Central Intake Process Report

A streamlined process for diabetes education referrals to improve navigation of the system

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Executive Summary

Since its inception in 2010, the Waterloo-Wellington Diabetes Regional Coordination Centre (RCC) has been working with stakeholders and care providers to identify and prioritize provision of diabetes services and access to care. Inventories of services with diabetes education programs, primary care providers, pharmacists, foot care providers and optometrists and ophthalmologists have been done, along with numerous stakeholder meetings and consumer consultations. From these findings, the RCC identified a need and priority for improved system navigation for individuals and families with diabetes and health care providers.

Inventory of diabetes programs indicated:

- a current wait time range from 2 weeks to 16 weeks with the longest wait times at hospital programs.
- The hospital programs, particularly in the Kitchener/Waterloo/Cambridge area, were triaging the incoming referrals to either keep the referrals or send them to the community programs.
- The hospital programs are struggling with high volumes of patients, yet there is a large capacity for patient referrals in the community programs, indicating challenges with triaging and perhaps competition for referrals.
- many of the hospital programs were not capturing data, such as number of incoming referrals, number of active clients or wait-times.

Feedback received from primary care providers, indicated:

- they are unsure where to refer people, and they are concerned with wait times.
- from experience when they do refer, their referral is often returned to them stating the program cannot accept their patient for various reasons. As a result they often stop referring.
- they are concerned with wait times at programs which deter them from referring as well.

Focus groups with individuals and families with diabetes identified:

- they had a long wait time to get in to programs,
- many of them had to prompt their primary care provider to refer for education.

To address this gap in diabetes services, and to streamline the referral process to Diabetes Education programs within the Waterloo-Wellington LHIN, a central intake (CI) process was designed and implemented, starting with a pilot project.

Results from the pilot project showed:

- the CI process was a significant improvement in the referral process for referring health care providers;
- data collected from the CI process provided important and useful data for program and system planning;
- CI provided a system for monitoring wait times and maximizing resources.

Given the success of the CI, there is currently demand from all physicians in the region for the CI process to expand, but it is not actively being marketed or promoted until further resources have been allocated.
The recommendation for CI is:

- the system/process should remain with the RCC for monitoring of data to support program and system planning and to provide "neutral" triaging for referrals.
- required staffing to maintain CI for the region is a full-time administrative/data collection person and a full-time experienced diabetes educator for triaging.
- additional funds are recommended to support moving the system from a manual process to an electronic system.
Introduction

Information collected from the inventory of diabetes programs and stakeholder engagements identified challenges with the referral process for diabetes education as well as capacity gaps in the region. The inventory of diabetes programs indicated a wait time range from 2 weeks to 16 weeks with the longest wait times at hospital programs. The hospital programs are struggling with high volumes of patients, while there is a large capacity for patient referrals in the community programs. Feedback received from a number of physicians, indicated they are unsure where to refer people. From experience when they do refer, their referral is often returned to them stating the program cannot accept their patient for various reasons. As a result they often stop referring. They also have indicated they are concerned with wait times at programs which deter them from referring as well. Based on the prevalence count of people with diabetes in Waterloo-Wellington and from the inventory of services, only 19% of the diabetes population are currently active clients with diabetes programs.

To address this gap in diabetes services, and to streamline the referral process within the Waterloo-Wellington LHIN, a central intake (CI) with triage criteria and wait time standards was implemented, starting with a pilot project.

Background

In the late 1980’s and early 1990’s, hospitals developed Diabetes Education Centres (DECs) to assist patients with managing their diabetes. They were considered cost-effective strategies to prevent people with diabetes from admission to hospital and/or allowed early discharge from hospital. All DECs were funded through hospital global budgets, and had their own individual referral forms.

Starting in 1997, the MOHTLC provided funding to establish community diabetes programs to provide improved access to diabetes education, as well as to support the increasing prevalence of Type 2 diabetes. Community Health Centres (CHCs) and later Family Health Teams (FHTs) in this region received such funding. They have worked together over time, to identify a triaging system for referrals, but there is not an effective system in place to monitor wait-times or evenly distribute referrals, resulting in a current wait time range from 2 weeks to 16 weeks with the longest wait times at hospital programs.

In the Waterloo-Wellington LHIN, each diabetes program had its own referral form with 50% of programs identifying that they will accept self-referral, although there is no self-referral form. The process prior to the initiation of the pilot project in the Kitchener/Waterloo and Cambridge area, was a triage system where the referrals were funnelled through the hospital programs, and for those patient with an A1C <8%, or newly diagnosed, their referrals are sent to the community programs. The community programs in this region send all their referrals with pre-diabetes to the Canadian Diabetes Association (CDA) to provide education. In Centre/North Wellington, all referrals are sent to the Diabetes Education Centre for initial teaching. They are referred back to the FHTs for follow-up based on triage criteria. In Guelph, referrals are directed to either the Diabetes program at the FHT, or the Endocrinologist/specialist office. Guelph hospital continues to see gestational diabetes, children with diabetes and inpatients.

Through stakeholder meetings, it was recognized that triaging of referrals was influenced by the hospital program’s lack of confidence with the community programs expertise, yet the community programs were not
able to build on their experience as they were not receiving referrals. Based on the prevalence count of people with diabetes in Waterloo-Wellington and from the inventory of services, only 19% of the diabetes population are currently active clients with diabetes programs, yet there is capacity for an additional 11,000 clients, based on the current ratio of 1 team:1000 clients and the allocated resources to this region.

The following diagram (Figure 1) shows the flow of referrals in the Kitchener/Waterloo/Cambridge region, using the various referral forms and triaging process.

**Figure 1: Flow of Referrals to Diabetes Education programs in the Kitchener/Waterloo/Cambridge region.**

**Current System**

**Proposed System**

**Vision**

A streamlined process for referral to a Diabetes Education Program in Waterloo-Wellington, allowing for easy system navigation for individuals with diabetes and health care providers.
Objectives:
- To develop a central intake 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 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 develop consistent curriculum for education programs
- To develop a centralized electronic scheduling/booking system for diabetes referrals

System Improvements:
- 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

Guiding Principles
- Effective service coordination depends upon ongoing communication, collaboration and professional respect.
- Thoughtful planning and sensitivity to historical and current relationships leads to successful change management
- Effective outcomes evolve when the strengths of individuals and programs are combined together
Central Intake Process Definition
The Centralized Intake Process is defined as beginning when a provider (physician) faxes the referrals to the central intake line, located within the RCC. The referral is triaged based on their age, diagnosis, complexity of care and reason for referral, and is faxed to the appropriate diabetes education program for service. The process ends when the outcome of the initial appointment is known.

FIG. 2 - Centralized Intake Process

Methodology
This project combines qualitative and quantitative methods and is being conducted in four phases.

FIG.3- Implementation Schedule

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Phase 1: Development

Common Referral Form
The initial phase of the central intake process was to develop a task force with members of diabetes programs representing each organization. The role of the task force was to develop the common referral form, discuss the roles of each program and develop triage processes.

