WATERLOO-WELLINGTON DIABETES REGIONAL COORDINATION CENTRE

Stand ^{up} to Diabetes

Facilitating timely and Equitable Access to Diabetes Services

Gap Analysis Report to the MOHLTC Implementation Branch

January 2012

Debbie Hollahan Elena Oreschina





Host Organization for the WW RCC

Contents

Executive Summary	4
Key findings of geographic, socioeconomic and cultural barriers:	4
Key findings from inventories of service and stakeholder meetings	4
Expected outcomes of implemented strategies	5
Purpose of the Gap Analysis	ô
Objectives	ô
Methodology	5
Data Sources	3
Waterloo Wellington Data	3
Prevalence	3
Risk Factors	Э
Data: Population Aging and Growth	Э
Data: Ethnicity10	С
Data: Obesity1	1
Data: Physical Inactivity1	1
Data: Gestational Diabetes1	1
Data: Socioeconomic Status1	2
Data: Waterloo Wellington Current Delivery System1	3
Data: Human Resources Specific to Diabetes1	5
Data: Hospital and Emergency Room Data1	5
Data: Management of Diabetes1	5
Gap Analysis and Strategies Implemented1	6
Personal skills and self- management support1	6
IDENTIFIED GAPS:	7
Delivery System Design1	8
IDENTIFIED GAP:	9
IDENTIFIED GAP:	1
IDENTIFIED GAP:	3
IDENTIFIED GAP	4

IDENTIFIED GAP:	. 25
DENTIFIED GAP:	. 26
DENTIFIED GAP:	. 27
Provider Decision Support	. 28
DENTIFIED GAP:	. 29
DENTIFIED GAP	. 30
DENTIFIED GAP:	. 31
DENTIFIED GAP	. 32
DENTIFIED GAP:	. 33
DENTIFIED GAP	. 34
DENTIFIED GAP	. 35
Information System	. 37
IDENTIFIED GAP:	. 37
Healthy Public Policy, Supportive Environments, Community Action	. 38
DENTIFIED GAP	. 38
IDENTIFIED GAP	. 40

Executive Summary

To identify and address gaps and barriers to accessing diabetes services in the region of Waterloo Wellington, numerous strategies were implemented including environmental scans, stakeholder meetings, as well as inventories of services were developed and disseminated.

This brief summary highlights the regional geographical variances significant to diabetes care in Waterloo Wellington region.

Key findings of geographic, socioeconomic and cultural barriers:

- The highest prevalence rates (10.1%) are found in the Rural-South Grey and North Wellington subLHIN
- The WW LHIN covers approximately 4,800 square kilometers of land
- 90% of the WW LHIN's total geographic space is rural
- Immigrants represent 20.6% of the WW LHIN, which is slightly lower than the provincial average
- The South Asian community is the largest visible minority group, followed by the Chinese and Black communities
- 75% of visible minority population is located in the Waterloo area
- Mennonite & Francophone make up 3.4% and 1.3 % respectively
- 1% of the WW LHIN population who identifies with at least one Aboriginal group (North American Indian, Métis or Inuit)
- Population in 65+ age group is projected the growth faster than the provincial growth
- Over 9% of Waterloo-Wellington residents were in the low-income bracket before taxes, compared to almost 15% for Ontario
- The WW LHIN population is engaging in less healthy behaviour
- Higher proportion of obese and overweight people 53.3% compared to the provincial average of 49.2%
- Lower percentage of the population consuming fruits and vegetables
- Lower proportion of residents participating in physical activity
- The percentage of heavy drinkers in WW LHIN (23.5%) is slightly higher than the provincial (21.7%)

Key findings from inventories of service and stakeholder meetings

Need for:

- Common data collection
- Improved navigation of the system
- Role definition of programs
- Improved distribution of patient load

- Monitoring of wait times
- Increased awareness/marketing of diabetes education programs
- Community programs to expand services to include insulin starts for Type 2 diabetes, especially basal insulin
- Extended hours; after hours support/on-call support
- Focus on prevention in particular: Gestational Diabetes, Pre-diabetes, Outreach services
- Focus on continuity of care

Expected outcomes of implemented strategies

- People exhibiting healthy behaviours
- Improved self-management of diabetes
- Increased participation in diabetes education programs
- Streamlined system navigation
- Streamlined scheduling system in place for diabetes programming
- 80% of people with diabetes, aged 18 and over have all three diabetes tests (cholesterol, retinal eye exam and A1C)
- 80% of people with diabetes are at or below target for cholesterol and A1C
- 80% of people with diabetes have an annual eye exam
- Decreased visits to ER for diabetes related complications
- Shortened length of stay for inpatients
- All people with diabetes have access to a primary health care provider
- Knowledgeable health care providers
- Consistent messaging from health care providers
- Successful implementation of CDA clinical practice guidelines for diabetes
- Effective communication and collaboration between all diabetes programs
- Coordinated approach to chronic disease management

Purpose of the Gap Analysis

A *gap analysis* is an appraisal that compares an actual to its potential or desired performance. It is an assessment of what is currently happening and where it should go in the future to meet the "Gold Standard" or best practice.

This report provides a review of the current diabetes services in the Waterloo-Wellington region, identifies gaps between the care that is delivered to the population living with diabetes and optimal care, and describes strategies implemented to address these gaps.

Objectives

- 1. Determine the current state of diabetes resources and access to care in Waterloo Wellington region
- 2. Identify a need and priority for improvement of system, and
- 3. Identify and implement specific strategies that are needed to meet the health needs of people living with diabetes

Methodology

In order to assess and evaluate the current diabetes resources and identify gaps in services, an environmental scan using inventories of service, stakeholder meetings, and data collection were performed. Data collection for diabetes services was in itself a gap, as there was limited data available from programs. Hence the best approach was to develop inventories of service for a variety of services. An inventory distribution model was developed, along with specific questionnaires for each discipline/service. The layered distribution approach was applied, starting with diabetes education programs and services and then engaging the broader diabetes community.

The inventory of diabetes education programs and hospital services, primary care and specialty care diabetes resources took place between 2010-11 in the Waterloo Wellington region, with a varied response rate as in Table 1.

Distribution date:	Inventory of services:	Sent out	Completed	Response rate
Dec 2010	DEP/DES(s)	20	20	100%
Feb 2011	Optometrists	151	72	47.7%
	Ophthalmologists	17	3	17.6%
Feb 2011	Foot Care RNs	23	9	39.1%
	Chiropodists/Podiatrists	28	12	42.9%
Feb 2011	Primary Care Providers	548	113	20.6%
	Nurse Practitioners	93	28	30.1%
May 2011	Pharmacists	150	32	21.3%
Sep 2011	Dental Hygienists	284	23	8.1%
Oct 2011	Dentists	345	26	7.5%

Table 1: Inventory of Diabetes Services Conducted by the DRCC during 2010-11

Key findings from the inventories and stakeholder meetings are summarized in Appendix A and Appendix B and are included in the following analysis.

