

MHO Report: Diabetes in SHR (2010)

We are very pleased to present this Medical Health Officer report looking at diabetes in Saskatoon Health Region (SHR). The report aims to profile this important and growing health problem, identify what is currently being done in the Region, make suggestions based on published evidence and examples of good practice as to what could be done, and provide recommendations to improve upon this crisis in our community.

I would like to extend an open invitation for your feedback on this report, including what you think about the recommendations and how you or your organization may use the report in your own decision-making for program and service delivery. Challenges, along with good news stories are always welcome. Please refer to the contact information at the end of this summary.

Dr. Steve Whitehead,
Deputy Medical Health Officer

What did we learn about diabetes in Saskatoon Health Region?

- Diabetes has increased in recent years and is projected to keep increasing
- Diabetes affects an older population
- Diabetes hits men harder
- The Registered Indian Status (RIS) population bears a high diabetes burden
- Residents of low income neighbourhoods in Saskatoon bear a high diabetes burden
- Diabetes rates look similar in rural and urban residents
- Standards of care indicators show lower than ideal levels for the Region and Province

Did you know?

In 2006/07, more than 16,500 people had diabetes in SHR. That is more than enough to fill Saskatoon's Credit Union Centre.

What is Diabetes?

Diabetes is a chronic metabolic disorder characterized by persistently high levels of blood glucose affecting virtually every part of the body. Complications from diabetes can include cardiovascular disease (heart disease, strokes), high blood pressure, renal disease, retinopathy and amputations.

Standards of care indicators

The provincial Health Quality Council reports on a number of standards of diabetes care indicators such as the percentage of people with diabetes aged 20 years and older in Saskatchewan with:

- three or more A1C tests per year to ensure glycemic goals are being met or maintained
- microalbuminuria - a positive urine screening test is an indicator of early kidney damage
- LDL cholesterol (LDL-C) level greater than or equal to 2.5 mmol/L dispensed a lipid lowering drug; guidelines recommend the use of lipid lowering drugs
- a most recent A1C level less than or equal to 7.0% as the optimal target for glycemic control

In all indicators examined, SHR and provincial results *fall below* ideal standards and in some cases, they are far below. Inequities exist as those in the lowest income quintile performed worse in 3 indicators compared to those in the highest income quintile.

Did you know?

SHR has made health care equity audits a priority in its Strategic Planning 2011-2012. The goal is to finalize the framework and one of the pilot areas is Chronic Disease Management (diabetes).

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Diabetes complications

- In all the hospital complications examined, people with diabetes are hospitalized at higher rates.
- As is seen with incidence and prevalence where diabetes complications are more common in older populations, the highest diabetes complication rates for stroke and death by any cause occur in those aged 60 years and older.
- Men have consistently higher complication rates than women for all complications examined.
- People from Saskatoon's low income and middle income neighbourhoods had significantly higher rates than those from the city's affluent neighbourhoods for most complications.

Issue on the Horizon

In examining hospitalization for complications, those 60 years and older show the highest rates except for hypo- and hyper-glycemia, where 0 to 29 year olds had the highest complication rates.

Upon further examination it was found that 0-9 year olds had the highest rates of hypo- and hyper-glycemia at 740 per 10,000 followed by the 10 to 19 year olds at 518 per 10,000 and then 20 to 29 year olds at 124 per 10,000. It is possible that these complications are related to Type 1 diabetes; however, further examination is required in the area, perhaps especially diabetes management for young people.

What are we doing in SHR?

- A Provincial Diabetes Plan was implemented in 2004 with long-term outcomes to be realized by 2012.
- The Saskatoon Regional Diabetes Reference Group continues to work towards activities laid out in *Saskatoon Health Region: Regional Diabetes Plan*.
- SHR surveyed diabetes stakeholders in 2010 and found that most respondents wanted more education, more linkages between services, especially by building on existing relationships and partnerships, and increased efforts to address rural service delivery.
- The majority of SHR programs, offered through LiveWell, Chronic Disease Management, are targeted to those who already have diabetes or are at risk of diabetes.
- Aim 4 Health is one of the program areas in Chronic Disease Management that focuses on high risk groups.
- Physical activity and healthy eating are prominent in many SHR program areas. Most program areas use education and exercise programming to affect physical activity and healthy eating, with the exception of programming in Health Promotion and Primary Health which focus on socio-environmental change. Activities are focused on whole populations and attempt to modify environments to bring about change through surveillance, research, community development, policy, population health interventions, education and evaluations.
- Though some programs are offered in rural SHR, it is likely that these programs are not evenly distributed across rural areas.
- Three recently released SHR Reports provide recommendations to reduce the rates of chronic disease, in some cases specifically diabetes.

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How does it all add up?

SHR Programs and Services

- 11** programs focused on primary prevention either through social determinants of health or individual strategies
- 5** screening services
- 13** programs focused on people with diabetes

Community Programs and Services

- 7** programs focused on primary prevention either through social determinants of health or individual strategies
- 6** screening services
- 5** programs focused on people with diabetes

A map of diabetes programs and services within Saskatoon and rural areas of SHR is included in the Report's Appendix. It was found that there are fewer SHR programs and services offered in rural areas at far less frequency compared to Saskatoon which may or may not have potential implications for service delivery.

Did you know?

The Canadian Diabetes Association (2008) proposes that good outcomes for people living with diabetes depend on: daily commitment to self-management; support by their proactive interdisciplinary team; and a system that links these two together (1).

(1) Canadian Diabetes Association. (2008). *Canadian Diabetes Association 2008 clinical practice guidelines for the prevention and management of diabetes in Canada*. Canadian Journal of Diabetes vol.32 (supplement 1)

Recommendations

The recommendations in this report are focused on reducing the incidence of diabetes in our community to improve overall health status.

Some of the recommendations are to:

- set measurable targets for lowering incidence, and hospitalization complication rates [especially for high risk groups]
- support the implementation of diabetes and chronic disease-related recommendations contained within three recently released SHR reports
- strengthen collaboration and capacity
- use a *Health Equity Lens*
- encourage and continue to support SHR initiatives and partnerships that affect the social determinants of health
- focus on physical activity and nutrition
- target diabetes screening to high risk populations
- enhance self-management for those with diabetes
- support and maintain chronic disease surveillance

Questions, Comments, Concerns?

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