transportation

The core neighborhoods show similar patterns of illness compared to Saskatoon as a whole, but there are significant differences.

- Men have higher rates of mortality from cancer and CHD than men in Saskatoon
- Both men and women have roughly double the rate of mortality from injury than their counterparts in Saskatoon, with men between the ages of 20 and 44 being at particular risk
- The rate of suicide is higher in the core, and for men it is increasing
- COPD causes more hospitalizations in the core and more deaths amongst its women
- As in Saskatoon, diabetes mellitus is a significant illness in the core
- There is a higher rate of STI's in the core

Despite the challenges to health that members of the core neighborhoods face, these communities remain strong and vibrant. There are many effective, established community-based organizations delivering services to meet many of the existing health needs and to address the broader determinants of health. Members of the core neighborhoods are committed to its improvement.

The West Side Community Clinic currently offers a successful model of interprofessional care upon which SWITCH hopes to build. The Clinic has earned the respect of community members

through the dedication of staff members to holistic care and the fostering of cultural sensitivity. Members of SWITCH will work with the WSCC and other CBOs and will be able to contribute in significant ways to the health of the community.

I. Review of the Literature

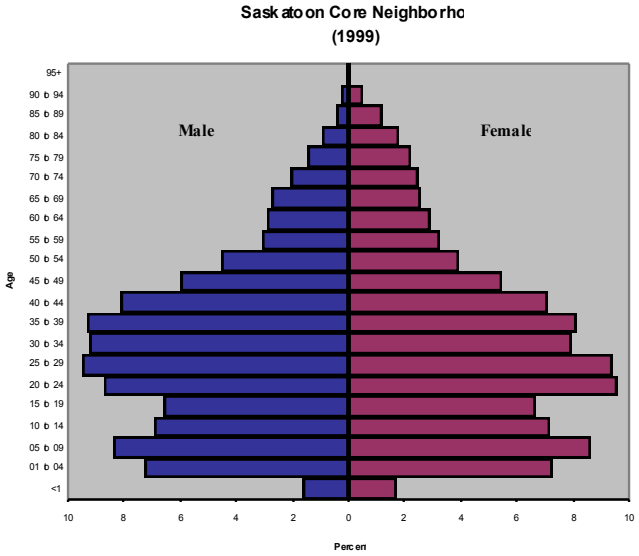
SWITCH is an organization committed to being guided by community priorities. In order to discover these priorities, a needs assessment was planned. However, consultation with Community-Based Organizations (CBOs) and residents in the core neighborhoods indicated that this population had been "surveyed to death." Therefore, it was proposed that it might be more useful for SWITCH members to complete a literature review which would summarize the numerous and varied assessments already in existence (a list of those reviewed may be found in Appendix B). In keeping with the principles of primary health care, the literature review, rather than focusing on physical health per se, focused on needs as they relate to the broad determinants of health. The information from this review was then supplemented with data from public records and focus groups. The advantage of this approach is that it minimized the likelihood of SWITCH members over-taxing the resources of CBOs and neighborhood residents, while simultaneously integrating previously-gathered information from numerous different sources. Ultimately, it was hoped that this information could be used to inform early decisions regarding programming offered at the SWITCH clinic and to help determine which topics would need to be covered in orientation materials for incoming volunteers.

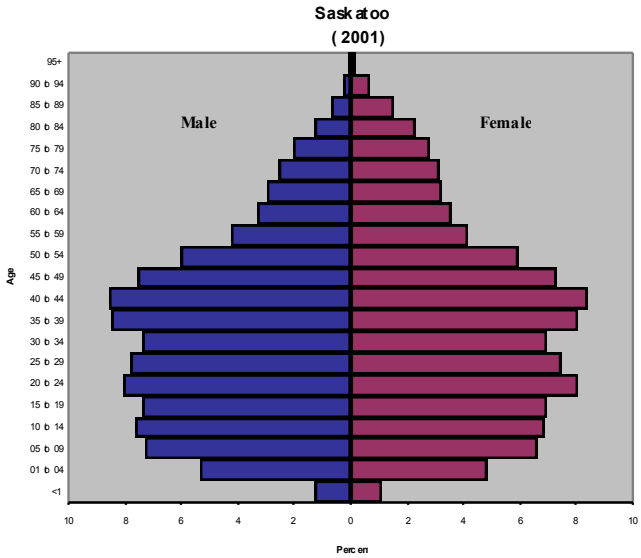
Accordingly, in October, 2004, the 3rd year medical students completed class projects which form the basis of the following report (Appendix A). The resulting papers, which contain considerably more detail than this summary, are available upon request. It is hoped that this document, by drawing on the excellent work of previous researchers, will provide a clearer and more accurate picture of the unique challenges and strengths of the core communities than it has been possible to ascertain to date.

II. Demographics/Descriptive Statistics

a. Population Composition

The neighborhoods of Caswell Hill, King George, Pleasant Hill, Riversdale, Westmount, Holiday Park and Meadow Green are collectively known as the "core neighborhoods." While these neighborhoods do not constitute a homogenous group, they nevertheless share some common attributes. In 2001, the total population of the core neighborhoods was 22, 663 persons, 11% of Saskatoon's total population. Women composed 48% of this population, men 52%. This is somewhat unusual, as men typically experience higher mortality at all ages. The core neighborhoods, on average, also had a higher percentage of Aboriginal persons, and new immigrants.