Working within the WW DRCC logic model and workplan¹, which is based on the Ontario Chronic Disease Prevention Management (CDPM) framework, attention was focused on the seven components of care from the perspective of the patient and the health care team and includes four components at the health care organization level: self-management support, delivery system design, provider decision support, and information systems and three components at the community and system level: healthy public policy, community action and supportive environment. The principles from Health Quality Ontario, and the Provincial RCC Strategic Framework of *"Safe, Integrated, Patient-Centred, Accessible, Equitable, Effective and Efficient"* were incorporated throughout the analysis and implementation of identified strategies.

As illustrated by the logic model, the RCC identified three priority areas to focus on:

- I. Quality Improvement
- II. Primary Care Engagement, and
- III. System Integration

¹ Waterloo Wellington Diabetes RCC Logic model and Workplan submitted to MOHLTC March 31, 2011

Data Sources

The gap analysis is based on results from the inventories of services including diabetes education programs, primary care providers, pharmacists, optometrists and ophthalmologists, foot care providers and dentists conducted between December 2010 and 2011.

Qualitative analysis includes numerous stakeholder meetings and focus group interviews with people living with diabetes. Data was also drawn from data compiled by the Institute for Clinical Evaluative Studies (ICES), BORN Ontario and administrative data retrieved from the Ontario Ministry of Health and Long Term Care, Provincial Health Planning Database. Other information sources included a detailed assessment of the community, its health and the most prevalent determinants of health that affect its residents.

Waterloo Wellington Data

The Waterloo Wellington region is home to approximately 740,000 residents and has been divided into five areas for planning purposes. The Waterloo Wellington LHIN covers approximately 4,800 square kilometres of land. Almost 90% of the WW LHIN's total geographic space is rural. For diabetes system planning, the region is divided in 3 areas, Centre/North Wellington, Guelph/East Wellington, and Kitchener/Waterloo/Cambridge.

Prevalence

As of July, 2011 approximately 46,333 individuals (7.9 %)² were living with diabetes in the Waterloo Wellington region. Although there was an increase in 2009, the trend has been relatively stable since April 2010. This region has the lowest prevalence rate compared to provincial of 9.4% (Figure 1).



FIG. 1 - Historical prevalence rates per 100 population, Dec 2009 & Jul 2011

² Data Source: *Key Performance Measures for the ODS.* MOHLTC, October 31, 2011 Population estimates LHIN, 2008. IntelliHealth Ontario, MOHLTC. Analysis is for population age 18+

Figure 2 shows a substantial variation in the rates of diabetes among the various sub-LHIN planning areas with the highest prevalence rates observed in the Rural-South Grey and North Wellington (10.1%) and the lowest rates in Rural Wellington which is 6.2%.



FIG. 2 - Prevalence rates per 100 population, by sub-LHIN area, Jul 2011

Risk Factors

A number of factors contribute to a person's risk of developing type 2 diabetes. These include older age, certain ethnic backgrounds, obesity (especially abdominal obesity), physical inactivity, history of gestational diabetes mellitus, overt coronary artery disease, high fasting insulin levels and IGT.³

Data: Population Aging and Growth

The population of Waterloo Wellington accounts for 6.0% of all Ontarians. Between 2009 and 2021, the population is projected to grow by 19.7%, and is projected to be the sixth fastest growing region in Ontario. Currently, the population of Waterloo Wellington is somewhat younger that the provincial age structure. The percentage of residents who are 65+ years is lower (12%) than that of Ontario average (14%). However, between 2009 and 2024, population in this age group is projected to grow faster than the provincial growth (69% vs. 63%)⁴. The projected growth in the older age groups, suggests that the overall diabetes prevalence within the region will continue to increase.

 ³ Canadian Diabetes Association Clinical Practice Guidelines Expert Committee. Canadian Diabetes Association
2008 clinical practice guidelines for the prevention and management of diabetes in Canada. *Can J diabetes.* 2008;
32 (suppl 1): S17.

⁴ Data source: Ontario MOHLTC Provincial Health Planning Database, based on 2009 Census

Over 80% of the population of the Waterloo Wellington lives in two urban planning areas: Urban Waterloo & South Rural Waterloo, comprising 63% of the population (467,881) and Urban Guelph with 19% (143,156) (Figure 3). Almost two-third of residents lived in Waterloo. Also Waterloo is the youngest area of the region with a median age of 37.





Data: Ethnicity

Immigrants represent over 22% of the Region's total population, which is slightly lower than the provincial average. From 2001-2006 the immigrant population in Waterloo region grew by 13.6%, almost twice the growth seen in the non-immigrant population (7.3%).

Historically, the majority of immigrants were from European countries. Next to English, the top five languages in the region are German, Portuguese, Spanish, Polish and Chinese. Over the past couple of decades there has been change and today more than 50% of the new immigrants to the region are immigrating from Asia and the Middle East, which is a high risk population for diabetes. Over 75% of the new immigrants are settling in the Waterloo area. As an example, between 1991 and 2006 the number of immigrants living in Cambridge increased by 6,860 people, or 37.4%. In comparison, the total population of the city grew by only 29.7% during the same period.

This region is unique to Ontario, as it is home to the Mennonite community. This population makes up 3.4% of the WWLHIN population. It is unclear the diabetes prevalence in this specific population. In the Old Order Mennonite groups, OHIP cards are not used, therefore their data is not captured in provincial health data.

There is a low percentage (1%) of aboriginal population who identifies with at least one Aboriginal group (North American Indian, Métis or Inuit).

1.3% of the population is Francophone, with an older Francophone population in Cambridge, and a younger larger population in Kitchener/Waterloo.

Data: Obesity

Diabetes is a condition that can be affected by health habits. The population of Waterloo Wellington is engaging in less healthy behaviour⁵. 53.3% of people in this region are overweight or obese as compared to the provincial average of 49.2%. Residents of Waterloo Wellington region experienced a 4.1% increase in obesity rates compared to the provincial average of 1.1% (2003-2007). This increase suggests that the prevalence of obesity will continue to increase and create a risk for development and progression of diabetes.

Despite being Waterloo Wellington having a large farming community, there is a lower percentage of the population consuming fruits and vegetables. 52.3% of the population consume less than five fruits or vegetables per day which is lower that the provincial percentage of 55.1%. Also, the percentage of heavy drinkers in the region (23.5%) is slightly higher than the provincial (21.7%) average.