Several meetings were arranged to discuss and develop a common referral form for the region. Stakeholders from all programs in the Kitchener/Waterloo and Cambridge area took part in the discussion. A draft was developed and circulated for review. The first draft of the form was then distributed to three physicians in the area Dr. Chauhdry (Endocrinologist), Dr. Liutkus (Internal Medicine) and Dr. Pandey (Family Medicine) in order to pilot the form and central intake process.

The initial form contained seven sections. The first section was the header row containing the contact information for the central intake (fax and phone number). Section two contained the demographic data of the patient. Section three contained the check boxes for type of diabetes. Section four included check boxes and blank areas for reason for referral. Section five was to be filled out with current therapy and medical history. Section six included all the lab results desired for effective triaging. Section 7 included referring physician name and an internal use only box for triaging purposes.

It was soon apparent that there was a key area missing on the referral form that could be addressed only with medical directives or through direct orders. Some programs were unable to work to their full capacity as the form did not include the standing orders outlined on their programs original referral form. After investigating the issue with the College of Nurses, the College of Dietitians and the College of Physicians and Surgeons, it was discovered that the standing orders on their current forms do not protect the health care professionals and are not allowed by the colleges. Therefore in order to protect the staff and help them work to their full capacity, the development of medical directives was initiated. The medical directives were not completed and were eventually put on hold. In order to address this concern, another section was added to the referral form instead. This section is called Orders for Insulin Initiation and Adjustments and has to be completed by the physician in order for the allied healthcare provider to provide these services. This section meets the requirements of the colleges for a direct order as it is patient specific and contains the right dose and time of medication to be started or adjusted. This option was felt to be more sustainable than medical directives as it does not require yearly review and sign off by physicians.

The final section to undergo changes was the section with the referring physicians name and internal use only box. The section was expanded to include more room for contact information of the referring physician and a line was included to ask for the name of the primary care physician. The primary care physician name is needed for the triage process as some family health teams have allied health professionals who provide diabetes education and this will be easier for the patient.

The final draft of the common referral form (Appendix A) contains eight sections with almost all sections having undergone changes in the pilot process. The form is available in hard copy and electronically for upload into the practice solutions electronic medical record system.
To supplement the referral form, an order form for insulin initiation and adjustments (Appendix B) was developed for the programs. This document is an insulin order set and contains all the available insulin therapies on the market along with a space to indicate doses and allow for adjustments. This document is available for patients that are currently active in Diabetes Education Programs, and therefore do not need another referral. It also serves as an educational form for primary care providers who are not as familiar with available insulin therapies. This form was developed to mirror the insulin prescription pad developed by the college of family physicians and surgeons.

Improving access to care also involved developing a self-referral form (Appendix C). This form was mirrored after the common referral form, but simpler for a person to complete. Initially the fax # was on the form, but feedback from individuals with diabetes indicated they did not have access to a fax, so mailing address was added to the form. A checkbox for consent to inform primary care physician was placed on the form to encourage communication between the person's healthcare team. This form is available on the Waterloo Wellington Diabetes web-site.

Standards for Wait-Times

Standards for wait-times were developed according to the *CDA Standards for Diabetes Education Program*. The Canadian standards were not inclusive of all types of diabetes, so advice was sought from experts in the field and the final document was approved by the RCC steering committee. (Appendix D)

Triage Process

1. Referral received by Central Intake
2. Referral reviewed and triaged to appropriate location within region depending on level of care required
3. Data from referral captured into central intake database
4. Diabetes Education Program returns fax with booked appointment date or unable to contact
5. When the patient has been booked for an appointment. The central intake database is updated and a form letter (Appendix E) is generated to the referral source indicating patient name, date of appointment and program location.
6. If a program has made three attempts to contact a patient, the referral will be returned to the central intake. This will be updated in the central intake database and form letter will be generated to both the referring physician and the patient.
7. Communication will be between referral source and program after first appointment is booked (i.e. consult notes and lab results). Plans are underway to develop a consistent communication tool.

Roles and Responsibilities

Data collected from the inventory of services, identified the programs offered at each Diabetes Education program. This data was collated in a chart form (Appendix F) and representatives from all programs were invited to meet and validate that the information was correct. This data supports appropriate triaging. To further clarify roles and to prevent duplication of services, a draft document has been prepared to outline the roles and responsibilities of the programs in the region (Appendix G). It is currently being reviewed and will continue to evolve as we move forward with the roll out of the central intake process. The RCC will continue to support programs as they expand their roles by formalizing a mentorship program established during the pilot.
**Data Collection**

One of the key gaps of knowledge in the LHIN was around number and types of referrals along with the wait times for appointments. Initially the pilot database was set-up to collect demographic data, the reason for referral and A1C as the clinical indicator for patients referred to central intake. 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.

To capture the adoption of the standard wait times, the database has been set-up to collect the reason for referral based on the highest level of importance, which is outlined in the procedure manual. The referring primary care provider can select several reasons for referral, which guides the educator in targeting the education.

Initially the A1c was collected as the clinical indicator, but as more types of diabetes were referred, it was evident that the A1c was not always the best clinical indicator. The database was updated to include due date for women with gestational diabetes, and fasting blood sugar and 2hr OGTT for people with pre-diabetes and newly diagnosed Type 2 diabetes. Establishing clinical indicators will allow the central intake team to monitor and evaluate care pathways and develop/promote best practices to improve patient outcomes.

**Policies and Procedures Manual**

A policy and procedures manual (Appendix H) was developed with 3 components:

1. Guide for health care providers referring to diabetes education programs
2. Guide for Central intake personnel on the processes and procedures involved in receiving referrals, entering in data-base, triaging to programs, sending to programs, follow-up communication.
3. Guide for Diabetes Education Program staff for explaining the central intake process including receiving referrals, booking appointments, communication back to central intake with appointment dates.

**Phase 2: Pilot Project (report previously submitted to MOHLTC)**

**Purpose:**

The purpose of the pilot project was to develop and evaluate a central intake process for diabetes education referrals, with a small number of high-referring physicians with the intent to:

- Trial the common referral form
- Evaluate the triaging criteria
- Develop a centralized Excel data-base for effective data-collection
- Identify types of data to assist with system and program planning
Evaluation of Pilot Project

The common referral form was evaluated:

1. From a referral source perspective:
   a. The ease of completing the form
   b. The ability to upload form to EMR

2. From the CI perspective:
   a. Enough information to triage effectively
   b. Ability to collect data from the referral form for ongoing analysis (ie. Enough fields to check)

3. From the DEP perspective:
   a. Sufficient information fields on form to book appointment and provide education

The process was evaluated, compared to previous referral processes:

1. From a referral source perspective:
   a. The ease of knowing where to send the form
   b. The satisfaction of communication from CI re: patient appointment date

2. From the CI perspective:
   a. Wait time of the process (ie. Receipt of referral to time sent to DEP)
   b. Ability to analyze data for effective system planning ie. Wait times; distribution of patient load

3. From the DEP perspective:
   a. Impact of process on incoming referrals

4. From the RCC perspective:
   a. Effectiveness of maintaining the CI with the RCC
   b. Resource implications for the RCC in maintaining the CI

Sample
A convenience sample of 3 high-referring physicians from the Kitchener/Waterloo/Cambridge area was selected initially to participate in the pilot project. As it became known, an additional 10 physicians requested to start using the form as well. From this area the following diabetes education programs included: Community Diabetes Program –Waterloo Region, Grand River Hospital, Cambridge Memorial Hospital, Riepert Pharmacy and Two Rivers FHT.