The population pyramid for the core neighborhoods looks strikingly different than that for the rest of Saskatoon. The city as a whole is fairly representative of a population demonstrating slow growth, with the largest proportion of individuals in Saskatoon falling in the 35-45 age group as a result of the "baby boom." In contrast to this, the core neighborhoods show a much higher proportion of the population in the younger age groups. For example, only 9% of the population in the core neighborhoods is over 65, while for males the highest proportion is in the 30-39 age group and for females the highest proportion is in the 20-29 age groups. While there are many possible explanations for this, it does suggest that SWITCH needs to be especially cognizant of the needs of youth and young adults.

b. Birth Rates and Fertility

Crude birth rate is an excellent measure of the expected growth of a population. In 2001, the core neighborhoods had 406 births. The crude birth rate per 1000 people was 17.9 (Saskatchewan Health Vital Statistics Database). Saskatoon had 3385 births in 2001 with a crude birth rate of 16.1. Clearly, the population of the core neighborhoods shows increased growth.

The general fertility rate of the core neighborhoods is higher than that for Saskatoon taken as a whole. These values are, for the year 2001, 67 per 1000 women for the core, and 45 per 1000 for the whole of Saskatoon (Saskatchewan Health Vital Statistics Database). This suggests that women living in the core neighborhoods are more likely to have babies. However, it is important to note that the general fertility rate has been falling in both the core neighborhoods and Saskatoon as a whole.

Age-specific fertility trends show an interesting pattern. Specifically, the core neighborhoods show increased fertility rates at a younger age. Using 2001 data (Saskatchewan Health Vital Statistics Database), the age-specific rate for the core was 134.2 per 1000 for women aged 20 to

24, 72.8 per 1000 for the remainder of the city. Women in the 20-24 age group had the highest age-specific fertility rate of any of the age groups analyzed for the core. The rate then decreases for the core as age increases. Saskatoon shows its highest age-specific fertility rate at a higher age, 24-29 years (108 per 1000). What this indicates is that women in the City of Saskatoon are having children at a later age than are the women who live in the core neighborhoods. In addition, the core neighborhoods show a peak in age-specific fertility at 15 to 19 years of age, at 95.9 per 1000 births when compared to a value of 30.6 per 1000 for the City of Saskatoon. This indicates a much higher teen pregnancy and birth rate for the core neighborhoods.

Another important vital statistic to be discussed is one of birth weight. Birth weight can be used as a measure of the population's health, as healthier mothers tend to give birth to heavier and healthier babies. Low birth weight is considered less than 2.5 kg, and high birth weight 4 kg or greater, with the normal value falling between these two values. As one might predict, the core neighborhoods show a higher proportion of low birth weight babies than the remainder of Saskatoon. One major determinant of birthrate is access to adequate nutrition.

Taken together, these statistics suggest that the core neighborhoods are increasing in population and that current services, many already over-stretched, need to be expanded. Furthermore, the high rates of teen pregnancy suggest that there may be a particular need for programming to educate adolescents about safe sexual practices and resources to assist young parents.

c. Migration

Migration examines the movement of people into or out of a specific geographic area. It is affected by a number of factors, including socio-economic status. For example, renters tend to move more often than homeowners since they are subject to rising costs of rent (however, they tend to move locally). Frequent moves can have implications for health in a variety of ways; for example, continuity of health care is made difficult, children may not have regular access to schooling or may fail to form student-teacher relationships, etc.

Core neighborhoods have higher rates of mobility (i.e., transience) than the city as a whole, with Pleasant Hill showing the highest rate of mobility. In 2001, 43.9% of the residents in this neighborhood had lived at their current address for less than 1 year and 74.2% for less than 5 years. This is dramatically different to the city's values as a whole (19.7% and 49.4%, respectively). It is also important to note that the city's rate of mobility has decreased over the last 3 census periods, but has increased in most of the core neighborhoods (Pleasant Hill, Holiday Park, Meadow Green, and Riversdale).

Once the mobility patterns and the age and sex distribution patterns of the city and core neighborhoods are taken into account, a clearer picture begins to form. The high rate of mobility and higher number of men relative to women suggests an in-migration pattern into the core neighborhoods. This pattern, which is first marked by an influx of men into the city core for employment reasons, is typical of a migratory population. Women then follow men into the city core once they have become established and are able to support their families. This trend has important implications fore many social institutions. For example, schools must deal with an influx of new students every year and are also affected by those students that leave. Hospitals

and family doctors are less able to forge long term relationships with their patients resulting in a poorer quality of health care. The in-migratory trend into the core neighborhoods may result in a housing crisis as more people have to be accommodated in a given amount of space, which may increase the incidence of communicable diseases.

d. Mortality Rates

The national (1997) mortality rate was 661 deaths per 10,000 (Statistics Canada). In Saskatoon, as a whole, the mortality rate was 664 deaths per 100 000 for women and 713 per 100 000 for men. In the core neighborhoods, the rate was 678 deaths per 100 000 for women and 868 deaths per 100 000 for men. Overall, men and women in the core neighborhoods have a lower life expectancy than residents of Saskatoon in general. A striking peak in mortality occurred in males of the core neighborhoods between the ages of 20-44, with a mortality rate of over 4500 deaths per 100 000. This indicates that young men may be particularly at risk.