Data: Physical Inactivity

Although there is a lower percentage of the population that participate in physical activity, a significant improvement was seen among residents of the Waterloo Wellington from 2008 to 2010. In 2008, 53.7% (49.7-57.7; 95% CI) of adults (age 18+) were physically inactive compared to 44.6% (40.4-53.2; 95% CI) in 2010.⁶

Data: Gestational Diabetes

GDM is the most common medical complication of pregnancy and affects up to 7% of pregnancies among predominantly white women (CDA, 2009), with increasing rates to as high as 8.5 % -13% among Native Canadians and Cree women^{7 8}. Research also showed that women

⁸ S. Rodrigues, E. Robinson and K. Gray-Donald. Prevalence of gestational diabetes mellitus among James Bay Cree women in northern Quebec. *CMAJ May 4, 1999 vol. 160 no. 9*

⁵ Data are from multiple original sources including:

[•] The Canadian Community Health Survey Cycle 4.1, 2007

[•] Waterloo Wellington Local Health Integration Network Integrated Health Service Plan, Population Profile and Health Services Utilization Details, 2010-13

⁶ Data source: BDDI, Key Performance Measures for the ODS, October 31, 2011

⁷ Harris, L. Caulfield, M. Sugamori, et al. The epidemiology of diabetes in pregnant Native Canadians. *Diabetes Care.* 1997; 20:1442-1425

from East Asia had a 2 times higher risk of developing GDM than their Canadian-born counterparts (Gestational Diabetes Among Immigrant Women, ICES 2011. <u>www.ices.on.ca</u>). Women with GDM have a 20 % risk of developing T2DM within 9 years postpartum⁹.

Analysis of statistical data collected from BORN Ontario, review of evidence-based reports relevant to Waterloo Wellington population and input gathered through engagement and consultation with expert group revealed the following:

- Women with GDM accounted for 3.8 % (816) of all deliveries for a three year period
- Women with diabetes were more likely to delivery by C-section (42.5%) than women without diabetes (25.2%)
- Women with diabetes were more than three times as likely to have a diagnosis of preeclampsia
- Women with diabetes were more than four times as likely to have hypertension
- 46% of the babies were born with macrosomia (>3500g)
- 1.4% of the babies were born with shoulder dystocia
- % of infants born to women with GDM/without who were delivered pre-maturely was 11.6% vs. to 6.2% (The POWER study)
- % of women with/without diabetes visiting specialists (Endocrinologist or Internist) during pregnancy was 63% vs. to 2% (ICES)
- % of women with/without diabetes having retinal exam during pregnancy was 31% vs. 12%

Of special note for this region: there is a high rate of mid-wife deliveries, which is not captured in the BORN data.

Data: Socioeconomic Status

The association between low income and diabetes prevalence is presented in Figure 4. As illustrated, the prevalence rate of people with low income is higher (9.3%) compared to 5.2% prevalence among high-income people. Overall, diabetes prevalence rates gradually decreased with higher socio-economic status.

In 2006, over 9% of Waterloo-Wellington residents were in the low-income bracket before taxes, compared to almost 15% for Ontario. According to the Statistics Canada, residents of Guelph and Kitchener-Waterloo have the highest proportion of residents in the region living below the low-income bracket. Of note, the development of chronic disease in women is affected much stronger by income level compared to men.¹⁰

⁹ Feig DS, Zinman B, Wang X, Hux JE. Risk of development of diabetes mellitus after diagnosis of gestational diabetes. CMAJ 2008 Jul 29;179(3):229-34.

¹⁰ POWER Study: Chapter 2 The Burden of Illness, June 2009



FIG. 4 - Diabetes Prevalence Rate by Income Quintile, Waterloo Wellington residents, 2004/05

Literacy is also linked to economic and social performance. Regarding education, 24% of residents 15 years of age and over, have no certificate, diploma or degree, which is slightly higher than the provincial at 22%.

Many individuals with low literacy skills are underemployed and were found to be more than 2.5 times more likely to be in poor health compared to those with high health literacy and the relationship between poor health literacy to health conditions was strongest with diabetes.¹¹ Unfortunately, there is a lack of ethnic-specific health data for Waterloo-Wellington region.

Data: Waterloo Wellington Current Delivery System¹²

In December 2010, twenty MOHLTC funded and non-ministry funded diabetes education programs were identified in the Waterloo Wellington region.

There are currently 13 structured diabetes education programs and 7 other diabetes clinics offered through a variety of funding models. Five programs are solely ministry funded community programs; 1 is jointly funded community and hospital funded; 4 are hospital global funded programs, and a number are Family Health Teams (FHT) funded through their primary care global funding. As well, there is 1 pharmacy that provides a structured diabetes education

¹¹ Canadian Council on Learning (2008). Health Literacy in Canada A Healthy Understanding.

¹² Data source: Inventory of Diabetes Services Report, WW RCC, April 30, 2011.

program and 1 complex diabetes management program that is supported through industry funding.

7 Family Health Teams (FHT) and 1 Community Health Centre (CHC) include different health professionals such as registered nurse, registered dietitian, nurse practitioner, and physician who provide diabetes care to patients with diabetes with a strong emphasis on prevention and health promotion.

3 Community Health Centres, 2 FHTs, 1 Hospital-based Team and 1 Pharmacy provide structured diabetes education programs that include basic to intermediate level diabetes education and management with emphasis on counselling and self-management support, engagement of people with diabetes in shared decision making, planned interactions and active follow-up.

Five hospital-based diabetes education centres provide access to specialist expertise for the most complex patients with diabetes.

The inventory of primary care and specialty care diabetes resources provides additional insights into the current status of resources in the community. There are 612 physicians ¹³ and 93 nurse practitioners who serve a population of 740,000. From a supply perspective, there are approximately 83 physicians per 100,000 of population. This is better than the recommended target of 72 physicians per 100,000 of population. Most of the family medicine physicians belong to one of the 10 FHTs or the 4 community health centres. Most of them are centered in the larger communities and a small number are in relatively isolated rural locations. Uneven distribution across the region creates a number of service gaps:

- Population at risk have challenges assessing primary care; as an example, only 68-80% of recent immigrants reported having a regular doctor, compared to 95% of the population¹⁴
- The three rural areas (rural Waterloo, rural Wellington and rural North Wellington and South Grey) have fewer physicians
- As of July 31, 2011, the number of Waterloo Wellington residents (age 18+) with diabetes who have registered with Health Care Connect, a provincial program that helps people find a primary care provider, was 365; 62.2% were referred to a primary care provider

¹³ Data source: Ontario Physician Human Resources Data Centre. Active Physician Registry, December 31, 2010

¹⁴ Data source: Primary Care Access Survey Waves 5-12, 2007-08

Data: Human Resources Specific to Diabetes¹⁵

The most common diabetes teams consist of a nurse and dietitian who are responsible for providing diabetes education and management to approximately 11,000 people with diabetes. With the established benchmark for staffing of 1 team: 1000 clients for community programs and a suggested ratio of 1 team: 750 clients for complex programs, there is currently capacity for an additional 11,000 clients, based on the results of this survey. There is no consistency in data-collection, so this capacity is an approximate calculation based on the information provided.

