Waterloo Wellington Diabetes Central Intake

2023-24 Year End Report

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Contents

Introduction

This annual report provides a summary of activities to date for Diabetes Central Intake and Resource Clinician activities, and the Waterloo Wellington Diabetes website www.waterloowellingtondiabetes.ca. Langs receives base funding from Ontario Health to offer these regional services to support the coordination of diabetes care for the region of Waterloo Wellington. These services support:

1. Residents (patients and families) with easy access to diabetes care;
2. The region in system planning for diabetes care by monitoring volume and wait-times; and,
3. Health care providers in the region to enhance their knowledge of diabetes management.

Detailed reports on the volume of referrals and referrers, as well as the types of referrals, are submitted quarterly. This year-end report summarizes activities and successes from the past fiscal year of 2023-24.

At all times, our work continues to be data driven and patient focused. We continue to emphasize our efforts in alignment with our tagline, ***Improving Access, Improving Knowledge and Improving Health***. We participate regularly with various community partners in the region and beyond and exhibit at many community events, promoting our services both virtually and in person.

Diabetes Central Intake (DCI)

Diabetes Central Intake continues to provide a streamlined process for referrals to Diabetes Education Programs and specialists. This year remained challenging for the team due to growing referral volumes.

For the year 2023-24, the volume continues to rise. DCI has processed 9,099 referrals for diabetes education (Table 1) from existing referrers and an additional 363 new referral sources (Table 2). We received 331 self-referrals (Table 3), and, in addition, 2,889 referrals have been directed to specialists (Table 4), making a total of 11,988 referrals processed.

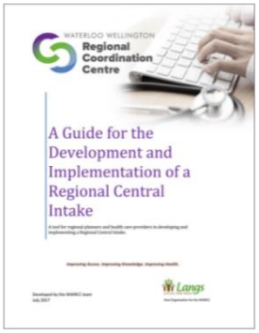
We continue to promote the use of eReferral with all physicians. We anticipated that continued virtual offerings would increase eReferral use, but the number of eReferrals has plateaued at 31% of referrals, remaining consistent with previous years. Within the limitations of the current state of the provincial RFB, we encourage all referrers who currently fax referrals to consider eReferral and expect to see the number of users to increase as additional service offerings come on to Ocean. There were 138 new eReferral sources and 2,865 eReferrals this year. The number of diabetes programs and specialists using Ocean remain consistent regionally, with continued conversations to support further uptake.

1,052 referrals have been received from area hospitals, which is up a drastic 27% from last year, a volume impact from the shift of the hospital program in Cambridge into the community at Langs. A great amount of time is invested by our triage nurse following up on discharge plans for patients and arranging timely appointments for people discharged from hospitals. We continue to capture the number of “Inpatient Late Discharge” referrals to ensure that the amount of follow-up required by our triage nurse is accurately captured in the number of referrals from hospitals.

331 self-referrals have been processed (Table 3), which represents a rise from last year. Increasing the number of self-referrals has been a focus of combined efforts with the KW4 OHT this past year, as they have been promoting and sharing resources about our self-referral process at local educational fairs.

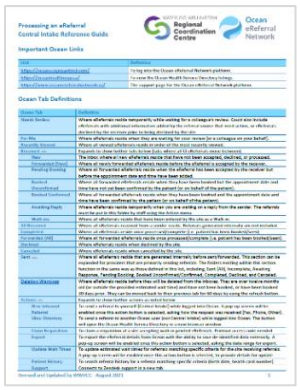
Other regions, both within Ontario and across Canada, continue to request direct consultation from us on the "how to" of developing a central intake program (not only for diabetes but other specialities). We are actively involved with offering support to several regions in the development of central intake processes, as they work towards a regional model. We continue to share the guide we created to support others in developing and implementing a regional central intake service. This guide was requested 9 times last year and led to follow-up conversations and connection with every share. The guide continues to be available by request from our RCC website (www.wwrcc.ca) (Figure 1).

Figure 1: A Guide for the Development and Implementation of a Regional Central Intake



Additionally, we continue to update and share a 13-page guide on how to process an Ocean eReferral from our central intake perspective. We have shared it with other regions, as well as within our own region to assist with training on Ocean eReferral (Figure 2).

Figure 2: Processing an eReferral Central Intake Reference Guide (with Ocean™)



We also continue to support Southwest region's coordinated access initiative with receiving/sending referrals to them, despite no further funding for this. To date, we have processed 3,976 referrals to the Southwest region, with 349 having been sent to London this year.

Our Successes

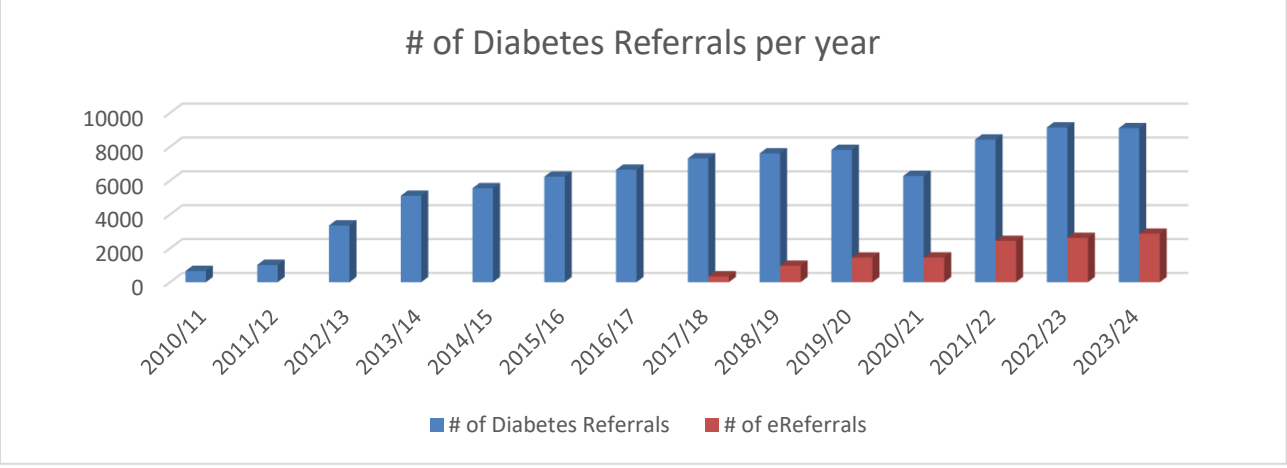
As is consistent for the last many years, we do not receive provincial data on the prevalence and incidence of diabetes locally, but from national and international data, the prevalence continues to rise. Despite an increasing diagnosis rate, we continue to demonstrate the following successes in our region:

- No one is “lost in the system”
- Increased number of people referred and followed for education with existing resources
- People are accessing care close to home and can get connected by sending self-referrals
- We can get people connected through referrals to other provinces and countries
- We have standardized regional wait-times established for benchmarking, with wait times for diabetes education programs being consistently within target
- Continued best utilization of community-based programs and hospital programs
- Use of pharmacies with Certified Diabetes Educators (CDEs) to offer after-hours education
- Streamlined access to diabetes specialists and increased retinopathy screening regionally
- Increased and targeted prevention

A Closer Look at our Program

The following data offers a detailed look at our work to date. As mentioned above, the volume of incoming referrals continues to rise, year over year. Not only do the volume of referrals sent within our region continue to rise, so too are referrals sent to programs and specialists outside our region. The following table (Table 1) demonstrates the volume of referrals over time to DCI.