However, a second group that is clearly at risk is infants. The Infant Mortality Rate (IMR) of the core neighborhoods is increasing over time, and consistently averages higher than the IMR for Saskatoon as a whole; the IMR of the Core neighborhoods was 17.2 in 2001 compared to Saskatoon's IMR of 5.9. This represents nearly a three-fold difference in IMR between the two areas.

The increasing IMR trend may be the result of numerous factors. The number of teenage pregnancies in the core is rising, leading to issues surrounding proper infant care. Factors in the core that may limit the ability of the parent(s) to obtain adequate health care include: a lack of financial means (e.g. to purchase of antibiotics for infection; nutritious food) and transportation (e.g. to clinic or hospital), communication difficulties (with health care facilities; health care providers), educational deficits (regarding the health care of neonates), cultural insensitivity in the delivery of health services, and the general lack of availability of health services.

III. Social Determinants of Health: Main Issues and Challenges facing the Core Communities

a. Family Structure

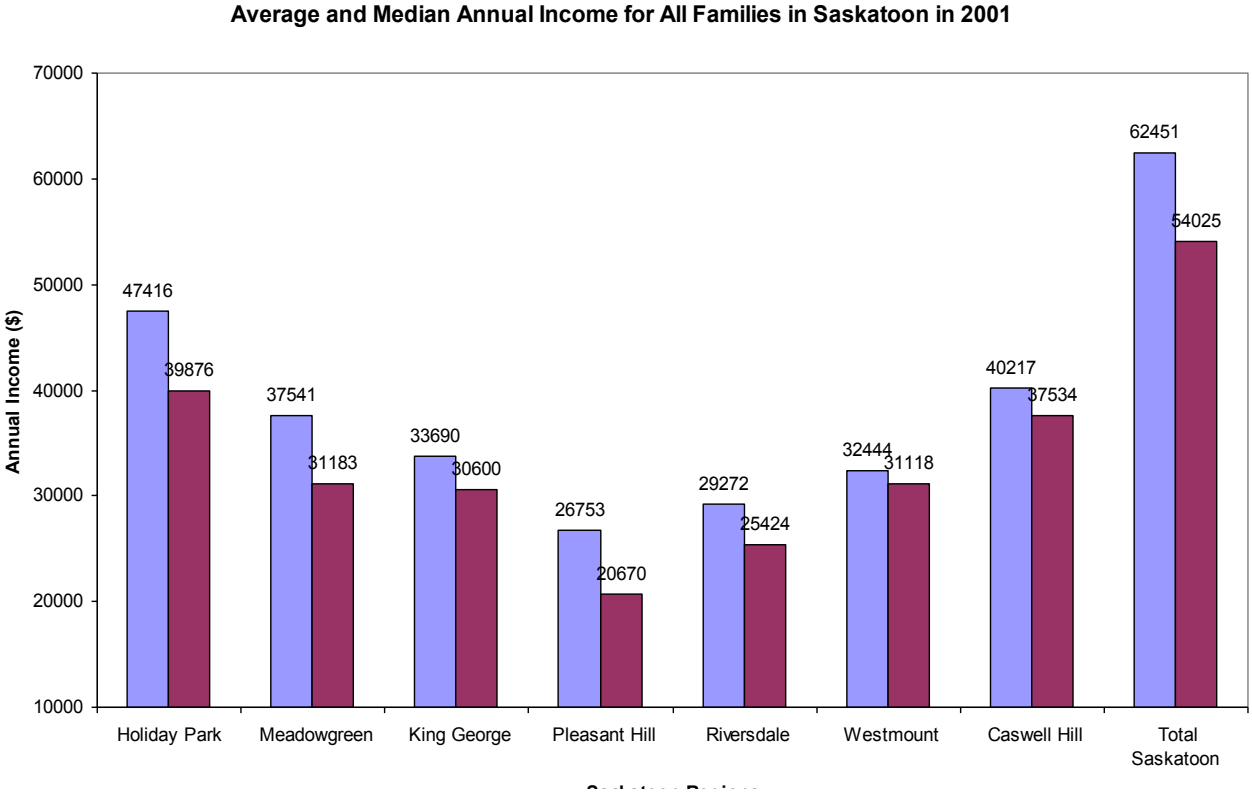
The core neighborhoods have a higher percentage of single-parent families than the remainder of Saskatoon, notably Pleasant Hill, which has the highest level of single-parent families (44%).