Data: Hospital and Emergency Room Data

The number and rate of emergency visits for hyper/hypoglycemia and complications per 100,000 diabetes population (age 18+) in Waterloo Wellington region is as follows:¹⁶

- In 2010/11, there were 408 emergency visits for hyper or hypoglycemia. The ageadjusted rate of emergency visits continues to show improvements (from 1,011 in 2009/10 to 900 in 2010/11 per 100,000).
- In 2010/11, there were 382 renal replacements; renal replacement therapy rates (renal dialysis or kidney transplant) have decreased (from 1,432 in 2009/10 to 837 in 2010/11 per 100,000)
- In 2010/11, there were: 1,155 (age-adjusted rate of 2,484) hospital separations for common infections; 248 (age-adjusted rate of 540) hospital separations for skin/soft tissue infections and 86 (age-adjusted rate of 188) hospital separations for amputations.

Data: Management of Diabetes

Overall, the data showing management of diabetes in the Waterloo Wellington region is as follows:

- As of March 2011, almost 46% of those with diabetes had received all 3 tests within guideline period. This is a slight improvement over previous years, but lowers than the target of 80%.
- Rates of LDL-C and retinal eye exams are high (over 70%) and have shown moderate improvements.

¹⁵ Data source: Inventory of Diabetes Services Report, WW RCC, April 30, 2011.

¹⁶ Data source: BDDI, Key Performance Measures for the ODS, October 31, 2011

• The proportion of people with diabetes with all 3 tests completed is highest (50.4%) in the Urban Guelph area (Figure 5).



FIG. 5 – Percentage of people with diabetes who have had <u>ALL 3 tests</u> within guideline period, by subLHIN, Mar 31, 2011

NB: Many people in the South Grey and North Wellington region access the hospital laboratory for their tests, resulting in missed reporting through Ontario Laboratory Information System (OLIS).

Gap Analysis and Strategies Implemented

Based on the data listed above, and strategic framework of the DRCC, the following report outlines gaps currently present in the Waterloo-Wellington region, and strategies implemented to address these gaps.

Personal skills and self- management support

Self-management is the active participation of individuals in achieving their best health and wellness. This involves gaining the confidence, knowledge and skills to manage physical, social and emotional aspects of life in partnership with health care teams and partnership with health care teams and community supports¹⁷.

¹⁷ Data source: Ontario Diabetes Strategy's Self-Management Working Group, August 2010.

IDENTIFIED GAPS:

- Confusion with the offering of Stanford self-management programs by community diabetes education programs-- structured self-management models (i.e. Stanford) offer a great framework for lay persons to deliver this program, but they are to complement and support diabetes education programs and not intended to be provided by Diabetes Educators.
- 2. There is no coordination of self-management programs and difficulties promoting existing programs.
- 3. There is lack of confidence and comfort in providers with behavioural change strategies and supporting self-management.

OBJECTIVES:

- To support the development and organization of self-management programs
- To enhance the knowledge, skill-set and confidence of health-care practitioners in impacting behavioural change in individuals with diabetes

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Diabetes Service Inventories
- Primary Care Providers Inventory
- November 24th Diabetes Networking Day¹⁸
- Consultations with programs
- Steering committee consensus
- Patient Focus Group and Questionnaire—Experience of People Living with Diabetes¹⁹

IMPLEMENTED STRATEGY

Through the Self-Management funding from the MOHTLC, the following program was developed:

- Tailored program for diabetes educators and health care professionals to gain the skill-set required to empower behavioural change and to support patients to self-manage their diabetes
 - Program includes 1 ½ day training by an expert psychologist specialized in behavioural change and diabetes with follow-up mentorship by a consultant psychologist to help build competency
- Coordinator and administrative assistant hired to coordinate regional programming and liaise with provincial counterparts
- A website and central registration line for bookings was developed

¹⁸ Appendix B; WW DRCC Final Report submitted to MOHLTC, March 31, 2011

¹⁹ Optimizing individual's Experience of Diabetes Care, Report submitted to MOHLTC January 31, 2012

• Assistance to regional programs with program planning and facilitation of programs

TIMELINES AND MILESTONES

- 1 session completed May 26/27 35 HCP's trained and follow-up mentoring sessions completed
- Hiring completed in August 2011
- 2nd session completed November 17/18 43 HCP's trained f/u mentoring session in progress
- 3rd session planned for March 22/23, 2012
- Environmental Scan of existing programs completed
- Partnership on Take Charge resources established and materials for promotion completed.

EXPECTED OUTCOMES:

- Improved self-management can lead to reduce risks of diabetes complications and improve patients' clinical outcomes
- Reduced number of diabetes related hospital admissions
- Improved knowledge of health care providers can lead to positive patient behaviour change

SUCCESSES AND CHALLENGES:

- Initially we encountered issues with primary care participation as the program requires a large time commitment and "buy-in". Therefore to increase primary care attendance, we accredited the program for 7.5 Mainpro M1 credits as incentive to attend.
- Feedback from participants and observers has been very positive with requests from other regions to develop a similar model
- Diabetes educators have been positive about this training and feel it is more appropriate training for them
- Training more lay leaders to offer Stanford programs in community
- Successfully launched website and hosted numerous events with 340 people attending

Delivery System Design

The term 'delivery system design' refers to the ways in which clinical health care practice is organized and carried out²⁰.

²⁰ Preventing and Managing Chronic Disease: Ontario's Framework, MOHLTC, May 2007

IDENTIFIED GAP:

There is a need and high priority for improved system navigation for individuals and families with diabetes and health care providers. ²¹

OBJECTIVES:

- To develop a central intake (CI) with one common physician referral form and a self-referral form
- To develop a model of care with clear definition of the roles of each diabetes program
- To identify triage criteria to improve access to the appropriate care
- To develop standard wait-times for education
- To provide timely access to information regarding the status of referrals (pending, booked, complete, reported) for primary care providers and patients
- To monitor wait-times of programs
- To help build and maintain capacity of diabetes education programs
- To standardize data collection in order to improve quality, monitor outcomes and implement appropriate changes

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Service inventories
- Consultations and stakeholder meetings
- Nov 24th Diabetes Networking Day

IMPLEMENTED STRATEGY

- Task force to develop referral form
- Standard wait-times developed
- Pilot Project to:
 - Trial the common referral form
 - Evaluate the triaging criteria
 - o Develop a centralized Excel data-base for effective data-collection
 - o Identify types of data to assist with system and program planning
- Roll-out central intake LHIN wide

TIMELINES AND MILESTONES

• The form, process and documents associated with central intake have been successfully piloted – pilot completed September 30th, 2011

²¹ Central Intake Report, submitted by WWDRCC to MOHLTC December 31, 2011

- Data-base developed in May 2011 for CI to collect incoming referral data, and diabetes education program appointment dates
- "Soft" Roll out of process and form in currently underway commenced November 1st, 2011
- First draft of roles and responsibilities have been completed working on an education event for diabetes educators and managers to assist programs with promoting their program finding their "niche" – currently planned for April 2012

EXPECTED OUTCOMES:

- A single point of contact for all patients with diabetes requiring education and for referring health care providers
- Simple and more timely access to information regarding the status of referrals (pending, booked, complete, reported) for primary care providers and potentially patients
- A central contact point for information regarding system availability and where specific types of education interventions are being provided
- Triaging of referrals to provide appropriate priority triaging and distribution of requests to various diabetes education programs
- Better consistency in reporting for accessing capacity
- On-going communication to provide a better source of quality data for system resource planning and best practice sharing

SUCCESSESS:

- Results from the pilot project showed that the CI process was a significant improvement in the referral process for referring health care providers;
- Feedback from PCPs and specialists has been extremely positive as it is one central # for all diabetes referrals
- Feedback from patients re: self-referral has been positive and eliminates barriers to education
- data collected from the CI process provided important and useful data for program and system planning;
- CI provided a system for monitoring of referral volume, wait times and maximizing resources.
- 800 incoming referrals to date

CHALLENGES

- Lack of human resources has made it difficult to promote central intake and process region wide
- Opportunities for electronic options exist and are being explored
- Change management has been a challenge for diabetes educators, but support from hospital and CHC management has been the key for success

IDENTIFIED GAP:

Research on Gestational Diabetes in the region demonstrated that there is no consistency in the management of gestational diabetes among programs and was identified as a concern from many of the diabetes specialists in the region. Data shows poor outcomes for women with gestational diabetes in the region.

OBJECTIVES:

- To develop a regional pathway for consistent management of gestational diabetes from screening to management to post-partum care
- Develop awareness of screening for GDM
- Improve consistency of gestational diabetes management (GDM)
- Identify programs for post-partum follow-up for GDM
- To identify and develop multi-disciplinary "one-stop shopping" clinics for gestational diabetes
- To reduce the number of caesarean sections to women with gestational diabetes or diabetes in pregnancy
- To reduce the onset of type 2 diabetes in women post-partum gestational diabetes
- To reduce the risk of type 2 diabetes in offspring of women with gestational diabetes

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Stakeholder Consultations
- Strategies to Address At -Risk Populations Report²²
- Data from report POWER Study
- Statistical data from BORN Ontario

²² Report on Strategies to Address At Risk Populations in Waterloo Wellington, submitted to MOHLTC by WWDRCC November 30, 2011

IMPLEMENTED STRATEGY

- Organize a strategic meeting with Key Opinion Leaders in the region to identify gaps and solutions
- Develop and implement a regional pathway and standards for practice for gestational diabetes care in the region for the whole continuum of care from prevention to screening to intrapartum management to post-partum care

TIMELINES AND MILESTONES

- First meeting held in Nov 2011
- Second meeting planned for Feb 2012
- First draft of pathway planned for spring of 2012

EXPECTED OUTCOMES:

- Regional pathway to guide practice for managing gestational diabetes
- Consistent management of gestational diabetes
- Increased awareness of gestational diabetes as a risk factor for Type 2 diabetes
- Planned structure, workload and budget for programs offering gestational diabetes clinics
- Evaluation and monitoring of outcomes of women with gestational diabetes
- Healthy and safe short-term outcomes for mothers and offspring such as reduced caesarian sections, reduced neonatal hypoglycemia
- Healthy long-term outcomes of prevention of type 2 diabetes in mothers, and reduced risk of type 2 diabetes in off-spring

SUCCESSESS

• Interest and enthusiasm from all stakeholders to develop consistent pathway

CHALLENGES:

- Not in the mandate of provincially funded ministry programs, therefore expected that hospital programs continue to fund GDM
- All stakeholders believe it would be better placed in community for access and wellness approach
- Stakeholders believe that GDM is "Type 2 diabetes appearing in pregnancy", so don't understand why it can't be offered in community
- HAPO data is available but the recommendations have not come from CDA; therefore challenges with which numbers to use for screening and management
- Involving midwives is "a first" for this type of program and research is not available

• There is a conflict in the holistic approach from midwives beliefs and the management approach from endocrinologists and obstetricians

IDENTIFIED GAP:

There currently are limited diabetes outreach services in the region. Community Diabetes Programs have received funding for outreach services but are unsure how to develop or provide these services.

OBJECTIVES:

- Assist with planning and targeting populations in need of outreach
- Provide outreach planning day to review information on the social determinants of health, cultural tailoring, health literacy and community profiling.

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Diabetes Service Inventories
- Primary Care Providers Inventory
- November 24th Diabetes Networking Day
- Stakeholder Consultations
- Strategies to Address At -Risk Populations Report²³
- Approached by the DEP's who received funding for this service

IMPLEMENTED STRATEGY

- Provide outreach planning day to health care providers in region
- Provide mapping of high prevalence areas
- Develop and provide outreach planning framework for programs
- Support programs in learning to do environmental scan
- Provide opportunity for programs to network and to learn from other successful outreach programs

TIMELINES AND MILESTONES

- Aug 17th, 2011 Outreach Planning Day– completed
- 45 attendees

²³ Report on Strategies to Address At Risk Populations in Waterloo Wellington, submitted to MOHLTC by WWDRCC November 30, 2011

• Follow-up with programs in attendance to collate list of what services and where they are performing outreach services

EXPECTED OUTCOMES

- Community diabetes programs will provide outreach services to their community for "hard to reach" populations
- Culturally specific programs are available to meet the needs of the population

SUCCESSESS:

- good feedback from all attendees
- excellent opportunity to network and share
- Provided opportunity to develop "inertia" for programs to develop outreach services

CHALLENGES:

• some programs have "run with" the information provided, while others expect the RCC to be more involved at the operational level

IDENTIFIED GAP

Concerns identified with the quality and availability of pre-diabetes education in Kitchener/Waterloo/Cambridge area.²⁴

OBJECTIVES:

- To reposition pre-diabetes education with the community diabetes education programs.
- Develop sustainable program that meets the needs of the community involved.
- Support diabetes programs with program planning as needed including developing methods to evaluate the program, both short and long-term.