Table 1: Number of Diabetes Referrals to Diabetes Central Intake



We continue to see growth in the number of referrers submitting referrals (Table 2). We have worked on increasing awareness of the self-referral pathway over the last year alongside the KW4 OHT team and have seen an increase in the number of self-referrals (Table 3). We also utilize the self-referral process if individuals phone our office to inquire about accessing services. Our self-referral form is also available on-line from our Waterloo Wellington Diabetes website https://www.waterloowellingtondiabetes.ca/Public-Referrals.htm and allows the people to submit the form electronically as an Ocean eReferral (Figure 3). The referral then follows the same process of being triaged and sent electronically to the appropriate program for booking directly with the patient.

Table 2: Number of referral sources per year

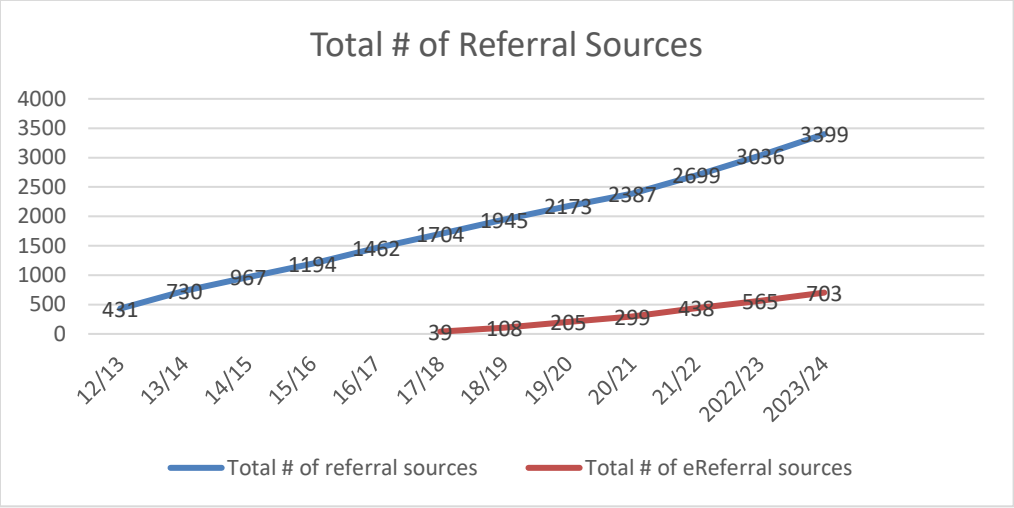


Table 3: Number of Self-Referrals

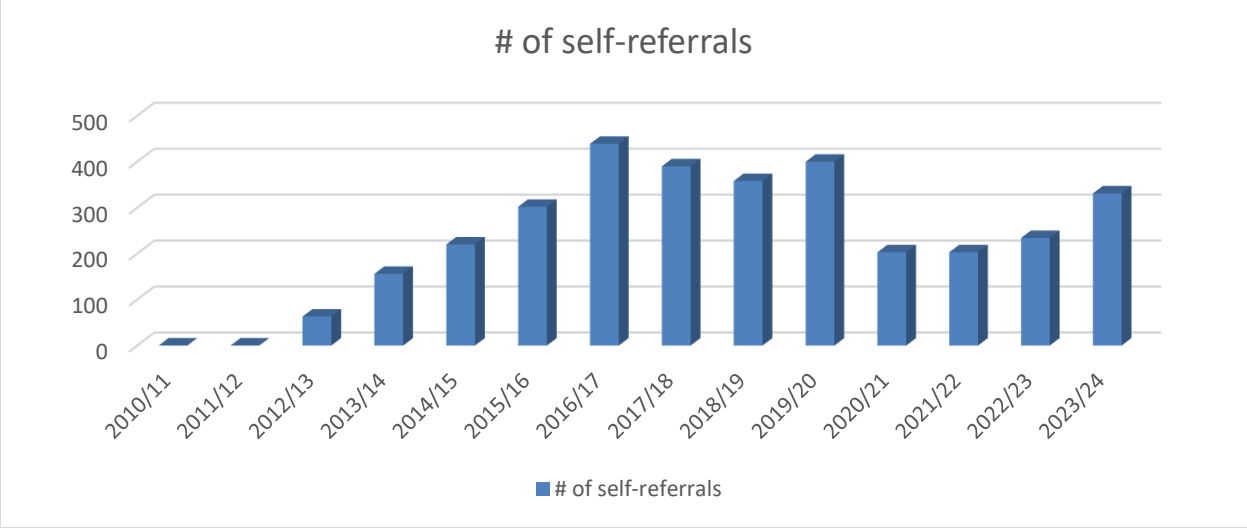
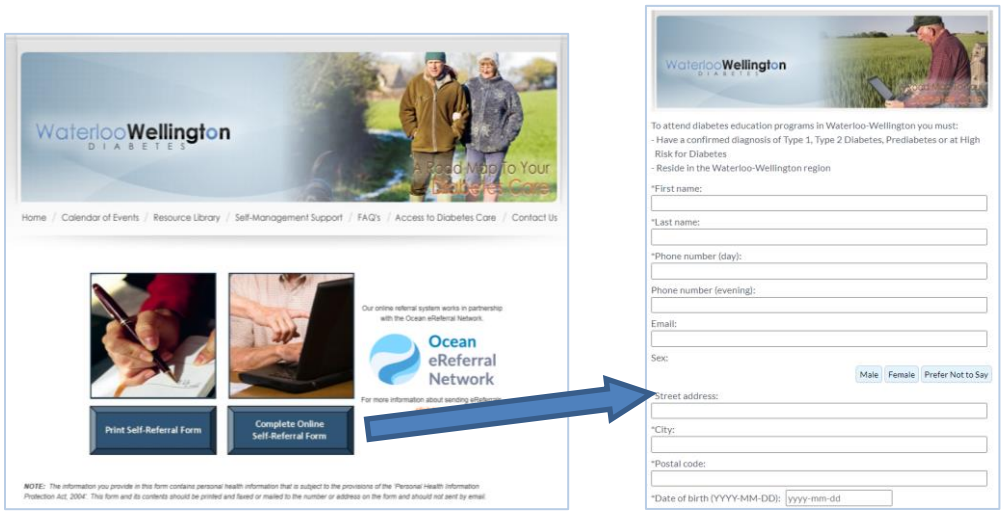
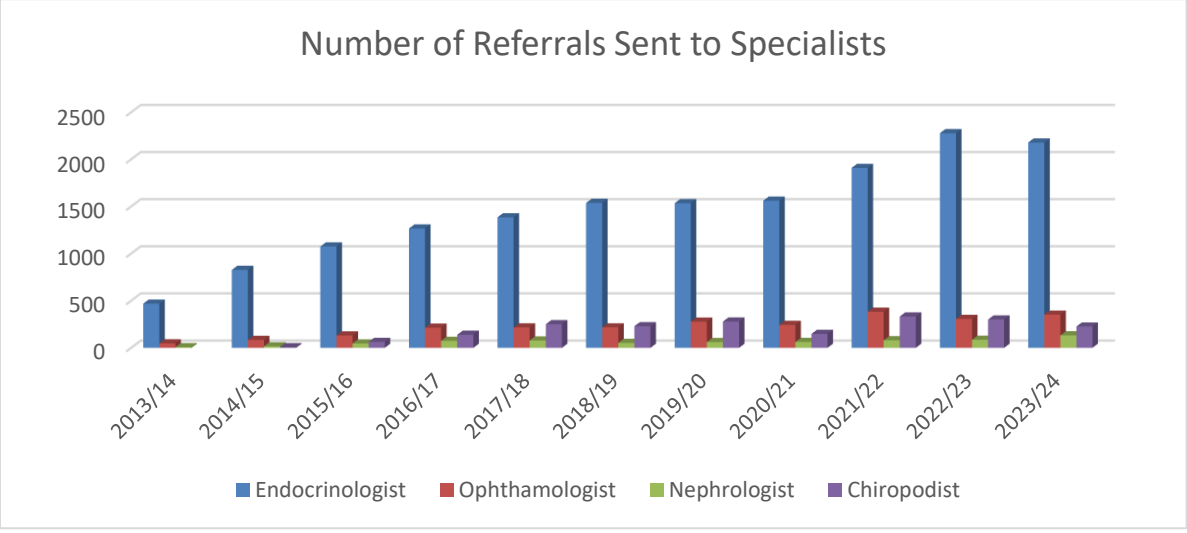