As this pilot was not a research project, the timelines for data collection were short—around five months, from May 15 – October 07, 2011

Data Collection and Analysis
All data was collected from incoming referrals and maintained in a centralized Excel data base (WW DRCC) and analysed. Feedback from the physicians and diabetes education program staff, particularly with respect to the common referral form, was incorporated during the pilot. Satisfaction questionnaires (Appendix I) were sent to the physicians and diabetes programs at the end of 5 months for additional feedback.
Results

During the five month pilot period, 307 referrals were received, on average about 61.4 referrals monthly. The response of physicians to the implementation of the centralized intake and standard referral form was uniformly positive.

Evaluation: Common Referral Form
The common referral form was received well by physicians, was self-explanatory, and was easy to complete. It is currently being uploaded to Practice Solutions EMR, which is the most common EMR in this region. Further evaluation will be done with the EMR process. The content of the form allowed for effective triaging of referrals. The check-boxes on the referral form allowed for easy data-entry for analysis, although physicians didn’t always fill out the referral form completely, which is consistent with previous diabetes education referral forms. The insulin order sets allowed the nurses to adjust insulin within their scope of practice, whereas the previous referral forms, developed by programs, were not considered acceptable practice under the College of Physicians and Surgeons and College of Nurses, to cover diabetes educators to adjust insulin under medical directives.

Evaluation: Referral Process
There was consensus amongst all physicians that they have been waiting for a simple process with one form for some time and they were very satisfied with the process. An additional important element in the referring physician’s satisfaction is the receipt of information on the patient appointment within a reasonable period. There was one negative evaluation received from a diabetes education program regarding the process, although that program received a lower number of referrals with this pilot, and may reflect change management challenges.

The time-lag from receipt of referral to being sent to the DEP, was minimal, and the triaging process was effective. From the type of data being collected, it is anticipated that the distribution of patient volume will be managed effectively allowing resources to be maximized and wait-times within standards.

Key Findings and Discussion:

- Centralized Intake Pilot has been found to be a valuable source of data for both the RCC for system planning, and for diabetes programs for educational program planning.

- There has been a steady increase in the number of referrals during the pilot period - May 15 to October 07, 2011. This increase may reflect the physician’s awareness of CI and willingness to implement into practice.

- The Centralized Intake was evaluated as practical and helpful for the majority of physicians.

- There are increasing numbers of physicians requesting to use the common referral form and central intake process

- Incorporating insulin order sets on the referral form allows the diabetes educator to function within their scope of practice
• Change management strategies are important to ensure acceptance by diabetes education programs

• As the CI process expands to service the region, additional resources will be required

Recommendations based on Findings from Pilot Project

• RCC maintain Central Intake process
• Request additional resources be provided to RCC to support the CI process:
  o 1 full-time admin/data entry person
  o 1 full-time certified diabetes educator (ie. Patient Navigator) for triaging.
• Roll-out Central Intake process regionally

Phase 3: Implementation of Central Intake Process

This phase incorporated the changes needed to improve the central intake process and was intended to involve the entire Kitchener/Waterloo/Cambridge area, followed by roll-out to the whole LHIN. A roll-out of the common referral form was commenced, but on advice from the steering committee, was changed to a "soft roll-out" due to limited resources within the RCC. The planned implementation process included the following steps.

Planned process:
Primary Care Engagement

Step 1: Mail out to physician offices informing of new process
  o Letter from Primary Care Lead
  o How to guide – filling out the common referral form
  o How to access referral form for EMR systems
  o Role of Diabetes programs
  o Instructions on when and how to refer
  o Rationale for central intake

Step 2: In-office education
  o Book lunches, breakfast or appointments with offices to address concerns with system re-design
  o Review package contents and instruct on insulin order set and proper use of the referral form

Step 3: Continuing medical education events (hospital rounds)
  o Primary care lead/Endocrinologist consult to:
    ▪ Present on insulin management
    ▪ Present insulin order sets
    ▪ Review common referral form
    ▪ Importance of compliance to system
Step 1 was complete, but Step 2 and 3 have been placed on hold, until further resources are available. The referrals continue to increase without active promotion, as primary care providers are hearing about the process through their colleagues, which indicates acceptance of the process. Currently, the number of primary care providers reached cannot be determined as the process has been random and intermittent.

**Diabetes Education Program Engagement**

**Step 1: Face to Face Presentation**
- Presentation on benefits of Central intake
- Review standards for wait times for education
- How to guide for administrative assistants re: receipt of referral; booking appointment and communication to central intake

Presentations have taken place, but no timelines have been provided. Some referrals have been received for programs outside of the Waterloo Wellington LHIN boundaries, and have been directed accordingly to the appropriate diabetes programs through the Stand up to Diabetes web-site information.

**Communication**

Communication has included verbal communication and info bulletins to steering committee, diabetes programs, primary care providers, and individuals with diabetes. Information is on the web-site, as well as in the spring, fall and winter 2011 RCC newsletters. Other promotion activities have included promotion on the website, meetings with primary care providers and consultations with diabetes programs. Several information documents (Appendix J,K) have been developed and distributed at meetings and events.

Further Communication pieces to be developed
- Brochure – to patient explaining why they are being referred and what to expect from programs
- Brochure – target primary care provider explain when, why and how to refer a patient
- Post-card—to market central intake process; target primary care provider; pharmacies; chiropodists
Phase 4: Evaluation for Assessing the Impact of the Central Intake Implementation -- Results To Date

Effect of Centralized Intake on Number of Referrals
During the seven month period including the five month pilot period, 662 referrals were received. On average, CI processes about 95 referrals monthly. The distribution of these referrals is displayed in Figure 4 and Figure 5.

![FIG.4 - Distribution of referrals by month, May 12 - Dec 12, 2011](image)

![FIG. 5 - Distribution (%) of referrals by destination, May 12 - Dec 12, 2011](image)
There has been an increase in the number of referrals between May 12 and December 12, 2011. Low number of referrals in May and December is primarily due to data collection factor - began on May 12th and ended on December 12th. The increase was more likely due to the increased number of physicians invited to participate in CI. The implementation of CI has been approached gradually. Currently, CI has been adapted by 66 physicians mostly practicing in the Kitchener/Waterloo/Cambridge area. The distribution of referral according to specialty is summarised in Table 1. Endocrinologists were more likely than other practitioners to refer patients through CI, accounting for 64% of all referrals, which is likely due to their close work and familiarity with diabetes system changes.