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Diabetes Service Inventories
- Primary Care Providers Inventory
- Stakeholder consultations
- Program statistics
- Analysis of pre-diabetes referrals received and sent- to CDA over last 2 years

²⁴ Report on Strategies to Address At Risk Populations in Waterloo Wellington, submitted to MOHLTC by WWDRCC November 30, 2011

IMPLEMENTED STRATEGY

- Facilitated discussion with community program managers, executive directors and CDA
- Community programs encouraged to develop pre-diabetes program
- Assisted with sample presentations and provided contacts of other programs offering prediabetes programs

TIMELINES AND MILESTONES

- Pre-diabetes programs now being offered
- Community DEP working with YMCA to develop enhanced program

EXPECTED OUTCOMES:

- Effective pre-diabetes program offered in Kitchener/Waterloo/Cambridge
- Outcomes evaluation of program to provide successful data
- Prevent progression of individuals from pre-diabetes to diabetes

SUCCESSESS

• Programs now being offered in community

CHALLENGES:

- Programs were afraid that this additional volume would overwhelm their staff
- Difficult to convince programs as they felt it wasn't in their mandate and that the current program was running well

IDENTIFIED GAP:

The need for social work support in diabetes education programs has been identified throughout the region as being a gap in services

OBJECTIVES:

• To support recommendations to Provincial Programs branch of MOHLTC to include social work as core team for Diabetes Education Programs

EVIDENCE TO SUPPORT IDENTIFIED STRATEGIES

- Diabetes Service Inventories
- Primary Care Providers Inventory
- Stakeholder consultations
- November 24th Diabetes Networking Day
- Steering committee consensus

IMPLEMENTED STRATEGY

- Supported 2 Diabetes programs in region to request social work funding
- Continue to develop strategy for further support in 2012

TIMELINES AND MILESTONES

• North Wellington and Langs DEP received funding for social work support

EXPECTED OUTCOMES

- Enhanced support for individuals with diabetes to cope with day to day challenges
- Improved stress management
- Improved support and access to programs such as disability, Trillium etc.
- Improved knowledge of diabetes educators re; programs available for individuals with diabetes

SUCCESSESS AND CHALLENGES

- Success with achieving social work support
- Challenge is there is not consistency with the funding allocation, and that the funding was in place of a dietitian position.

IDENTIFIED GAP:

Services provided to the population living with diabetes are not well integrated and clients frequently seeking care at the Emergency department due to access to care problems.

OBJECTIVES:

- To have a well-coordinated system for diabetes where individuals and families with diabetes feel supported
- To reduce visits to ER for diabetes related occurrences

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Diabetes Service Inventories
- Primary Care Providers Inventory
- November 24th Diabetes Networking Day
- Consultations with programs
- Steering committee consensus
- Patient Focus Group and Questionnaire—Experience of People Living with Diabetes
- Hospital data

IMPLEMENTED STRATEGY

- Central intake for diabetes education referrals (as above)
- Enhanced communication between hospital discharge and community programs
- Proposed regional after hours on-call service

TIMELINES AND MILESTONES

- Central intake process as above
- Proposal in place to LHIN to support on-call service to rotate between diabetes education programs in region
- Quarterly meetings starting in January 2012 with hospital managers to enhance inpatient care and continuity of care
- Meetings planned for March with hospitalists to discuss central intake

EXPECTED OUTCOMES:

- Lower rates of ED visits, less hospitalization and shorter lengths of stay for patients with glycemic complications
- Increase consistency of care and cross-boundary continuity of care
- Information on transition of patient care between settings, specifically from acute care hospital to a homecare or community

SUCCESSESS:

- Success with central intake system
- Interest, enthusiasm and support for enhancing flow of patients from inpatient to outpatient setting

CHALLENGES:

• Challenge with funding for on-call system

IDENTIFIED GAP:

There is currently no communication or linkage between regional renal programs and diabetes education programs.

OBJECTIVES:

- To reduce the progression renal disease in individuals with diabetes
- To develop improved continuity of care between diabetes programs and renal program

EVIDENCE TO SUPPORT IDENTIFIED STRATEGIES

- Diabetes Service Inventories
- Primary Care Providers Inventory
- November 24th Diabetes Networking Day
- Consultations with programs
- Steering committee consensus
- Renal Steering committee discussions

IMPLEMENTED STRATEGY

- Discussions with Regional Renal Director
- Participation at Renal Education Event
- Further strategy to be developed in 2012

TIMELINES AND MILESTONES

- Monthly participation at Regional Renal Steering Committee
- Participated at Renal Education Event November 2011
- Further strategy to be developed in 2012

EXPECTED OUTCOMES

- Decreased progression of individuals to hemodialysis
- Improved coordination between diabetes program and renal program
- Improved knowledge of diabetes educators on renal diet and management

SUCCESSESS AND CHALLENGES:

- Strong partnerships developed
- Interest and enthusiasm from all partners

Provider Decision Support

Prepared, proactive practice teams need a range of decision supports that enable them to provide evidence-based expert, timely clinical management, self-management support, and prevention²⁵.

²⁵ Preventing and Managing Chronic Disease: Ontario's Framework, MOHLTC, May 2007

IDENTIFIED GAP:

With the additional resources to support diabetes educators in the community, there are many newer diabetes educators with limited knowledge and experience in diabetes education. This has created trust issues in the experience and knowledge level of community diabetes nurses by the hospital diabetes educators and some physicians. As well, there is an increasing need for community programs to provide more intermediate level of care in order to more evenly distribute the workload, yet the educators are not confident in their abilities.

OBJECTIVES:

- To enhance the knowledge, skill and judgment of entry level diabetes educators to care for more complex patients within the community program
- To support community program educators in gaining the ability to initiate and adjust insulin therapy on people with diabetes to reach CDA 2008 CPG targets.
- To create sustainable qualified diabetes educators for complex care

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Inventories of Service more specifically the gap was identified when developing the central intake process and looking at patient flow
- Consultations with programs
- Steering committee consensus

IMPLEMENTED STRATEGY

- Developed proposal for NovoNordisk for educational grant to support mentoring program ²⁶
- Facilitate meetings with programs and experts to help with orientation schedules
- Support educational events to enhance knowledge

TIMELINES AND MILESTONES

- Experienced mentor hired in September 2011
- Mentoring in progress

EXPECTED OUTCOMES

- Knowledgeable confident diabetes educators in the community
- Community programs able to accept referrals for insulin initiation and adjustment
- Decreased wait-times for insulin starts due to maximizing resources

²⁶ Waterloo Wellington Mentoring Program Preliminary Report on Progress, submitted by WWDRCC to MOHLTC October 30, 2011

SUCCESSESS

- In a very short time, this program has made a tremendous impact on the quality of diabetes care being provided to patients.
- It creates a sustainable system, by building on the knowledge of educators already in the system.
- Keeping an open schedule enabled the learning needs to be dictated by the individual
- Tracking sheets were developed for data collection as well as evaluation tools.

CHALLENGES

- Important to recognize and manage change management principles
- Some educators were resistant at first but became more receptive after learning of others experiences

IDENTIFIED GAP

There is a need for community wide medical directives to support educators to work to their full potential.