Figure 3: Screenshots of website page and self-referral form



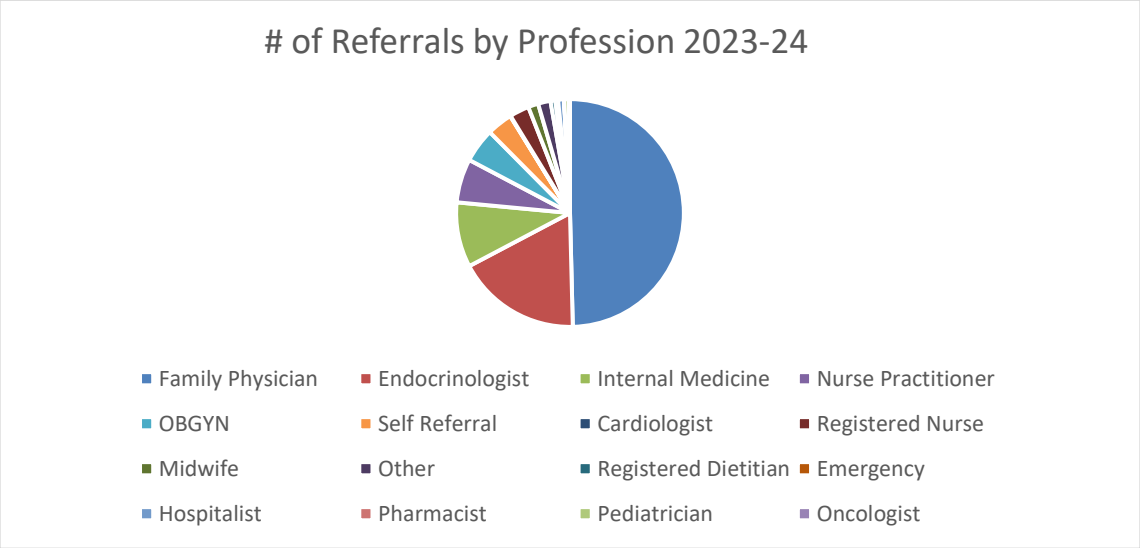
DCI has streamlined coordination and access to specialized diabetes care by providing specialist consults on the same referral form (paper or electronic) for endocrinologist, ophthalmologist, nephrologist, chiropodist, and wound care specialists (Table 4). We facilitate referrals to the Home and Community Care Wound Care Clinic and have agreements with a select number of chiropodists in our region who receive referrals from us for chiropody services, although this is a fee-for-service model and is dependent on the person's ability to pay. This year, with access to free chiropody services remaining an issue in our region, we have added a new referral pathway for improved access to *Medically Supervised Wound Care Management*. Four specialists have signed on to accept referrals from Central Intake in Cambridge, Guelph, and Kitchener-Waterloo. We will implement reporting and tracking of the uptake and need for these referrals in the new fiscal year.

Table 4: Number of Referrals Sent to Specialists



We continue to see an increase in our referrers from within our region and outside our region. As of year end, we have a total of 3,399 referral sources with 50% of total referrals from primary care (Family Physicians and Nurse Practitioners) and 18% from endocrinologists. The table below represents the number of incoming referrals sorted by profession of referrer over the last year (Table 5).

Table 5: Number of Referrals by Referrer Profession



We continue to see an increase in referrals from hospitals, except for Guelph General Hospital where their diabetes educators facilitate transition of residents from hospital directly to their Diabetes Education Program. The following tables illustrate the number of referrals from hospitals (Table 6) and the number of referrals by department (Table 7) each year, including those referrals for "Inpatient Late Discharge" that represent additional follow-up required by our triage nurse. We saw a large increase in referrals into the community from CMH over the past year with their program transitioning to Langs CHC. Previously they may have handled certain referrals internally, but we now see the transition into the community through a large increase in referrals coming from the hospital.