**Table 1: Patterns of referral according to specialty in recent report**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>No. of referrals</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endocrinologist</td>
<td>425</td>
<td>64.3%</td>
</tr>
<tr>
<td>GP</td>
<td>195</td>
<td>29.5%</td>
</tr>
<tr>
<td>Internist</td>
<td>40</td>
<td>6.1%</td>
</tr>
<tr>
<td>RD</td>
<td>1</td>
<td>...</td>
</tr>
<tr>
<td><strong>Total for May 12-Dec 12, 2011</strong></td>
<td><strong>661</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Just over 66% (n=441) of all referrals were referrals for patients with established diabetes and 32.5% (n=215) were with newly diagnosed diabetes (Figure 6). The following Table 2 shows the distribution of referrals by diabetes type and status. Patients with established type 2 diabetes were accounted for about 65% (n=284) of the total number of referrals (n=660).

---

1 Data was missing
Table 2: Number (%) of referrals through Centralized Intake by diabetes type and status, May 12 – Dec 12, 2011

<table>
<thead>
<tr>
<th>Diabetes type</th>
<th>Established diabetes</th>
<th>New diagnosis</th>
<th>Repeat GDM</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 2</td>
<td>284 (64.5%)</td>
<td>103 (47.9%)</td>
<td></td>
<td>387</td>
</tr>
<tr>
<td>Type 1</td>
<td>141 (32.0%)</td>
<td>5 (2.3%)</td>
<td></td>
<td>146</td>
</tr>
<tr>
<td>Pre-diabetes</td>
<td>1</td>
<td>62 (28.8%)</td>
<td></td>
<td>63</td>
</tr>
<tr>
<td>GDM</td>
<td></td>
<td>27 (12.6%)</td>
<td>5</td>
<td>32</td>
</tr>
<tr>
<td>IGT of Pregnancy</td>
<td></td>
<td>10 (4.7%)</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Pregnant Type 2</td>
<td>8 (1.8%)</td>
<td>1</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Pregnant Type 1</td>
<td>4</td>
<td>1</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Steroid induced</td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>4</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>440(^2)</td>
<td>215</td>
<td>5</td>
<td>660</td>
</tr>
</tbody>
</table>

Referral Practices
The referral practices are summarized in Table 3. Among the referral practices, diabetes education was the most frequently referred, accounting for about 54% of all of referrals, which refers to general education versus more specific reasons for education.

Table 3: Referral practices, May 12 – Dec 12, 2011

<table>
<thead>
<tr>
<th>Referral practice:</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes education</td>
<td>356</td>
<td>53.8</td>
</tr>
<tr>
<td>Self-management of insulin adjustments</td>
<td>80</td>
<td>12.1</td>
</tr>
<tr>
<td>Poor diabetes control</td>
<td>60</td>
<td>9.1</td>
</tr>
<tr>
<td>Insulin start</td>
<td>52</td>
<td>7.9</td>
</tr>
<tr>
<td>Insulin pump</td>
<td>52</td>
<td>7.9</td>
</tr>
<tr>
<td>Carb counting</td>
<td>28</td>
<td>4.2</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
<td>3.0</td>
</tr>
<tr>
<td>Weight control</td>
<td>11</td>
<td>1.7</td>
</tr>
<tr>
<td>Hypoglycaemia</td>
<td>3</td>
<td>...</td>
</tr>
<tr>
<td>Total</td>
<td>662</td>
<td>100</td>
</tr>
</tbody>
</table>

Wait Times
Out of total 662 referrals received through Centralized Intake, over 63% (n=419) were booked with the next available educator during a recent report period. There were 22 referrals to unable to contact and 7 no shows. Table 4 shows mean wait times for appointments with educator within specific time frames (Standard Wait Times\(^3\)). Eighty nine percent of referrals were for non-urgent (14-28 days wait times) patients.

\(^2\) Data on diabetes type is missing (2 cases)
\(^3\) Based on the Canadian Diabetes Association Standard for Diabetes Education in Canada 2009, Structure Standard 1.3, pg. 9; Consensus from Waterloo-Wellington RCC Steering Committee June 9, 2009.
Table 4: Wait Times (in days)

<table>
<thead>
<tr>
<th>Standard Wait Times (in days)</th>
<th>No. of referrals through CI</th>
<th>No. of booked appt. with educator</th>
<th>SUM</th>
<th>Mean</th>
<th>No. of booked appt. within Standard Wait Times</th>
<th>SUM</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Urgent 14-28</td>
<td>589</td>
<td>363</td>
<td>9821</td>
<td>27</td>
<td>228</td>
<td>3140</td>
<td>14</td>
</tr>
<tr>
<td>Urgent 7-14</td>
<td>57</td>
<td>48</td>
<td>338</td>
<td>7</td>
<td>41</td>
<td>165</td>
<td>4</td>
</tr>
<tr>
<td>Urgent 2</td>
<td>16</td>
<td>8</td>
<td>142</td>
<td>18</td>
<td>2</td>
<td>Same/Next day</td>
<td>Same/Next day</td>
</tr>
</tbody>
</table>

Table 5 shows mean wait times for appointments with educator by type of diabetes. Wait Time interval was calculated between specific dates: days between date referral received from physician at Centralized Intake and booked patient appointment date with an educator.

Table 5: Wait Times (WT) by diabetes type, May 12 – Dec 12, 2011

<table>
<thead>
<tr>
<th>Diabetes Type</th>
<th>No. of referrals through CI</th>
<th>No. of booked appt. with educator</th>
<th>%</th>
<th>SUM</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 2</td>
<td>387</td>
<td>235</td>
<td>60.7%</td>
<td>2409</td>
<td>10</td>
</tr>
<tr>
<td>Type 1</td>
<td>146</td>
<td>89</td>
<td>61.0%</td>
<td>1918</td>
<td>22</td>
</tr>
<tr>
<td>Pre-diabetes</td>
<td>63</td>
<td>45</td>
<td>71.4%</td>
<td>888</td>
<td>20</td>
</tr>
<tr>
<td>GDM</td>
<td>32</td>
<td>25</td>
<td>78.1%</td>
<td>181</td>
<td>7</td>
</tr>
<tr>
<td>IGT of Pregnancy</td>
<td>10</td>
<td>9</td>
<td>90.0%</td>
<td>47</td>
<td>5</td>
</tr>
<tr>
<td>Pregnant Type 2</td>
<td>9</td>
<td>5</td>
<td>55.6%</td>
<td>19</td>
<td>4</td>
</tr>
<tr>
<td>Pregnant Type 1</td>
<td>5</td>
<td>5</td>
<td>100.0%</td>
<td>47</td>
<td>9</td>
</tr>
<tr>
<td>Steroid induced</td>
<td>2</td>
<td>1</td>
<td>50.0%</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>4</td>
<td>66.7%</td>
<td>47</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>660</td>
<td>419</td>
<td>63.5%</td>
<td>5562</td>
<td>13</td>
</tr>
</tbody>
</table>

Key Findings
- There are increasing numbers of physicians requesting to use the common referral form and central intake process
- As of December 12, 2011, 66 physicians (16%) of physicians from the Kitchener/Waterloo/Cambridge area have participated in CI
- There has been improvement in the consistency of information received from physicians in terms of completion a standard referral form.
- Wait time standards need to be reviewed to ensure they are reasonable
- DEP program managers need support with data to support program planning