OBJECTIVES:

- To develop regional medical directives to support diabetes educators in performing insulin adjustments
- To meet the criteria of the various professional Colleges to ensure educators were practising within their "scope of practice"

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- November 24th Diabetes Networking Day
- Consultations with programs
- Steering committee consensus

IMPLEMENTED STRATEGY

- Task force of interested diabetes educators developed
- Several meetings were held and research was performed to look at developing medical directives
- The first draft of the medical directives was completed
- Due to long-term feasibility of medical directives a new approach was taken and insulin orders and order sets were imbedded into the common referral form

TIMELINES AND MILESTONES

• Task force developed in spring 2011

- Insulin order sets developed in time for central intake pilot
- Additional work to be done with gestational diabetes medical directives

EXPECTED OUTCOMES:

- Consistency with insulin adjustment practice throughout region
- Support for educators to ensure they are within their "scope of practice"
- Safe practice for educators and patients on insulin

SUCCESSESS

- Much research and discussion helped to understand the challenges of medical directives
- Developing insulin order sets that are specific to the patient, rather than medical directives helped solve the issue, and therefore did not needed yearly signatures

CHALLENGES:

- Challenges to agree on medical directives--What is a medical directive and order?
- Communicating this to the educators was difficult as they felt like we were policing
- The implementation plan and ability to review and re-sign on a yearly basis became a challenge

IDENTIFIED GAP:

There was no forum to allow for effective and timely communication between all programs. Educators and individuals with diabetes all wanted a web-site to reflect regional activities.

OBJECTIVES:

- To develop a regional web-site for both individuals and families with diabetes and for health care professionals to serve as a resource and communication venue
- To develop quarterly newsletters for health care providers to keep informed of regional diabetes activities and activities of RCC
- To develop an updated Directory of Services in partnership with CDA

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Diabetes Service Inventories
- Primary Care Providers Inventory
- November 24th Diabetes Networking Day
- Consultations with programs
- Steering committee consensus
- Patient Focus Group and Questionnaire—Experience of People Living with Diabetes

IMPLEMENTED STRATEGY:

- Regional web-site developed <u>www.waterloowellingtondiabetes.ca</u>
- Quarterly newsletters developed and circulated to health care providers in the region.
- Directory of services in progress

TIMELINES AND MILESTONES

- Web-site launched on November 14th, 2011, International Diabetes Day
- Quarterly newsletters sent out, starting in December 2010
- Meeting in January to discuss translation of web-site to French
- Link to provincial web-site planned for 2012

EXPECTED OUTCOMES:

- Informed individuals with diabetes on local resources and activities
- Informed health care providers on local resources, activities
- Improved access to diabetes education with access to referral forms and information

SUCCESSESS

- Web-site launched with success
- Excellent feedback on web-site and newsletters
- Improved information sharing within region

CHALLENGES

• Intend to integrate a social media campaign to increase awareness of diabetes research and resources—will require further skill-set to do this

IDENTIFIED GAP

Pharmacists in area expressed interest in diabetes management and wondered how they can fit in to the diabetes care circle.

OBJECTIVES:

- To offer educational event for pharmacists to:
 - Raise awareness of RCC
 - Increase knowledge of Diabetes Medscheck for pharmacists
 - o Increase knowledge of central intake and referral opportunity
 - Offer networking opportunity with focus on diabetes

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Pharmacist inventory
- Stakeholder meetings

IMPLEMENTED STRATEGY

• Provided educational event for pharmacists

TIMELINES AND MILESTONES

- Presentation offered in November 2011
- Further meetings to be determined

EXPECTED OUTCOMES

- Increased awareness of resources in region
- Increased understanding of Medscheck program
- Improved continuity of care

SUCCESSESS AND CHALLENGES:

- Excellent feedback from pharmacists at educational event
- Pharmacists now referring patients through central intake process
- Need for further education on Medscheck program

IDENTIFIED GAP:

There is a concern identified with the glycemic management of clients in Long Term Care Homes (LTCs).

OBJECTIVES:

- To assess the current care provided in LTCs
- To improve the knowledge level of physicians, and staff of LTCs
- To prevent hypoglycaemia in the elderly
- To reduce visits to ER for diabetes related issues

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Consultations with programs
- Stakeholder meetings
- Steering committee consensus
- LTC inventory to be done and analyzed in 2012

IMPLEMENTED STRATEGY

- Initial meeting with Director of LTC home, physicians, RCC endocrinologist and staff
- Endocrinologist to spend day in LTC following staff to assess gaps
- Implementation strategy to be developed once gaps assessed
- Education provided to staff with provincial DVDs
- Facilitated educational presentations for LTC staff by diabetes program staff

TIMELINES AND MILESTONES

- Initial meeting in December 2011
- Future meetings to be determined
- LTC inventory to be developed

EXPECTED OUTCOMES:

- Guidelines for LTC homes re: safe glycemic control
- Reduced visits to ER for glycemic related events
- Knowledgeable staff in LTC regarding diabetes management

SUCCESSESS AND CHALLENGES:

• Interest from stakeholders

IDENTIFIED GAP

With the increasing number of available treatment options for patients with diabetes, as well as the increasing complexity of diabetes management, the need for inpatient staff education around diabetes was identified. Also, the need for consistent protocols for all hospitals was identified.

OBJECTIVES:

- To improve the knowledge level of inpatient nurses and allied health professionals
- To develop consistent protocols throughout region
- To enhance care to individuals with diabetes while in hospital
- To reduce length of stay in hospital with improved protocols

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Consultations with programs
- Stakeholder meetings
- Steering committee consensus

IMPLEMENTED STRATEGY

- Quarterly meetings with hospital managers to:
 - assess current gaps in knowledge and process
 - Share current protocols and pathways
- Task force to develop region-wide protocol for self-management of insulin pumps while in hospital
- Task force to be developed e-learning module for inpatient nurses

TIMELINES AND MILESTONES

- 1st meeting with managers in January 2012
- Task force for protocol for self-management of insulin pumps met in spring 2011, with draft protocol prepared
- Task force for e-learning module planned for spring 2012

EXPECTED OUTCOMES

- Improved inpatient management of diabetes measured by:
 - Reduced episodes of hypoglycaemia
 - Reduced insulin errors in hospital
 - Shortened length of stay
- Improved knowledge of inpatient staff measured by:
 - o E-learning program
- Consistent protocols such as:
 - Self-management of insulin pumps while in hospital
 - Treatment and management of hypoglycaemia in hospital
 - Management of Diabetic Ketoacidosis (DKA)

SUCCESSESS:

- Interest and enthusiasm by hospital administration
- Opportunity for managers to meet and share protocols
- DKA pathway developed by North Wellington shared with other hospitals

CHALLENGES:

• Significant time will be required to develop effective program to meet needs of all hospitals

IDENTIFIED GAP

From many of the inventories of service, foot care was identified as a gap for many people with diabetes, not only from an access gap, but also from a knowledge level gap.