Table 6: Number of Referrals by Hospital by Year

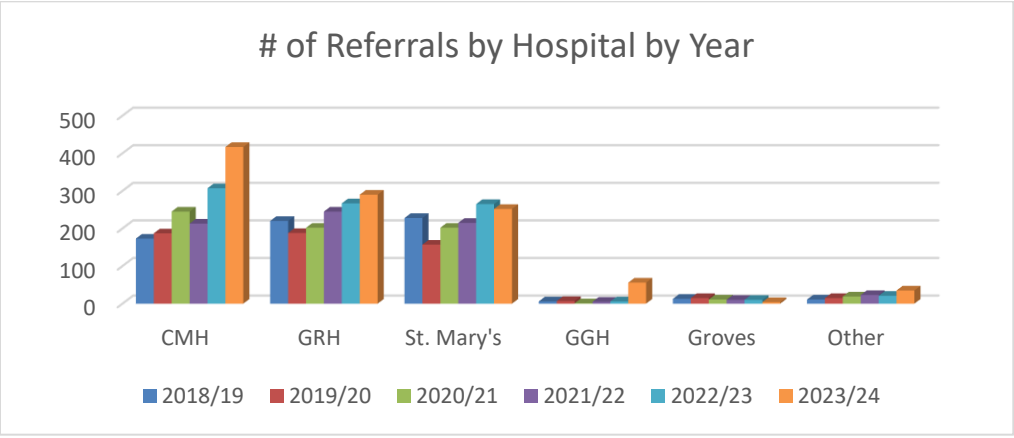
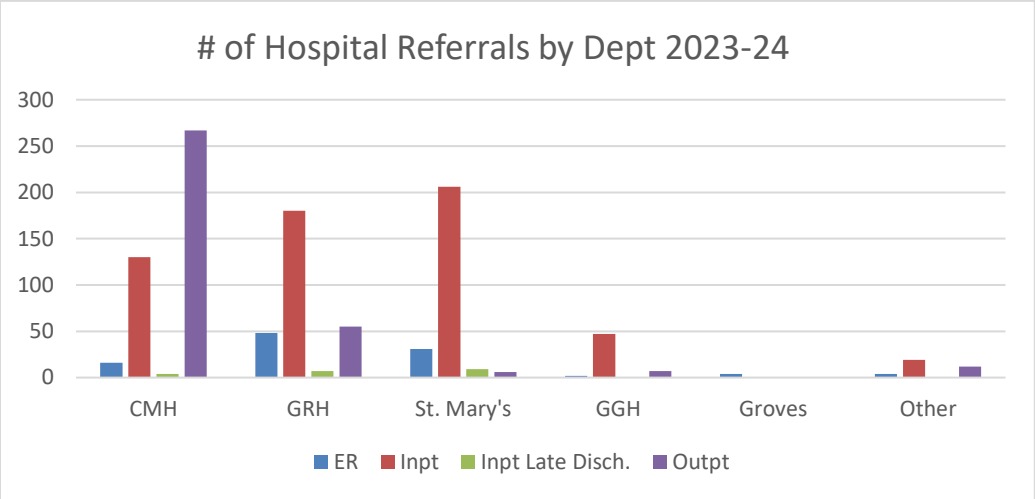


Table 7: Number of Hospital Referrals by Department 2023-2024



DCI also continues to receive referrals from, and direct referrals to, programs outside of our regional geographical area in Ontario. We continue to be consulted by other regions and provinces with inquiries on how to implement diabetes central intake. The following data provides the breakdown of referrals sent to, and received from, other regions and outside of our province (Table 8).

Table 8: Number of Referrals Sent to and Received from Inside and Outside of WWLHIN for 2023-24

Region (previous LHIN boundaries)	# of referrals sent to	# of <u>new</u> referrers from
Erie St. Clair	8	0
South West	563	48
Waterloo Wellington	8,459	213
Hamilton Haldimand Niagara Brant	36	9
Central West	6	7
Mississauga Halton	5	43
Toronto Central	2	20
Central	0	7
Central East	4	9
South East	0	0
Champlain	6	2
North Simcoe Muskoka	3	3
North East	3	1
North West	0	0
Other Province	4	2
TOTAL	**9,099**	**364**

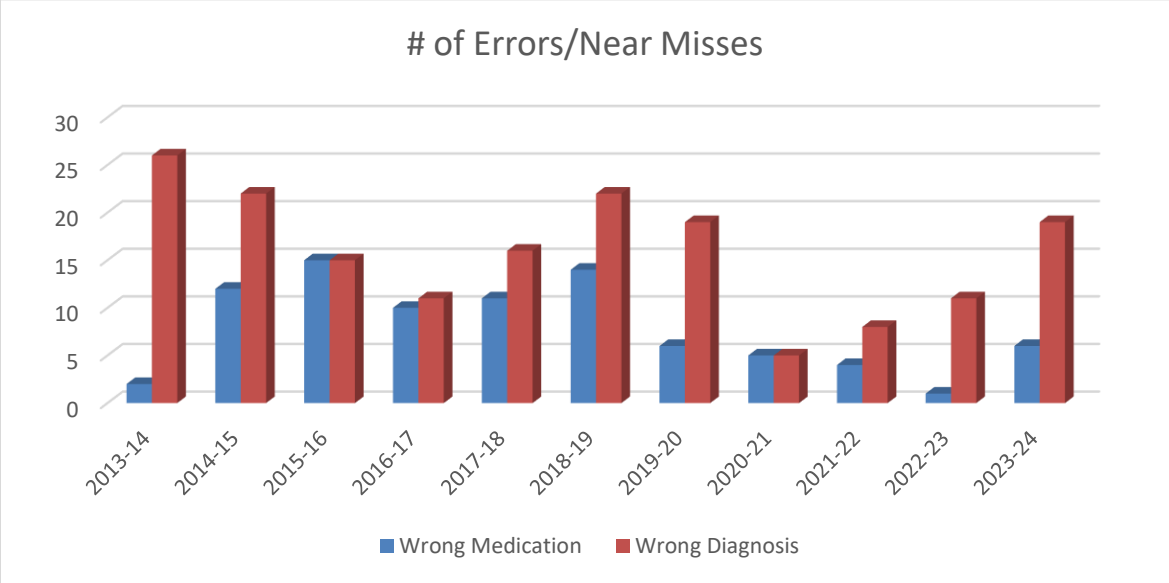
Triaging

The role of the clinical triage nurse/patient navigator is essential in making Diabetes Central Intake a success. The triage nurse is an experienced Certified Diabetes Nurse Educator (CDE), who reviews every referral and determines the urgency of the referral and where to send the referral. The triage nurse is in regular contact with primary care providers, Endocrinologists and Diabetes Educators in the DEPs to ensure excellent patient navigation and coordination. They connect with hospital units to determine when patients are being discharged from hospital to facilitate appropriate follow-up with Diabetes Education Programs and regularly use *ClinicalConnect* to obtain additional data to support triaging.