The trend towards single-parent families has been increasing in Saskatoon and the core neighborhoods; however, the average rate of increase in the core neighborhoods is approximately 3 times that of Saskatoon as a whole. When it comes to lone-parenting, much is known about the disadvantages those families face with regard to single income and time management issues, but more needs to be done in providing services tailored to their specific needs. In particular, it is clear that single-mother families account for the majority (89%) of single-parent families in the core neighborhoods; therefore, the needs of single mothers are especially important to attend to.

b. Income

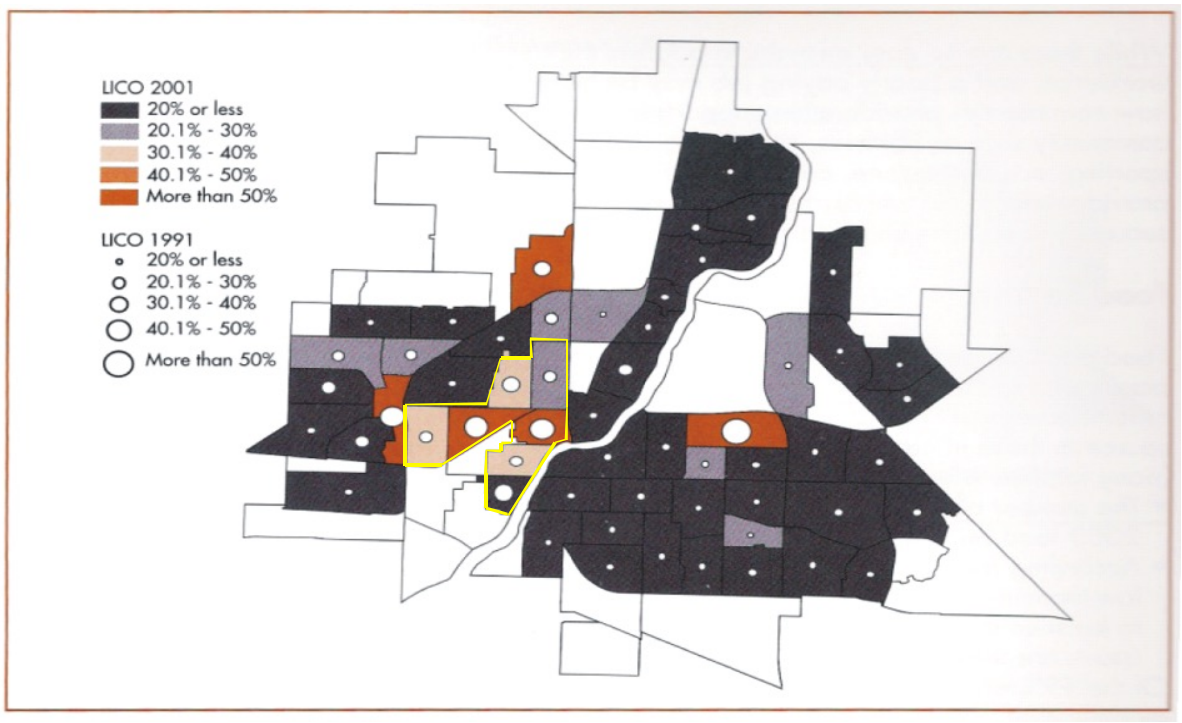
According to Saskatchewan Health (2003) the most important determinants of health are income and social status. Higher social and economic status is associated with better health. This can be substantiated through data from the Second Report on the Health of Canadians (1999). In this report Health Canada found that "Only 47% of Canadians in the lowest income bracket rate their health as very good or excellent, compared with 73% of Canadians in the highest income group" (Towards a Healthy future: Second Report on the Health of Canadians; Highlights: Income, Income Distribution and Health, 1999). Low-income Canadians are more likely to die earlier and to suffer more illness than Canadians with higher incomes, regardless of age, sex, race and place of residence.

The effects of poverty on health status can hardly be overstated. It is known to be associated with inadequate nutrition, a lack of education, inadequate housing, transportation challenges and substance abuse and other addictions. Average family income has increased throughout Saskatoon in recent years. Most of the core neighborhoods have also experienced an increase. However, Holiday Park is the only neighborhood that has had a *significant* increase from 1996 to 2001. King George has experienced a slight decrease in income from 1991 to 2001, while in Westmount there has been no significant change.



Poverty rates among residents of Pleasant Hill have increased by 15% between 1991 and 2001. Pleasant Hill has the lowest average and median annual income, whereas Holiday Park has the highest average and median annual income of the core neighborhoods. All regions, however, are considerably lower than Saskatoon as a whole. Meadowgreen, King George, and Westmount have similar median annual incomes, but Meadowgreen has a slightly higher average annual income.

Some information specific to different neighborhoods was available. For example, in Pleasant Hill, over 50% of families were classified as low income. The average family income of Pleasant Hill in 1996 was $21 928 compared to the Saskatoon average of $48 927. Unemployment among residents of Pleasant Hill was high, with only 46% of working age adults employed. Lower than average vehicle registration per person suggests that citizens in this area need alternative methods of transportation in order to access essential services within and outside the community. This community also has the highest percentage of Aboriginal people living in it (2001).