---

4 Data was missing (2 cases)
Challenges
- The delay in full implementation is due to resource implications
- Currently, all referrals are entered into database by outreach coordinator; it’s time consuming to track the referrals

Recommendations
- RCC maintain Central Intake process
- Request additional resources be provided to RCC to support the CI process:
  - 1 full-time admin/data entry person
  - 1 full-time certified diabetes educator (ie. Patient Navigator) for triaging.
- Roll-out Central Intake process regionally

Resources Required
Budget for the development of Central Intake originally was intended to rely heavily on the staff resources already available within the Diabetes Education Programs within the LHIN. The plan was for the RCC to develop and fine-tune the process, then designate a program to assume the role of central intake. Following the implementation of the pilot project, it was recognized that the central intake should remain with the RCC, as it maintains neutrality for triaging; it provides important data for system planning; it requires a data analyst to effectively monitor the system; it requires administrative support to input data, and keep the process flowing.
Conclusion
The central intake process developed in the Waterloo-Wellington region, has been a very successful project to date, with achievement in all the identified objectives. The common referral form has been received well by the region, with desire to expand it further. There is interest from the regional renal program as well as other specialists in utilizing the form for their services as well. The central intake will be well positioned for when the Ontario Diabetes Registry becomes available, as it will be one central access point for education referrals. The self-referral form is just starting to have an impact, and is anticipated to improve access as it becomes more widely known. The central intake is providing valuable data, and will be of more use when it becomes the only entry point for referrals. Challenges identified are the resources to maintain and grow the system. With additional resources, centralized intake for diabetes education referrals will significantly improve system navigation for both individuals and families with diabetes, as well as health care providers in the region.
# Appendix A

## Referral Form

**Central Intake Fax:** 1-866-DIABETS (342-2387) or 519-650-3114  
**Central Intake Phone:** 519-653-1470 x372

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Name</td>
<td>Name of the patient</td>
</tr>
<tr>
<td>Address</td>
<td>Address of the patient</td>
</tr>
<tr>
<td>City</td>
<td>City of residence</td>
</tr>
<tr>
<td>Telephone</td>
<td>Contact number</td>
</tr>
<tr>
<td>Health Card Number</td>
<td>Health card number</td>
</tr>
<tr>
<td>Primary Care Provider Name and Phone Number</td>
<td>Name and contact number of the primary care provider</td>
</tr>
<tr>
<td>M</td>
<td>Male</td>
</tr>
<tr>
<td>F</td>
<td>Female</td>
</tr>
<tr>
<td>DOB (dd/mm/yy)</td>
<td>Date of birth</td>
</tr>
<tr>
<td>Postal Code</td>
<td>Postal code of residence</td>
</tr>
<tr>
<td>Language Spoken</td>
<td>Language spoken by the patient</td>
</tr>
<tr>
<td>Language Barrier</td>
<td>Language barrier for the patient</td>
</tr>
</tbody>
</table>

### Diabetes Assessment

- **Diabetes Education**
- **Weight Control**
- **Foot Care Education**
- **Insulin Pump**
- **Hypoglycemia**
- **Lipid Management**

### Reason for Referral

- **Diabetes Education**
- **Weight Control**
- **Foot Care Education**
- **Insulin Pump**
- **Hypoglycemia**
- **Lipid Management**

### Current Therapy and Medical History

- **Insulin**
- **Antihyperglycemic Agents**
- **History attached**
- **Hypertension**
- **CVD**
- **PAD**
- **TIA/Stroke**
- **Retinopathy**
- **Nephropathy**
- **Exercise restrictions**
- **Neuropathy**
- **Vegetarian**
- **Foot ulcers**
- **Psychosocial**
- **Dyslipidemia**
- **Alcohol Use**
- **Sex Dysfunction**
- **Tobacco Use**
- **Other**

### Lab Results

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
<th>Date</th>
<th>Test</th>
<th>Result</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>FB5</td>
<td></td>
<td></td>
<td>Creatinine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2hr OGTT</td>
<td>T Cho/HDL Ratio</td>
<td></td>
<td>Triglycerides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIC</td>
<td></td>
<td></td>
<td>HDL Cholesterol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACR</td>
<td></td>
<td></td>
<td>LDL Cholesterol</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Signature:**  
**Date:**

**Print Name:**  
**Phone:**

**Address:**

---

For Internal Use Only

First Contact:  
Appointment Dates:
**Appendix B**

**INSULIN ORDERS FORM**

**DIABETES PROGRAM:**

**PHONE NUMBER:**

**FAX NUMBER:**

<table>
<thead>
<tr>
<th>Patient Name:</th>
<th>City:</th>
<th>DOB (dd/mm/yy):</th>
<th>Postal Code:</th>
<th>Language Barrier: □ YES □ NO</th>
<th>Language Spoken:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Insulin Regimen</th>
<th>Insulin Type</th>
<th>Adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Basal</td>
<td>□ Lantus *</td>
<td>□ Adjust insulin dose by 1-2 units or up to 20% prn to achieve CDA CPG glycemic targets of ac 4-7 mmol/L and pc 5-10 mmol/L or individual target of:</td>
</tr>
<tr>
<td>Starting dose:</td>
<td>□ Levemir *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Humulin N</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Novolin *ge NPH</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Bolus</td>
<td>□ Apidra*</td>
<td>□ Adjust insulin dose by 1-2 units or up to 20% prn to achieve CDA CPG glycemic targets of ac 4-7 mmol/L and pc 5-10 mmol/L or individual target of:</td>
</tr>
<tr>
<td>Starting doses:</td>
<td>□ NovoRapid *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Humalog *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Humulin R</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Novolin *ge Toronto</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Premixed</td>
<td>□ Humalog<em>Mix25</em></td>
<td></td>
</tr>
<tr>
<td>Starting doses:</td>
<td>□ Humalog<em>Mix50</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ NovoMix*30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Humulin *ge 30/70</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Novolin *ge 30/70</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Novolin *ge 40/60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Novolin *ge 50/50</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Insulin Pump Therapy</td>
<td>□ Apidra*</td>
<td>□ Adjust insulin dose by 1-2 units or up to 20% prn to achieve CDA CPG glycemic targets of ac 4-7 mmol/L and pc 5-10 mmol/L or individual target of:</td>
</tr>
<tr>
<td>Starting doses:</td>
<td>□ NovoRapid *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Humalog *</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Allow Certified Diabetes Educator to reduce the secretagogue dosage accordingly to avoid hypoglycemia
- Allow Certified Diabetes Educator to adjust carb/insulin ratios for self management of insulin therapy
- Allow Certified Diabetes Educator to dispense insulin samples for teaching and financial need
- Allow Certified Diabetes Educator to order blood glucose or A1c for assessment and evaluation of glycemic control
- Allow Registered Dietitian to perform blood glucose monitoring with a meter

**AUTHORIZING PHYSICIAN INFORMATION**

Print Name: ________________________  Date: ________________________

Signature: ________________________  Ph#: ________________________

Address (or stamp): ________________________

---

24
Appendix C

To attend diabetes education programs in Waterloo-Wellington you must be:
- Have a confirmed diagnosis of Type 1 or Type 2 Diabetes
- Be a resident in the Waterloo-Wellington region or have a family doctor in the region

Please fill out the following information and fax back
- If possible, please attach recent blood work results and/or a list of up to date medications you are taking
- By completing this form you are giving the diabetes education programs the permission to contact your family doctor for more information if required.