The expertise of the triage nurse has led to identification of cases that were previously misdiagnosed (i.e., patient identified as having type 2, when they had type 1 diabetes). This has prevented many patients from progressing to diabetic ketoacidosis, a serious life-threatening condition. The triage nurse has also identified cases where patients were prescribed the wrong medication and/or the wrong dosage. Clinical expertise and intervention has provided safe, effective, and efficient service, preventing individuals from ending up in emergency departments or requiring hospital admission. The following table demonstrates the number of misdiagnoses/incorrect medications identified by DCI (Table 9).

The triage nurse also tracks system issues that reflect larger scale issues for managing diabetes in the region, such as diabetes programs that are declining referrals or lacking the services necessary to provide quality care, often due to not having a chiropodist or social worker on staff. This year there were 7 examples of system issues identified in our region.

Table 9: Number of Missed Diagnoses and Incorrect Medication/Dosages

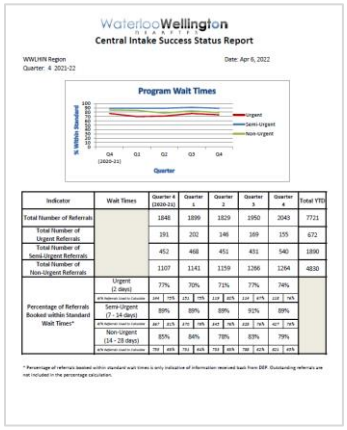


Monitoring of Data

Wait Times

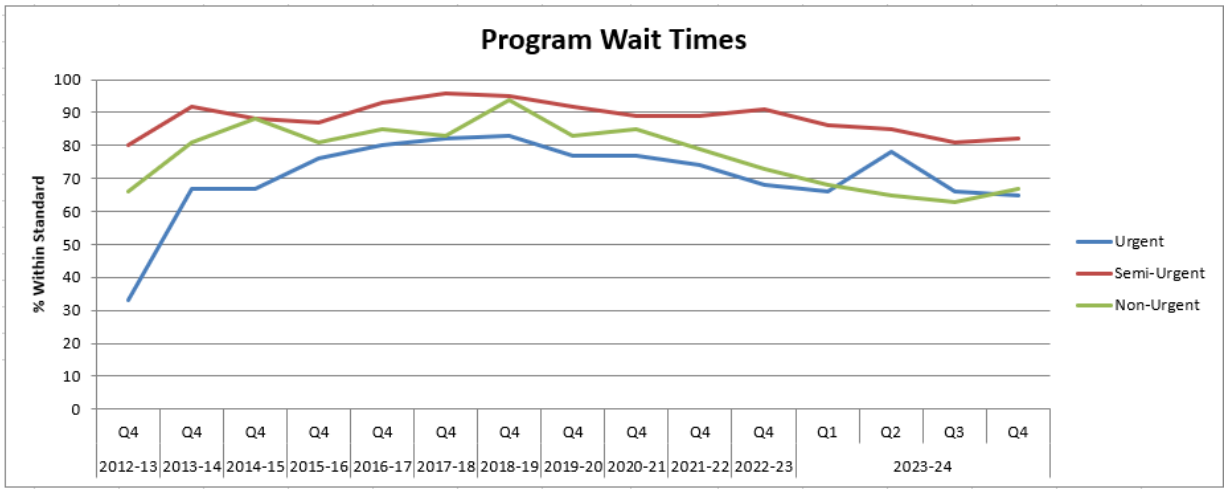
DCI monitors wait times for diabetes education programs and reports to the DEP program managers and Ontario Health West quarterly (Figure 4). This monitoring is not intended to be punitive, but to provide support to managers to review and revise their programming accordingly. With the increasing prevalence of diabetes, and the need for ongoing follow-up to support effective self-management of diabetes, programs must identify more effective and efficient methods of program delivery. This DCI service of monitoring and reporting supports programs in offering more effective programs.

Figure 4: Copy of Regional Success Status Report



Wait times are consistently within 75-90% of the benchmark wait times for semi-urgent referrals and non-urgent referrals; urgent referral booking is sitting around 65% within the benchmark wait times (Table 10). These wait times reflect new referrals and not ongoing follow-up care provided by the programs to support individuals. Follow-up visits and active clients are captured in DEP reporting.

Table 10: Program Wait times for Waterloo Wellington Over Time



The volume of urgent and semi-urgent referrals has been consistently rising with the volume. This places an added stress on diabetes programs, as these individuals need to be seen within 2 or within 7-14 days, respectively, and can require more frequent or ongoing follow-up (i.e., referrals for GDM, steroid-induced diabetes), which isn't reflected in the data from DCI.

The following tables demonstrate the breakdown of urgent/semi-urgent/non-urgent for the region (Table 11) and the change in urgency over the past three years (Table 12).