Single parent families in the seven core neighborhoods struggle with lower incomes than the average single parent family in Saskatoon. Even though there were no male lone-parent families in Holiday Park and Meadowgreen in 2001, the other neighborhoods' male lone parent incomes are well below the average in Saskatoon for single male parent families. Average male lone-parent incomes were especially low in Westmount. In 2001, the average female lone parent income in the city was a little over half the average male lone parent income. In addition, for the city as a whole, female lone parents' income has been approximately 3/5 of male lone parents' income over the past 3 Census periods (1991-2001; Health Status Report, 2004). Clearly, single mothers are an important target population for health intervention.

Unemployment rates in most of the core neighborhoods are well above that of Saskatoon as a whole. All neighborhoods have a higher rate of youth unemployment compared to Saskatoon's rate of 13% with the exception of Holiday Park. Underemployment is also a concern for this population.

c. Housing

Housing within the core neighborhoods is often a major concern to citizens. Many of the homes in the area are older, property maintenance is low, and deterioration is obvious. A significant part of the problem is the fact that resident ownership of homes is extremely low in many parts of the core, which has a large proportion of rental properties. Increasing the amount of owner occupancy is a priority of the community and also a way to address the issue of property maintenance as ownership increases the accountability of residents to the neighborhood, helping to facilitate stronger neighborhoods and bring residences up to acceptable standards. Home ownership strengthens community spirit, brings people together in work and play, helps implement community safe walk/block parent programs, and reduces crime and vandalism within the area. Ownership also aids in decreasing the number of vacant lots and abandoned properties within a neighborhood. By owning rather than renting property, the overall cost of living is reduced over the long term, an important factor to consider in a neighborhood with high poverty rates.

d. Transportation

Transportation issues are major concerns to residents of the core neighborhoods. As mentioned above, these communities have lower than average vehicle registration per person, suggesting citizens in this area depend on alternative methods of transportation in order to access essential services.

e. Crime

Areas with higher rates of crime restrict lifestyle activities and create a sense of vulnerability in all individuals living within these communities. Furthermore, higher rates of crime lead to an increase in population mobility as individuals attempt to move to safer areas which, in turn, disrupts the continuity of schooling and other services. In 2002, Saskatoon had the "highest violent crime rate of all 5 prairie urban prairie centers and ranked second highest for all crime incidents at 14 095 per 100 000 residents" (SHR, Saskatoon Police Services, 2004, p.26). While there was no census data regarding crime per neighborhood in Saskatoon, as a proxy, the number of pawnbrokers in the city as a whole versus the core area was calculated. It was found that 80% of pawnbrokers are located within the core neighborhood areas.

Some insight may be gained from the age-specific rates of violent crimes. There has been an astounding 71% increase in violent crimes in the 15-19 year old age group since 1995 (Saskatoon Health Region, Saskatoon Police Services, 2004). Other census data gathered identifies a larger proportion of this age group as well as a higher youth unemployment rate in core neighborhood areas compared to other areas in Saskatoon.

f. Discrimination/ Cultural Barriers

Given the cultural heterogeneity of the core, it is important to acknowledge the possibility that many of the residents may have experienced discrimination. As much of the Westside Community Clinic's patient population is of Aboriginal ancestry, it will be important to effectively orient SWITCH volunteers as the realities of discrimination in our society and to foster cultural sensitivity.

g. Education

From 1991 to 2001, there was an emerging trend of higher education attainment. There is a general trend with a higher percentage of the population in all communities attending post secondary education. In all 3 of the last census periods, Saskatoon has a higher percentage of the population attending post secondary education as compared to downtown core neighborhoods. In 2001, a larger percentage of college and university students in Saskatoon finished with a certificate or degree as compared to the core communities. A general deficit in education may accompany a deficit in understanding health issues, for example; a lack of understanding on issues of sexual assault and addictions, both within the community and among health care professionals, a deficit in parenting skills and a deficit in coping skills.

h. Community Strengths

To be a constructive contributor within the community, SWITCH must focus on and integrate the community's strengths in delivering services. It will be essential to tap into the wealth of knowledge and experience possessed by the many effective community leaders. By working with residents and established CBOs, SWITCH can help to address the challenges faced by community members. The recurrent theme that emerged throughout our research was that residents are strong, resilient, adaptable, and eager to pursue opportunities that better their lives. This eagerness is particularly prevalent in the youth. Residents of the community want to be directly involved in meeting the needs of their neighborhoods.