Name: _______________________________ Male or Female
Phone Number (Day): ___________________ Phone Number (Evening): ___________________
Email: ________________________________
Address: ________________________________
City: ___________________ Postal Code: ___________________
Date of Birth (dd/mm/yyyy): _______________ Family Doctor: ___________________
When is the best time to contact you? ___________________

If you know, do you have Type 1 or Type 2 Diabetes? ________________

How long have you had diabetes for?
Newly Diagnosed (less than 1 year) or Previously Diagnosed (greater than one year)

Do you have any allergies?  Yes or No If yes, to what? ___________________

Do you take insulin?  Yes or No Do you take other medications for your diabetes? Yes or No

Have you attended Diabetes Education in the past? Yes or No

What is your first language? English/French/Other: ___________________

Is there anything else you would like us to know about you? ___________________

Signature: ___________________ Date: ___________________
Print Name: ___________________
Standards for Access to Diabetes Education

**Urgent (within 48 hours)**
- Uncontrolled Diabetes (BG>20, Ketonuria >1.5)
- Newly Diagnosed Type 1 Diabetes
- Pregnancy with pre-existing Diabetes
- Recent treatment for DKA/HHS
- Crisis that drastically affects individuals ability to manage their diabetes
- Inpatients or ER admission (while in hospital)
- ER discharge follow up

**Urgent (within 1-2 weeks)**
- Gestational Diabetes/IGT in pregnancy
- Inpatient discharge follow-up
- Steroid Induced Diabetes

**Non-Urgent (2-4 weeks)**
- Pre-diabetes
- Type 2 Diabetes
- Established diagnosis—Type 1 Diabetes
- Insulin pump therapy
- Type 2 insulin initiation

Based on the Canadian Diabetes Association Standards for Diabetes Education in Canada 2009, Structure Standard 1.3, pg. 9; Consensus from Waterloo-Wellington RCC Steering Committee June 9, 2009.
December 18th, 2011

Dear,

Thank you for your referral on received on 12/12/2011. Your patient has/had an appointment at GRH on 12/22/2011. If you require further information on the status of your patient please contact the diabetes program.

Sincerely,

Triage Nurse, Central Intake
Waterloo-Wellington Diabetes

<table>
<thead>
<tr>
<th>Contact Information for Diabetes Education Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CMH</strong> Cambridge Memorial Hospital Diabetes Education Centre</td>
</tr>
<tr>
<td>700 Coronation Blvd, Cambridge</td>
</tr>
<tr>
<td>Ph: 519-740-4948 x 2345</td>
</tr>
<tr>
<td><strong>GRH</strong> Grand River Hospital Diabetes Education Centre</td>
</tr>
<tr>
<td>835 King St. W., Kitchener</td>
</tr>
<tr>
<td>Ph: 519-740-4300 x 2622</td>
</tr>
<tr>
<td><strong>C-CHC</strong> Lanark Community Health Centre Community Diabetes Program</td>
</tr>
<tr>
<td>1145 Concession Rd., Cambridge</td>
</tr>
<tr>
<td>Ph: 519-653-1470 x 285</td>
</tr>
<tr>
<td><strong>K-CHC</strong> Kitchener Downtown Community Health Centre Community Diabetes Program</td>
</tr>
<tr>
<td>44 Francis St. S., Kitchener</td>
</tr>
<tr>
<td>Ph: 519-772-0192</td>
</tr>
<tr>
<td><strong>DCG</strong> Diabetes Care Guelph Community Diabetes Program</td>
</tr>
<tr>
<td>83 Dawson Rd., Guelph</td>
</tr>
<tr>
<td>Ph: 519-840-1962 x 351</td>
</tr>
<tr>
<td><strong>Riepert</strong> Riepert Pharmacy Diabetes Program</td>
</tr>
<tr>
<td>98 Highland Rd. W., Kitchener</td>
</tr>
<tr>
<td>Ph: 519-578-1210</td>
</tr>
<tr>
<td><strong>T-R</strong> Two Rivers FHT Community Diabetes Program</td>
</tr>
<tr>
<td>350 Conestoga Blvd., Cambridge</td>
</tr>
<tr>
<td>Ph: 519-629-4615 x 228</td>
</tr>
<tr>
<td><strong>W-CHC</strong> Woolwich Community Health Centre Community Diabetes Program</td>
</tr>
<tr>
<td>10 Parkside Dr., St. Jacobs</td>
</tr>
<tr>
<td>Ph: 519-644-3794 x 233</td>
</tr>
<tr>
<td><strong>GGH</strong> Guelph General Hospital Diabetes Education Centre</td>
</tr>
<tr>
<td>115 Delhi Street, Guelph</td>
</tr>
<tr>
<td>Ph: 519-837-6440 x 2784</td>
</tr>
<tr>
<td><strong>Fergus</strong> Groves Memorial Hospital Diabetes Education Centre</td>
</tr>
<tr>
<td>235 Union St. E., Fergus</td>
</tr>
<tr>
<td>Ph: 519-843-5331</td>
</tr>
<tr>
<td><strong>Palmerston</strong> Palmerston Hospital Diabetes Education Centre</td>
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<tr>
<td>500 Whites Rd., Palmerston</td>
</tr>
<tr>
<td>Ph: 519-323-3333</td>
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<tr>
<td><strong>Mount Forest</strong> Louise Marshall Hospital Diabetes Education Centre</td>
</tr>
<tr>
<td>630 Dublin St., Mount Forest</td>
</tr>
<tr>
<td>Ph: 519-323-3333 x 1336</td>
</tr>
</tbody>
</table>

E-W East Wellington FHT Community Diabetes Program
6 Thompson Cres., Erin
Ph: 519-833-7576 X 7576
Appendix F

Programs Offered in KW/Cambridge Region

<table>
<thead>
<tr>
<th>Group</th>
<th>Individual</th>
<th>High Risk T2</th>
<th>Pre-DM</th>
<th>T2 + Lifestyle Meds</th>
<th>T2 + insulin</th>
<th>T2 Insulin Initiation</th>
<th>T2 + Complex Insulin Regimen</th>
<th>T2 Insulin Pump Therapy</th>
<th>T1 DM</th>
<th>T1 Insulin Pump</th>
<th>Gestational Diabetes</th>
<th>T1 w Pregnancy</th>
<th>T2 with Pregnancy</th>
<th>Pre-conception Care</th>
<th>Post Partum</th>
<th>Steroid Induced</th>
<th>Inpatient Urgent</th>
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Appendix G

Diabetes Care Continuum Roles and Responsibilities

Diabetes Clinic Visit
- Primary care provider quarterly visit
- May involve support staff i.e. RN/RD
- Assess patient’s control and management of chronic disease
- Utilize patient flow sheet as guide sheet
- Management of medications to control blood glucose levels