Table 11: Volume of Referrals by Urgency

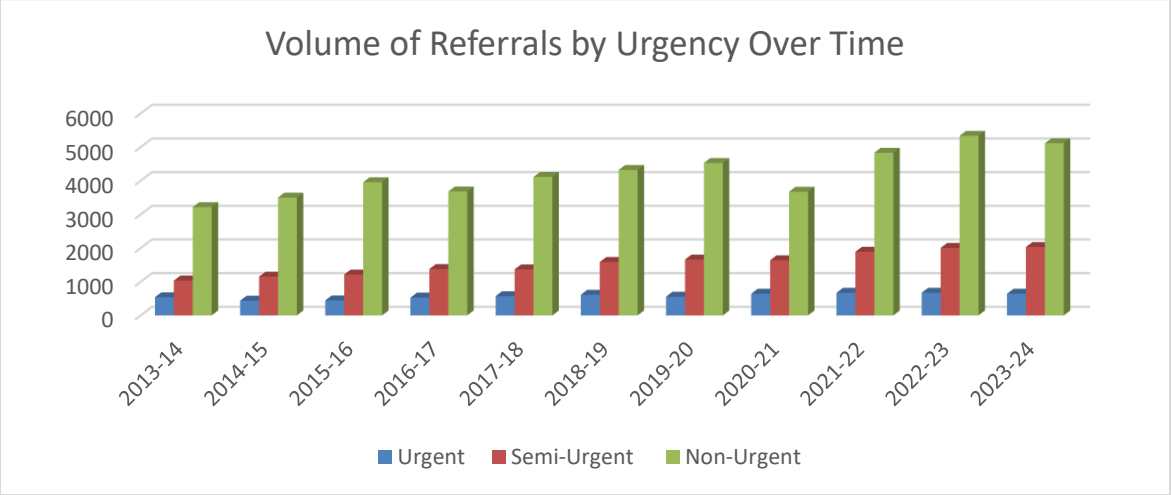
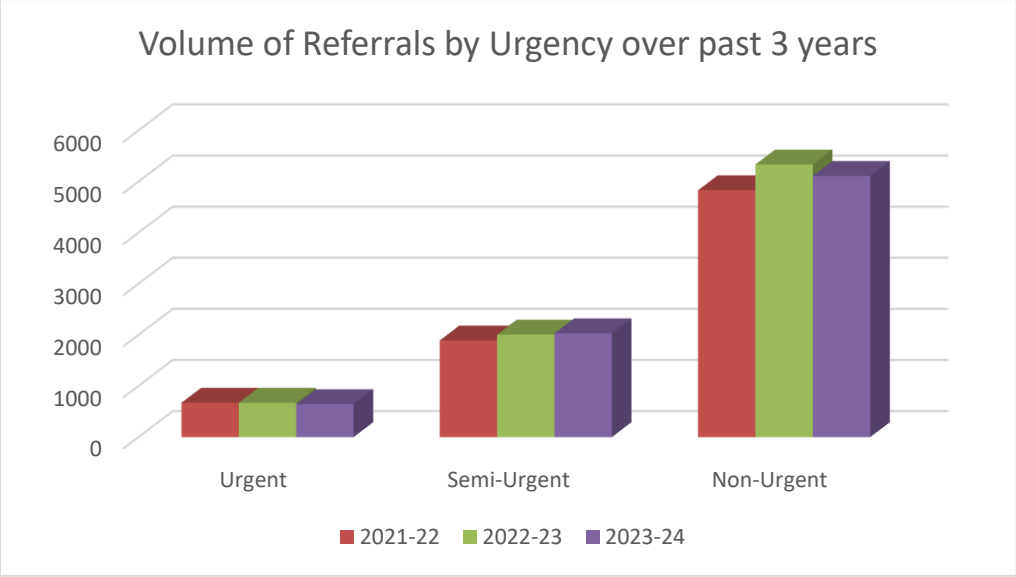
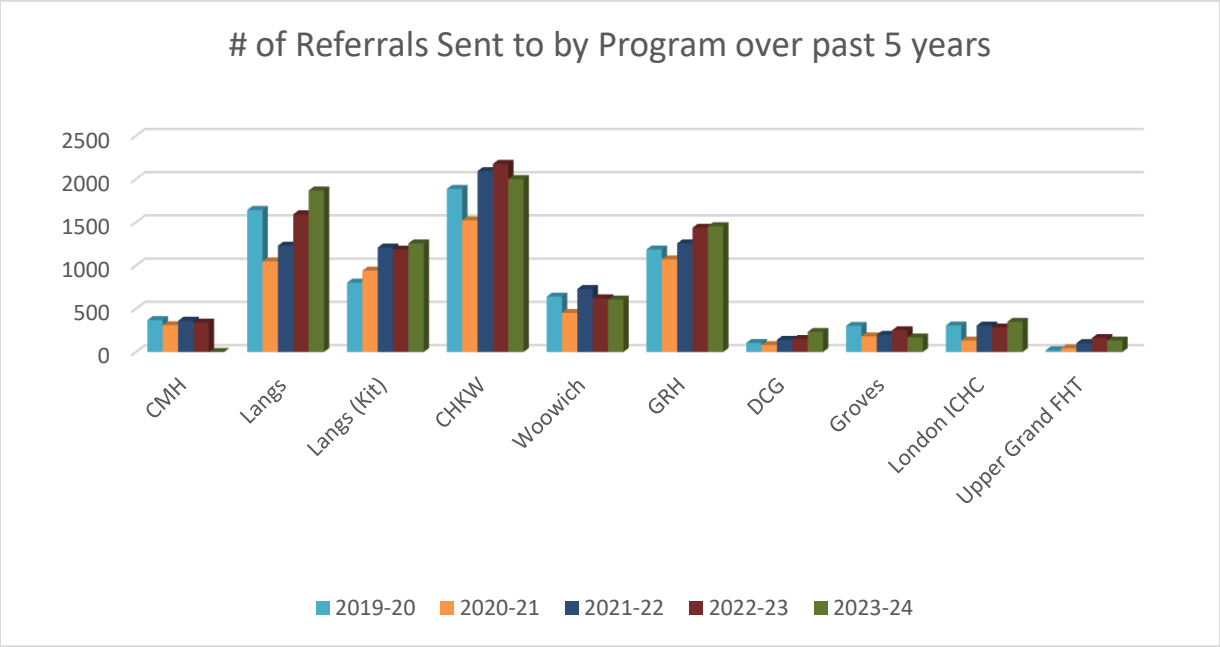


Table 12: Volume of Referrals by Urgency over Past 3 years



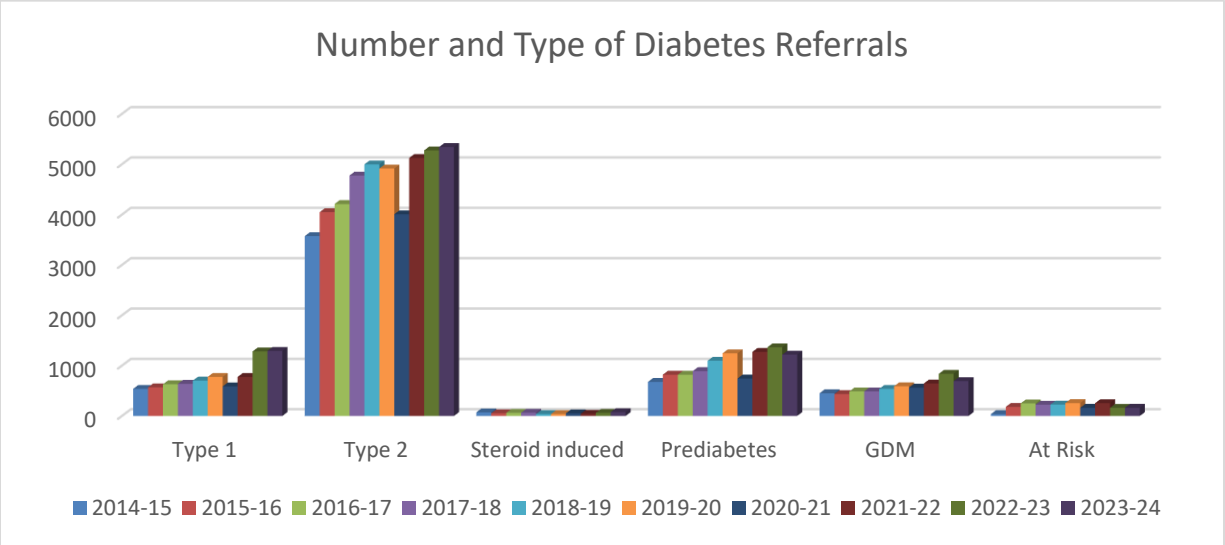
The following table (Table 13) demonstrates the volume of referrals by program over the past five years.