IV. Medical Issues in the Core

After age-standardization, the primary causes for admittance to hospitals and mortality in Saskatoon and the core neighbourhood for the years 1997-2001 included coronary heart disease (CHD), stroke, cancers, COPD, diabetes, injuries and suicide.

a. Cancer

Cancer (all types) was the most significant contributor to mortality rates in the core and in Saskatoon as a whole. Males in the core had a mortality rate from cancer of 194.1 per 100 000, compared to that of 180.9 for men in the rest of Saskatoon. Females in the core neighborhood had a lower mortality rate due to lung cancer than females in Saskatoon. In 2001, cancer caused 28 deaths in the Core neighborhood (18% of all deaths). Lung cancer was the most deadly type of cancer for both sexes, causing 5 deaths in 2001 (3% of all deaths).

b. Coronary heart disease (CHD)

Apart from cancer, CHD was the most significant contributor to mortality rates for males in both the core and Saskatoon in 2001. There was a significant geographic difference for mortality due to CHD, with men in the core experiencing a rate of 189.8 per 100 000 compared to a rate of 142.3 for men in the rest of Saskatoon. Females in the core fared slightly better than those in Saskatoon, having a rate of 103.9 deaths per 100,000 due to CHD compared to a rate of 107.7 for women in the city at large. Stroke was a significant cause of mortality in both Saskatoon and the core, but the rates between the two were not markedly different.

c. Injury

When it comes to mortality rates for due to injury, there is a stark difference between the core and greater Saskatoon. In 2001, the rate of mortality due to injury in males in the core neighborhoods was more than double the value for Saskatoon (115.8 per 100 000 versus 54.7). There is a similar gap between women in the core (44.2 per 100 000) and in Saskatoon (22.3). The gender difference between injury mortality rates for men and women is obvious. While males in the core neighborhood experienced the highest rates of mortality due to injury throughout all age groups, the rate in ages 20 to 44 was strikingly elevated, with almost 8000 deaths per 100 000.

In the core, the two most significant causes of deaths due to injury were accidental poisonings and transport accidents, causing 32% and 12% respectively. In Saskatoon, the situation was reversed; transport accidents caused the largest proportion of deaths (36%) with accidental poisonings responsible for 12% of deaths. In the core, assault caused 12% of deaths, but only 4% in Saskatoon as a whole.

d. Suicide

In 2001, the mortality rate from suicide was higher for males than females, and higher in the core neighborhoods than in Saskatoon as a whole. The mortality rate in the core was 42.1 per 100 000, more than double that for greater Saskatoon (16.6). In terms of hospital separations for 2001, the 20-44 age group was most at risk for suicidal attempts followed by those between the ages of 10-19 years. Moreover, the mortality rates due to suicide in males in the core neighborhood have been slowly increasing since 1999, while the opposite occurred in males in Saskatoon since 1999.

e. COPD

The hospital separation data suggests that rates of this disease in the core neighborhoods are higher than the remainder of the City of Saskatoon. In 2001, men in the core had a hospital separation rate per 100 000 of 244 versus men in Saskatoon with a rate of 58; women in the core had a rate of 296 compared to a rate of 128 for women in Saskatoon. This is especially interesting given that COPD and lung cancer tend to be diseases of an aging population. However, there is a higher prevalence of smoking in lower socioeconomic levels and in those

with less formal education. In females, COPD caused almost double the mortality rate in the core neighborhood compared to Saskatoon; however, in males, the mortality rates due to COPD were approximately equal.

f. Maternal and Child Health

As noted earlier, there is a 20% higher rate of fertility in the 15-35 age group for women in the core neighborhoods when compared women in Saskatoon as a whole. The lower average birth-weight in the core neighborhood suggests that socio-economic and educational disparity places young mothers and infants at risk. Babies with low birth-weights (<2500gm) are at a greater risk of death, disease and disability. On the other hand, the prevalence of higher birth-weights shows that there is a trend in Saskatoon of bigger babies, possibly due to an increasing incidence of gestational diabetes.

g. Diabetes

The data describing mortality due to diabetes is difficult to interpret. Those with diabetes often die of complications associated with the disease, such as heart attack, stroke and renal failure. Diabetes clearly is a significant issue in the core.

h. Substance Abuse

Substance abuse and addiction represent a significant problem both within the core neighborhoods and in Saskatoon as a city. A review of Saskatoon's Westside Community Clinic 2003-2004 records revealed that 1.9% of all visits (367 out of 19 044) were related to chemical dependency. This does not include visits for assistance with alcohol dependency or mental health services, which comprised an estimated 36% of all visits.

i. Sexually Transmitted Infections

While Hepatitis C can be transmitted sexually, it is more often associated with the use of injection drugs. In every age group, the incidence of Hepatitis C is dramatically higher in the core neighborhoods than in Saskatoon as a whole. This finding is most dramatic within the 40 to 59 year age group.

The incidence of Chlamydia in the Core as compared to the rest of Saskatoon is higher in every age group. For 15-19 year olds, the incidence of Chlamydia is more than twice as high in the core. The highest incidence occurs in the age 20 to 24 year olds.

With the prevalence of STIs in the community, and the rate of teen pregnancy, suggests that sex education for adolescents will be an important aspect of SWITCH's intervention. It will also be important to consider the health needs of sex trade workers in the area and maintain a partnership with CBOs involved in advocacy for this vulnerable group.

j. Mental Health

Data gathered by the Health Service Utilization Group have shown that the most common problem presented by patients to physicians and other health care service providers over the past two years has been related to some aspect of mental health. Specifically, the most common reason for visiting the WSCC was to receive care for psychiatric and psychological disorders.