Diabetes Education Programs
- Diabetes Programs provide basic to intermediate level diabetes education and management services through a model that is needs-based and community-based
- Type 2 Diabetes New Diagnosis and Established
- High Risk Pre-Diabetes Populations
- Specialized Classes
  - Diabetes A, B, C
  - Hypertension Management
  - Lipid Management
  - Foot Care Education
  - Meter Teaching
- Urgent Insulin Starts
- Insulin Management

Diabetes Management Centres
- Diabetes Management Centres provide intermediate to advanced level diabetes education and management services through a model that is needs-based and community-based
- Complex Insulin Management
  - Multiple Daily Injections
  - Carbohydrate Counting
- Hypoglycemia Unawareness
- Urgent Insulin starts
- Insulin Pump Therapy
- Gestational Diabetes Management
- Pre-conceptual counselling
- Pregnant Type 1 and Type 2
- Inpatient Care/Emergency Care Pathway
- Steroid-Induced Diabetes
- Type 1 Adult & Paediatrics
- Transitional Programming
- Continuous Glucose Monitoring
- Partnerships with Renal Programs
- Specialized Classes
Central Intake Procedure Manual

Step 1: Enter information into central intake database from incoming referrals

- Open database located in the central intake folder under the shared drive (CentralIntake_DTB_Valid_Now11.xlsx)

- # of Referrals: The information in this column is to identify if there has been more than one referral on a patient. In most cases the number entered into this column is “1” unless there has been a previous referral.

- Date Rec’d: Is the date the fax was received at central intake not the date of the signature

- OHIP #: Includes version code when present. If no OHIP number is provided please complete the cell with “9999”.

- Last Name, First Name: Enter information from referral. It is when you are filling in the name that duplicates may show as the cell will try to automatically populate with information provided earlier

- DOB: Date of Birth is captured by entering Day/Month/Year

- Sex: selection of M or F is a drop down menu and not manual entry

- Postal Code: Enter the first three characters of the postal code i.e. “N2K”

- Phone #: Enter the patients number with no spaces or characters as the cell will automatically format into phone number

- Language Spoken: In most cases complete the cell by entering “E” for English unless otherwise specified on the referral

- Referral source: Is the name of the health care provider referring the patient for service. If it is a new referring hcp please enter the information into the file named PhysicianReferralList.xlsx found in the central intake folder on the shared drive.

- Referring source fax number: It may be located on the fax received, if not please search for fax number using first the master list of referring physicians and then the CPSO website (www.cpsso.on.ca). Please be sure to update the master list of referring physicians.

- Status: Is a drop down menu. This information should be completed by the referring source
  - Established >1 yr
  - New diagnosis <1 yr (This applies for pre-diabetes and GDM cases that are not repeat)
  - Repeat GDM

- Diabetes type: Is a drop down menu. This information should be completed by the referring source
• Delivery Date is the clinical indicator for GDM and Repeat GDM referrals. This can usually be found in at the top of the referral under diabetes assessment if not there check the lab work.

• Reason for referral is a drop down menu. If the referring primary care providers has selected multiple reasons please select the most clinically important according to the below diagram from 1 to 4.

1. Insulin Pump
   - Insulin Start
   - Self management of Adjustments

2. Carb-Counting
   - Hypoglycemia
   - Poor Diabetes Control

3. Diabetes Education

4. Weight Control
   - Foot Care Education
   - Lipid Management
   - Other

• A1C is the clinical indicator for Established Type 1 and Type 2 Diabetes and can be found in the lab results section of the referral or in the attached lab work. If on the lab work it can be found as HbA1c as a percentage. If the A1c is recorded as a decimal (i.e. 0.078) please record in the database as a percentage by multiply by 100 (i.e. 7.8)

• FBS and Glucose 2HR are clinical indicators for pre-diabetes and newly diagnosed patients. This can also be found under the lab results section or on the attached lab work.

Step 2: Check for duplicate referrals
• Search database for any other referrals received on the individual entered. If a referral already exists on this patient than send the new referral to the care centre indicated on the previous record.

Step 3: Have the Patient Navigator triage the referral to appropriate care centre

Table 1: Legend for Diabetes Education Programs (Care Centres)

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Diabetes Program</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>CMH</td>
<td>Cambridge Memorial Hospital DEC</td>
<td>Cambridge</td>
</tr>
<tr>
<td>GRH</td>
<td>Grand River Hospital DEC</td>
<td>Kitchener</td>
</tr>
<tr>
<td>Groves</td>
<td>Groves Memorial Hospital DEC</td>
<td>Fergus</td>
</tr>
<tr>
<td>Louise</td>
<td>Louise Marshall Hospital</td>
<td>Mount Forest</td>
</tr>
<tr>
<td>Palm</td>
<td>Palmerston Hospital</td>
<td>Palmerston</td>
</tr>
<tr>
<td>GGH</td>
<td>Guelph General Hospital</td>
<td>Guelph</td>
</tr>
<tr>
<td>DCG</td>
<td>Diabetes Care Guelph</td>
<td>Guelph</td>
</tr>
<tr>
<td>C-CHC</td>
<td>Langs Community Diabetes Program</td>
<td>Cambridge</td>
</tr>
<tr>
<td>K-CHC</td>
<td>Kitchener Downtown Diabetes Program</td>
<td>Kitchener</td>
</tr>
<tr>
<td>W-CHC</td>
<td>Woolwich Community Diabetes Program</td>
<td>Woolwich</td>
</tr>
<tr>
<td>TR-FHT</td>
<td>Two Rivers Community Diabetes Program</td>
<td>Cambridge</td>
</tr>
<tr>
<td>GV-FHT</td>
<td>Grandview Family Health Team</td>
<td>Cambridge</td>
</tr>
<tr>
<td>EW-FHT</td>
<td>East Wellington Community Diabetes Program</td>
<td>Erin</td>
</tr>
<tr>
<td>UG-FHT</td>
<td>Upper Grand Family Health Team</td>
<td>Fergus</td>
</tr>
<tr>
<td>Riepert</td>
<td>Riepert Pharmacy</td>
<td>Kitchener</td>
</tr>
</tbody>
</table>
• For Internal Use Only Box → write in the abbreviation of the care centre you are triaging the referral to. Mark the paper with the appropriate colour to indicate urgency
  ○ Red → Urgent 2
  ○ Yellow → Urgent 7-14
  ○ Green → Non-urgent 14-28
• Return triaged referrals to administrative assistant for distribution, filing and data completion

Step 4: Fax and record care centre referral is triaged to
• Fax referral, corresponding lab work and patient history to care centre indicated
• Update the database with triage information
• Standard Wait Times (in days) → This is a drop down menu. If the referral is marked with Red select Urgent 2; if the referral is marked with Yellow select Urgent 7-14; if the referral is marked with Green select Non-urgent 14-28.
• Sent to → Select centre from drop-down menu

Step 5: File referral under appropriate centre
• Large centres have three folders and the referrals should be filed under by urgency.