Table 13: Volume of Referrals by Program



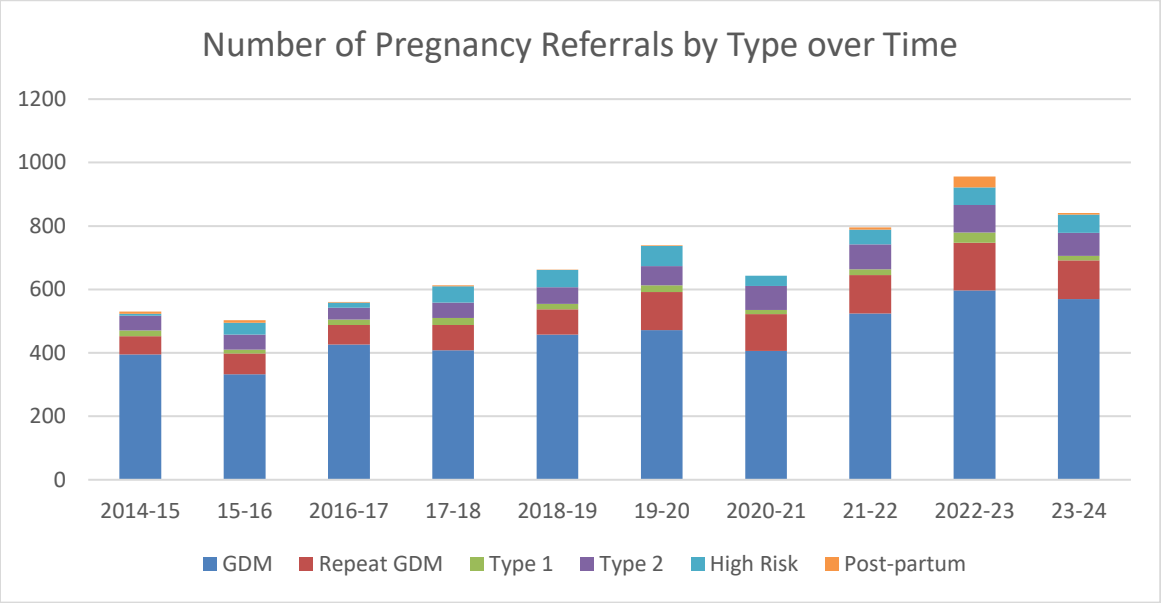
DCI has worked hard to move the volume of referrals from the hospitals to the community programs since its inception. DCI assists with the triaging and processing of patient referral transfers from hospital. Regionally, the hospital programs now only receive referrals for complex diabetes cases, such as Type 1 diabetes, diabetes in pregnancy, insulin pumps, steroid induced diabetes, and complex Type 2 diabetes (i.e., those on complex insulin regimes or on dialysis). DCI also captures the various types of diabetes noted on referrals (Table 14). This informs more effective and specified program planning and helps drive a shift from the hospital to community-based programs, where appropriate.

Table 14: Number and Type of Diabetes Referrals



DCI is also able to capture the number of referrals for pregnancy, broken down by type (Table 15). This is useful for those hospital programs who manage diabetes and pregnancy. By monitoring the number of women with gestational diabetes there is opportunity for post-partum intervention with this group to prevent progression to Type 2 diabetes. This data does not include Guelph and North Wellington.

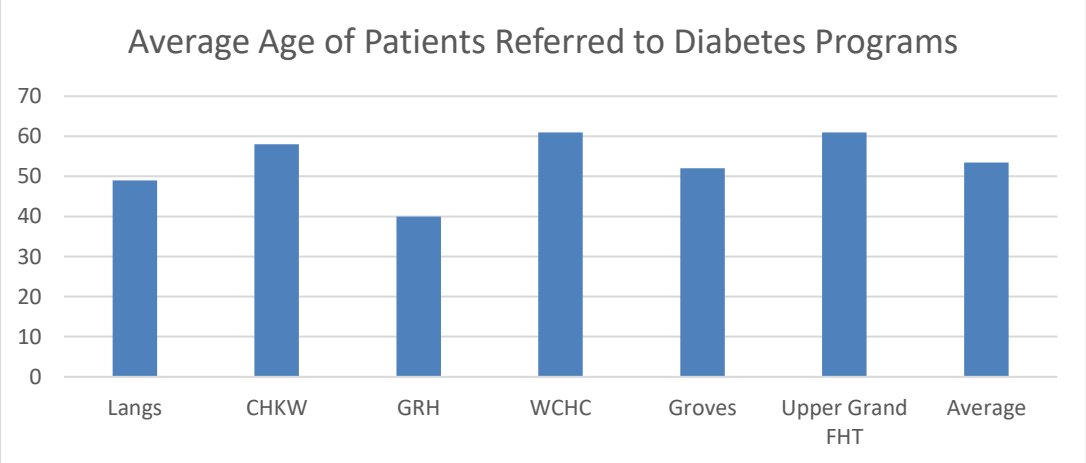
Table 15: Number of Pregnancy Referrals by Type Over Time



In addition to volume and wait time patterns, DCI captures information about several trends that help with overall system and program planning.

The following table shows the average age of patients at the time of referral being sent to Diabetes Education Programs (Table 16). The average age of hospital programs is typically lower due to the higher volume of young people with Type 1 diabetes and those who become pregnant.