This broad area, which includes mood disorders, psychoses, and addictions, accounted for an estimated 36% of the health care problems within the core neighborhoods. The statistics gathered from the WSCC in Saskatoon showed that in 2002-2003 depression was diagnosed 84 times. This figure was doubled to 164 diagnosed cases of depression in 2003-2004. This may be significant as untreated depression is the number one cause of suicide. According to a report by the Royal Commission on Aboriginal Peoples, the suicide rate among Aboriginals of all age groups is three times higher than that of non-Aboriginal people. High suicide rates tend to be associated with various community characteristics, including a high number of occupants per household, more single-parent families, fewer elders, lower average income and lower average education.

k. Low Immunization Rates

For the core neighborhoods, the rate of immunization for measles/mumps/rubella (MMR) was only 45%, while the City of Saskatoon as a whole had an average of 70% (1998-2002). Despite the fact that these immunizations remain free to children, there continues to be under-utilization of this health care service. To achieve an effective level of vaccination and meet the standards of Public Health, there must be a concerted effort to address the barriers to immunization and to health care services as a whole.

Table 1 : Summary of Mortality Rates (Average Age-Standardized Mortality Rates (per 100 000) in 2000-2001)

Cause of Death	Males Core	Males Saskatoon	Females Core	Females Saskatoon
Coronary Heart Disease	***189.8***	***142.3***	***103.9***	***107.7***
Stroke	***46.7***	***45.8***	***63.1***	***68.8***
All Cancer	194.1	180.9	148.6	173.3
Lung Cancer	***51.8***	***42.1***	20.8	***28***
Colorectal Cancer	39.7	18.3	21.7	20
Prostate Cancer/Breast Cancer	21.4	***33.7***	21.9	27.3
Chronic Obstructive Airways Disease	26.3	25.9	***43***	21.8
Diabetes	4.1	29.7	***27.1***	***29.4***
Mental Disorders	10.1	24.6	4.5	***33.8***
Injury	***115.8***	***54.7***	***44.2***	22.3
Suicide	***42.1***	16.6	4.5	2.7
All Cause	860.2	702.6	697.1	685.7

Source data: Saskatchewan Health Vital Statistics and Covered Population

V. Services in the Core

One of the most important principles of primary care is accessibility. Accessibility refers to the ease with which people can access services. The factors that determine the accessibility of a service include:

- extended hours of operation
- assistance with transportation
- non-judgmental atmosphere
- safe environment
- free of charge
- childcare provided
- effective referrals
- drop-in access available
- convenient location

A number of barriers to access were identified in the core neighbourhoods. First, the lack of stable funding has rendered some programs transient and unreliable. Without sufficient financial and human resources, patient care is undermined by lengthy waiting times and poorly aligned services. A lack of resources can also make coordination of and collaboration between service providers more difficult. Second, the mobility of the core's population makes it difficult to establish continuity of care and build trusting, respectful relationships. Third, SWITCH has been advised to integrate child care provision and transportation assistance into its delivery of care, as these are important barriers to access. Finally, it will be crucial to listen carefully to community members and patients and make the service offered relevant to their needs. Available services are often underutilized if they are not delivered in a way that is sensitive to the particular experiences and cultural context of the patient.

One of the most important barriers to access is the availability of services outside of regular business hours. With psychological disorders and traumatic injuries comprising the majority of physician visits, it is reasonable to conclude that the community's needs could be better met by offering health care on nights and weekends.

2. The Westside Community Clinic Experience

The Westside Community Clinic (WSCC) is an integral part of the health care services provided within the city's core neighborhoods. The mission of the clinic closely reflects the ideals of the SWITCH project. The community clinic provides an interprofessional approach designed to best meet the needs of the core population. It employs physicians, an Aboriginal health worker, a community outreach nurse, a nurse practitioner, registered nurses, and a counselor. Access to these health care providers is available to all members of the clinic.

The vast majority of patient contacts were for general nursing (this reflects the structure of the WSCC since the RN assesses, screens, counsels, educates, and refers clients to the appropriate agencies or healthcare practitioners). While doing general nursing, the RN spends a significant proportion of his or her time either counseling patients or assisting a physician.

The nurse practitioner's (NP) role includes diagnosis and management of common health problems, taking patient histories, physical examinations, ordering pertinent investigations, and treatment of common health problems. The NP had a total of 1573 visits from 473 patients in 2003-04.

The aboriginal health worker acts as a liaison between health care workers at WSCC and individual aboriginal organizations and agencies. The aboriginal health worker had 2367 visits in 2003-04. This included over 500 home visits and 269 phone contacts.