Other Triage Considerations
1. Grandview FHT → if primary care provider is a team member at Grandview the referral should be triaged to this centre. Pay special attention to referrals that come from specialists where the patient lives in Cambridge (for example, Dr. Liutkus, Kumar, Pandey etc.)
   • Dr. S. Alavi
   • Dr. H. Arora
   • Dr. S. Arora
   • Dr. K. Bennett
   • Dr. A. Maharshwari
   • Dr. J. Bras
   • Dr. C. Cameron
   • Dr. R. Davis
   • Dr. R. Johnstone
   • Dr. J. Main
   • Dr. A. Monkhouse
   • Dr. R. Russak
   • Dr. J. Samolick
   • Dr. P. Trudel
   • Dr. E. Yakoub
   • Dr. A. Young
   • Dr. T. Samolick

2. Two Rivers FHT → if primary care provider is a team member at Two Rivers the referral should be triaged to this centre. Pay special attention to referrals that come from specialists where the patient lives in Cambridge (for example, Dr. Liutkus, Kumar, Pandey etc.). Also patients should be referred to Two-Rivers when the Community Programs have a wait time.
   • Dr. Chyphan
   • Dr. Light
   • Dr. A. Pandey
   • Dr. V. Thomason
   • Dr. A. Attalla
   • Dr. P. Benajmen
   • Dr. I. Costin
   • Dr. K. Halkinson
   • Dr. T. Hughes
   • Dr. M. Komflass
   • Dr. L. Siddall
   • Dr. J. Skillman
   • Dr. D. Whan
   • Dr. T. Williams
   • Dr. S. George
   • Dr. B. Snyder
   • Dr. Ashton
   • Dr. Geddes
   • Dr. Kolak
   • Dr. Kunanan
   • Dr. Limmender
   • Dr. Pharm
   • Dr. Springdale

3. Physicians must have privileges at Cambridge Memorial Hospital in order to refer a patient for services at the diabetes program. Please see below for a list of physicians without privileges at CMH
   a. Chaudhry

4. Woolwich Community Health Centre has a catchment area → only patients residing in the Woolwich, Wellesley and Wilmot areas will be accepted at this site.
Step 6: Update booked appointments and inform referral source (see picture on pg. 6)

- Date booked → enter the date indicated in the for internal use only box into the column
- Letter sent to referral source → place an “x” in this cell to indicate that a letter has been sent
- Write down the row number minus one on a piece of paper. Keep this number to generate the letter informing referral source
- If the referral comes back as unable to contact, declined or later date requested update the Date Booked Comments which is a drop down menu. Place an “x” in the cell under letter sent to referral source column and write down row number minus one.
- Save and close database
- Open Word and locate file Letter to Referral Source_2.docx in the central intake folder under the shared drive
- Select “Yes” when the dialog box comes up to warn that this is connected to a data source
- Change the date to the current date
- Select “Mailings” from the top of the menu bar
- Under “Preview Results” there is a window with a number. Enter the first number you have written down into the window and hit enter (remember the row-1 → i.e. the information was on row 545 so the number you should have written down was 544)
- Select print
- Repeat for all the referrals that have dates booked.
- If no appointment was booked indicate why and send
- Fax to the referral source (fax numbers are automatically populated on the letter beside the referral source name)
- After letter has been sent remove referral from filing system and place in completed pile (or shred – as appropriate)

Check voicemail *98 ext 372 password 2580
Appendix I

Compared to the previous system of patient referral to Diabetes Education Centres, please rate the following statements:

1. The central intake process is:
   - Much more difficult
   - Slightly more difficult
   - Same
   - Slightly Easier
   - Easier

2. The central intake process directs patients to the appropriate diabetes education services:
   - Never
   - Occasionally
   - Most of the time
   - Always

3. The central intake process saves me time in selecting diabetes education services:
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

4. The communication from the central intake provides me with timely information on the date/location of patient appointment:
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

5. In completing the common referral form, it is:
   - Much more difficult
   - Slightly more difficult
   - Same
   - Slightly Easier
   - Easier

6. The sections on the referral form probed for the appropriate information:
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

7. I am more likely to refer for diabetes education and management services:
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

8. Overall, your experience with centralized referral services is:
   - Very dissatisfied
   - Dissatisfied
   - Neutral
   - Satisfied
   - Very Satisfied

Do you have any other comments? 

__________________________________________________________________________________________________

__________________________________________________________________________________________________

__________________________________________________________________________________________________
INFOBulletin

Keeping health care providers informed of changes to diabetes care in your region

To: Primary Care Providers
Published By: Diabetes Regional Coordination Centre, Waterloo-Wellington
Date Issued: November 1st, 2011

Re: New Central Referral Process for Diabetes Education Available!

Changes to the Referral Process

The Waterloo-Wellington Diabetes Regional Coordination centre is launching the Centralized Referral Form as the first phase for streamlining the process for diabetes referrals and education. There is now one standardized referral form to complete and submit in order to refer your patients for diabetes education and management in Waterloo-Wellington.

Once received at the central intake, the referrals will be triaged to the closest centre to the patient’s home address and to the centre most appropriate for the required level of care. The referral information will be then forwarded to the selected centre. The centre will contact the patient to book an appointment, which will be communicated back to the primary care provider. If the centre is unable to reach the patient after three attempts the patient will be contacted by mail and advised to contact the centre for booking.

In addition to helping streamline referrals for diabetes education and management, the Central Intake system will be used by the Regional Coordination Centre to monitor patient wait times and maximize resources.

How to Refer a Patient

- To refer patients for diabetes education and management – please use the attached common referral form or request the electronic form for your EMR system by emailing Sarah at sarahc@langs.org

- Physicians will be required to provide contact information anywhere on the form in order to receive communications.

- When referring patients – please complete all sections on the referral (to the best of your ability) in order for the patient to be triaged appropriately and seen within the Waterloo-Wellington Standard for Wait Times

- Once the form has been completed, please fax referral to 1-866-DIABETS (342-2387)

Waterloo Wellington DIABETES
A Streamlined Process for Diabetes Education Referrals

Central Intake, as a key deliverable from the Ministry of Health and Long-Term Care under the Ontario Diabetes Strategy, will lead to improvements in the navigation of the system, data collection, wait times and patient load distribution.

What are the objectives of central intake?

- Streamline the referral process
- Help build and maintain capacity
- Improve access to the appropriate care; and
- Standardize data collection in order to improve quality information, monitor outcomes and implement appropriate changes.

What are the benefits of central intake?

- A single point of contact for all primary care providers and patients to access diabetes education
- Simple and more timely access to information regarding the status of referrals
- Better consistency and quality in reporting for accessing capacity
- Fluid role definitions for complex and community programs to meet the changing needs of the population
- Stronger flow between all care providers leading to better patient care and use of resources
- Valid data that will strengthen advocacy measures for increasing resources
- Create and evaluate benchmarks for all levels of care

What are the future directions for central intake?

- To have all referrals within the Waterloo-Wellington LHIN processed at one central location
- To develop an e-process for centralized booking and referrals
- To integrate system into the Diabetes Registry to allow for better communication of patient information