OBJECTIVES:

- To improve the frequency of foot care assessments at the primary care level
- To improve the knowledge level of all healthcare providers in diabetes care, re: foot care
- To improve the availability of wound care clinics for foot ulcers
- To reduce the visits to ER for foot ulcer related visits

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Diabetes Service Inventories
- Primary Care Providers Inventory
- Chiropodist/Foot Care Nurses Inventory
- November 24th Diabetes Networking Day
- Consultations with programs
- Steering committee consensus
- Patient Focus Group and Questionnaire—Experience of People Living with Diabetes

IMPLEMENTED STRATEGY

- Foot care specialist invited to speak at educational event in May 2011
- No formal strategy implemented to date
- Plans to develop strategy for this gap

TIMELINES AND MILESTONES

• Plan to do further assessment and strategy development in fall 2012

EXPECTED OUTCOMES

- 80% of individuals with diabetes will have yearly foot exam by primary care provider
- Improved knowledge of foot care assessments by all health care providers
- Improved access to foot care in rural areas
- Improved system navigation for those people identified with foot ulcer
- Reduced visits to ER for foot ulcer related visits
- Reduced rate of amputation for lower limbs for individuals with diabetes

SUCCESSESS

- Inventories complete
- List of chiropodists and services collected for Directory of Services
- Networking opportunities have started with educational events

• OTN event on foot care for individuals and families with diabetes scheduled for June 2012

CHALLENGES:

- Significant time will be required to develop effective program
- Require physician champion who specializes in foot ulcers
- Chiropody visits currently not covered by OHIP

Information System

*Prepared, proactive practice teams need timely data about individuals, and populations, their care and outcomes to enable them to identify individuals with specific diseases and make planned proactive care possible*²⁷.

IDENTIFIED GAP:

Limited information exchange between health professionals and between health sectors due to a lack of common technologies and standardized data collection tools.

OBJECTIVES:

- To support and engage primary care providers in utilizing information systems
- Develop data-collection tools for consistent reporting for diabetes education programs

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Diabetes Service Inventories
- Primary Care Providers Inventory
- November 24th Diabetes Networking Day
- Consultations with programs
- Steering committee consensus

IMPLEMENTED STRATEGY

- Encourage primary care physicians to participate in the Baseline Diabetes Data Initiative (BDDI) a tool which provides information about their patients' testing practices
- Develop data-collection tools for consistent reporting to diabetes education programs
- Develop data-base for central intake to track volume of referrals; type of referrals; referral source; appointment date; A1C (see central intake report)

²⁷ Preventing and Managing Chronic Disease: Ontario's Framework, MOHLTC, May 2007

- Upload common referral form into Practice Solutions EMR for physicians
- Support Provincial Diabetes Registry as it becomes available for our region

TIMELINES AND MILESTONES

- Piloted database in central intake pilot and continue to use and analyze data inputted into central intake database
- Common referral form uploaded to a few physicians EMR with success
- Encourage physicians to use BDDI—promoted in newsletter and presentations
- Plan to develop data-collection tool for programs

EXPECTED OUTCOMES:

- Establishing clinical indicators will allow the RCC to monitor and evaluate care pathways and develop/promote best practices to improve patient outcomes.
- Establishing data collection will allow RCC to monitor improvements to system changes

SUCCESSESS AND CHALLENGES:

- Over the course of the pilot several changes were made to the database to ensure the data collected would yield all the information needed to make future decision on diabetes care in the region
- More time is needed to effectively include all programs and HCPs in common data collection

Healthy Public Policy, Supportive Environments, Community Action

Healthy public policy is an important tool in promoting health and preventing chronic disease within the population as a whole.

Community action refers to activities that are undertaken by communities aimed at increasing their control over those issues that affect the health of their residents.

IDENTIFIED GAP

There is a lack of partnerships and knowledge of services between organizations involved in chronic disease management and prevention.

OBJECTIVES:

- To participate and establish relationships with other agencies
- To facilitate partnerships between diabetes programs and other agencies

- To increase awareness of public policies and programs
- To collaborate with CDA on initiatives for awareness and advocacy

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Diabetes Service Inventories
- Primary Care Providers Inventory
- November 24th Diabetes Networking Day
- Consultations with programs
- Steering committee consensus

IMPLEMENTED STRATEGY

- Ontario Renal Network
 - Participate on regional steering committee ongoing
 - Exhibited at renal day -completed
 - Collaborating on referral criteria to renal program through diabetes education referrals – Q2 2012
- Bariatric Clinic GGH
 - Participation in education day May 11, 2011
 - Communicated central intake process for diabetes referrals Nov 1, 2011
 - Made a connection to Diabetes Care Guelph completed
 - Public Health Smoking Cessation Project completed
 - Participation in education day
 - Attended local events and made connection to RCC
- Outreach Planning Day Aug 17th, 2011
- Diabetes Mental Health Peer Support Program contact initiated with program. Program to be launched in region in 2012
- Revise and disseminate Directory of Services
- Include various organizations at educational events to share information and services
- Develop and promote website for the public and providers to learn more about various services in the region
- Recruit participants from diverse backgrounds and with diverse experiences

TIMELINES AND MILESTONES

• As above

EXPECTED OUTCOMES

- Increased outreach programs to rural and at-risk populations
- Increased understanding of a community's needs and assets
- Improved public policies and health systems

• Widespread public support for issues or actions

SUCCESSESS

• Established connections with many partners in the region

CHALLENGES

- Determining how to work together has been difficult sometimes it is just to keep each other informed
- Currently working on a number of joint projects for 2012
- Challenge with lack of communication between ODS and Provincial Programs branch with respect to patient survey. A survey was sent out to diabetes programs simultaneously to the RCC requesting Diabetes programs to do patient surveys.

IDENTIFIED GAP

Lack of knowledge of services offered by regional programs not involved in direct diabetes education delivery.

OBJECTIVES:

- To collaborate with community partners to provide public events to generate awareness
- To provide opportunities for organizations to promote and increase awareness of services to diabetes professionals

EVIDENCE SOURCE TO SUPPORT IDENTIFIED STRATEGIES

- Patient Focus Group and Questionnaire—Experience of People Living with Diabetes
- Steering Committee Meetings
- Stakeholder engagement
- Inventories of Service

IMPLEMENTED STRATEGY

- Completed -May 11^{th -} event for diabetes educators Bariatric program and mental health programs presented services offered and how to access them
- Kidney foundation, Public Health Smoking Cessation, CDA and H&S exhibited at education event
- Tools were developed and posted on the website for access by HCP's
- Partnered with CDA to host Diabetes Expo Nov 12, 2011 completed open to public to learn more about resources for people with diabetes in the community

- Partnering with CDA to develop Directory of Services-- currently under review and changes are being made completion anticipated end of Q1 with dissemination beginning in Q2
- Partnered with CDA to offer OTN event in November for health care professionals on Literacy
- Partnering with CDA to offer 2 OTN events in March and June for individuals and families with diabetes—nutrition and foot care
- Nov 14th, 2011 website launched to share information
- Social media planned– Q1 2012
- Nov 17th, 2012 planning 2nd Expo

TIMELINES AND MILESTONES

• As above

EXPECTED OUTCOMES

- Knowledgeable individuals with diabetes
- Increased engagement of service providers accessing professional site of web-site

SUCCESSESS:

- Successful events delivered
- Solid partnerships developed

CHALLENGES:

• Challenge when offering events with charitable organizations such as CDA, as their mandate is to raise funds through their events--important to have agreements in place regarding partnership roles and responsibilities