3. WSCC Utilization Data

The most common reason for visiting the WSCC was to receive care for **psychiatric and psychological disorders**. **Infections** made the second most common reason for seeking physician care **followed by maternal care**. The total number of patients seen who suffer from these problems increased from 2002/03 to 2003/04 in each of the main categories. For example, drug abuse rose from 78 instances in 2002/2003 to 367 in 2003/2004. That constitutes a 471% increase. Other conditions that are commonly seen include **upper respiratory tract infections, prenatal care, and diabetes mellitus.**

Table 2. **WSCC Utilization by Diagnosis for the 2002/2003 and 2003/2004 Fiscal Years.**

WSCC Ultization by Diagnosis	2002-2003	2003-2004
UPPER RESPIRATORY INFECTION	285	308
PRENATAL CARE	270	343
COUNSELLING	269	449
COMPLETE PHYSICAL	183	244
OTITIS MEDIA	133	86
DIABETES MELLITUS, UNCOMPLICATED	119	145
BACK PAIN,BACK DISORDER	113	136
ANXIETY STATE	107	290
WELL BABY CARE	103	85
SASKATCHEWAN SOCIAL SERVICES REQUEST	95	113
ATTENTION DEFICIT DISORDER	89	103
DEPRESSION	84	162
DRUG ABUSE	78	367
CELLULITIS/ABSCESS, UNSPECIFIED SITE	76	102
BRONCHITIS	71	65
VAGINITIS/VULVOVAGINITIS	64	98
PAIN IN JOINT	62	52
CONTRACEPTIVE MANAGEMENT, COUNSELING	61	61
PRE-OPERATIVE ASSESSMENT	54	53
DERMATITIS/ECZEMA	52	60
ARTHRITIS	51	56

Source: Westside Community Clinic Fiscal Statistical Data

VI. The Role of SWITCH

A number of concrete recommendations for SWITCH can be derived from the research completed.

First and foremost, the extent and complexity of unmet health needs in the core suggest that an interprofessional approach would be most successful. The focus must not be placed solely on the medical illness, but also on the person's mental health, social situation, strengths, and experiences. SWITCH must focus on health promotion and work to empower community members to make good decisions about their own healthcare. SWITCH members will need to work hard to create a safe environment for community members, particularly women and children, in which a trusting relationship can be built.

An integral component of building this safe, inviting environment will be fostering cultural awareness and sensitivity. This is of particular concern for interacting with Aboriginal peoples. Knowing about, and where possible integrating, traditional forms of healing will help to build trust and facilitate effective, meaningful care. The inclusion of non-traditional health care workers (e.g., native health care worker, elders) will be extremely important in delivering holistic care. Further, it is hoped that some members of the community may be employed at the SWITCH clinic.

SWITCH members will need to be patient and understanding when interacting with community members. Some concerns were raised about the transient nature of the student body which would be operating the clinic and how this would affect the community. Clearly, SWITCH will need to take steps to insure that adequate continuity and follow-up is maintained. SWITCH may need to be creative in finding ways to address concerns about a fluctuating student population. As well, SWITCH will have to develop an effective system of evaluation to ensure a high standard of care is maintained.

Clearly SWITCH will need to address issues of accessibility. Part of the solution may involve the use of a dedicated clinic shuttle bus or the reimbursement of bus fares. In some cases, it may be appropriate to offer home visits or to provide some services by telephone. In addition to this, SWITCH will need to make concerted efforts to maintain adequate follow-up. By offering nutritious food and childcare services, however, SWITCH may be able to provide some incentive for individuals to access services at the clinic.

An essential part of SWITCH's mission will be to encourage health through educational programming. SWITCH must target key areas such as injury prevention, substance abuse/addiction, diabetes management, smoking cessation, sexual health, nutrition, neonatal care and psychiatric illness. Programs should focus on groups which are at particular risk (e.g., youth, single mothers, the elderly).

It is essential that SWITCH avoid duplicating services already in place in the core neighborhoods. SWITCH must find its place within the network of established, successful CBOs. SWITCH can make significant contributions within the community, given the number of students involved and their enthusiasm. However, it will be crucial to proceed with humility and

listen carefully to both community members and volunteers of other CBOs whose experience will be invaluable.

In order to treat a patient holistically, it is essential to take into consideration the person's social context and account for the determinants of health in the broadest possible sense. Therefore, individuals at SWITCH should be able to provide information regarding complimentary services concerning housing, employment, addiction treatment, etc. Similarly, it is important that other organizations are aware of and consider SWITCH as a possible site for referral. Moreover, given the prevalence of poverty in the core and deleterious effects this has on health, SWITCH may wish to become involved in social policy advocacy.

Perhaps one of the most important recommendations for SWITCH is to recognize that an initiative of this magnitude requires taking small steps and setting realistic, attainable goals. It is unreasonable to expect that SWITCH will be able to provide every possible service from the day the clinic opens. It is important to choose services that are of a high priority and provide them effectively before expanding.

Appendix A – Papers prepared by Medical Students, Class of 2006

I. Demographics Summary

prepared by: Randy Walker, Vincent Wourms, Raj Baath, Tristan Hembroff and Alika Lafontaine

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II. Health Status Assessment - Health Indicators

prepared by: Sana Ahmed, Muna Chowdhury, Rebecca Mackay, Kit Mark, Anthea Peters

III. SWITCH Community Needs Assessment Survey

prepared by: Lara Blanco, Roger Bristol, Andrea Hull, Joel Puetz, Joanna Smith, Darcie Spearing, Jill Wooff

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prepared by: Amie Cubbon, Earl Kowalczyk, Trevor Loback, Joey Podavin, Kara Powell

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