Table 16: Average Age of Patients at Time of Referral for Diabetes Education



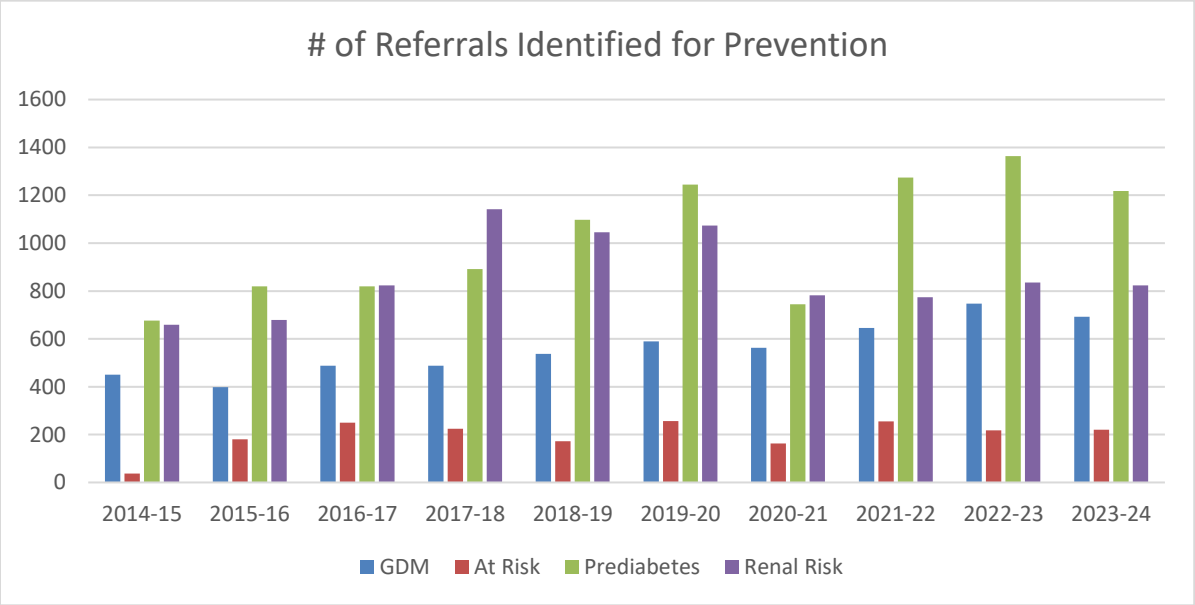
Prevention

DCI continues to focus on prevention efforts. As mentioned above, the diagnosis of gestational diabetes provides an opportunity to intervene to prevent the onset of type 2 diabetes in both the mother and the baby. Identifying women with gestational diabetes and facilitating an early referral for education increases opportunities for screening and intervention.

Diabetes programs accept referrals for patients that are both "at risk" for developing diabetes as well as for those diagnosed with prediabetes. Intervention at the prediabetes stage can prevent the progression to diabetes. Despite understanding the importance of these preventative measures, programs are concerned with the increased volume of this population and the impact on their resources.

DCI also continues to monitor the number of referrals with criteria indicating higher risk for renal disease to identify further opportunities for earlier intervention. These numbers, along with those referrals that were received for GDM, high risk for developing diabetes, and prediabetes are outlined in the table below (Table 17).

Table 17: Number of Referrals Identified for Prevention



Resource Clinician & Project Lead

The mentoring program, which is unique to this region, was restructured in 2020 to support the growing needs of the program and the region. It was originally developed to support the community diabetes educators in managing the increased volume and complexity of patients being moved from the hospital to the community programs. With that transition being achieved, the position shifted to a resource clinician who is capable of leading targeted practice development, quality improvement projects and knowledge translation activities with diabetes educators and interprofessional clinical teams.

The Resource Clinician and Project Lead also participates at regional and provincial networks. This person engages in active mentoring and coaching with health care professionals and/or teams across the region, leading and/or supporting local communities of practice as needed and develops/delivers/ evaluates effective tools, resources, and workshops for health care professionals throughout the region. Collaborating with the regional Self-Management program, also hosted at the Waterloo Wellington Regional Coordination Centre, is key to supporting general health care provider training.

This year, the Resource Clinician and Project Lead provided valuable learning and collaboration opportunities for diabetes educators across the region. By regenerating a quarterly newsletter and focusing on targeted projects and needs identified, this position has proven incredibly valuable and impactful in our community.

Projects/Activities/Workshops Delivered:

- **Regional Diabetes Programs**: Medication updates, practice alerts circulated as needed, attended Diabetes Knowledge Exchange meeting, regular mentoring, and coaching
- **Diabetes and Ramadan Document:** Created, circulated, reviewed, and updated
- **Workshops:** Presented at Diabetes Knowledge Exchange event, CICMH Southern and KW Forum, Diabetes and Ramadan event
- **CDE Exam Prep**: Sessions created based on topics of interest and study needs, facilitated
- **Regional Diabetes Network:** Participated as chair, shared resources, assisted with agenda preparation and follow-ups
- **Urgent Referral Pilot:** Attended joint ED MD meeting to review referral flow, created project parameters and reporting requirements alongside local endocrinologist
- **Lower Limb Preservation:** Circulated questions to local OHTs around priorities, established relationships with specialists, enabled edits to form to include Medically Supervised Would Care consults, supported MOU development for total contact casting
- **Communication:** Ongoing engagement to assess regional needs, quarterly newsletter, "Glycemic Roots" developed and circulated, World Diabetes Day article in Wellington Advertiser, website edits and updates

Projects Initiated and Ongoing Plans:

- Regular communication serving 113 organizations and 661 active clinicians in our region with practice alerts/updates
- Website content updates/development
- Clinical resource for clinicians
- Support Central Intake and Self-Management
- Circulation of Steroid Induced Diabetes resource for educators and patient materials
- Reestablishment of regional Diabetes Educator Collaborative events
- Collaborative planning efforts underway to inform future educational opportunities (mini-conference, educational talks, etc.)
- CDE succession planning as a region and education of newer staff in the region
- CDE Exam Preparation Sessions
- Consideration of working groups to review CGM use in hospital, regional pediatric network, needs of urgent care clinics
- Ongoing website management, review, and plans for future development of best communication mechanisms

Website

Our regional website continues to be well received with a high number of users. It offers education, information on upcoming events and local resources. It also offers easy access to referral for diabetes care. The following table describes the volume and reach of our website over the past 5 years (Table 18).

Table 18: Waterloo Wellington Diabetes Website Data

Fiscal Year	# of visitors	# of page views	# of countries
2019-20	6,109	19,798	75
2020-21	6,888	17,680	93
2021-22	8,340	10,682	100
2022-23	7,900	21,394	104
2023-24	7,471	19,275	148

Challenges, Risks and Opportunities

The biggest challenge for DCI continues to be the limited resources of 1 FTE Triage Nurse and 1 FTE Admin Support. This is the same allocation of staffing resources since the MOHLTC funded DCI in 2012. With our growing referral numbers and current capacity limits, we have relied on the support of an additional admin support staff using an organizational grant from Langs. This additional support ended in December and we anticipate availability of upcoming Primary Care Expansion funding to allow us to maintain the stability of the program but this does not serve as a sustainable solution.

The eReferral solution offers some efficiency with respect to the ease of transmission and notifications, but DCI still requires staffing to process and follow-up regarding the referrals and is lacks coverage for staff due to the limited resources. It is important to note that eReferral is a method of transmission and replaces fax transmission. Having said that, triaging, processing and follow-up are all essential components of central intake. These functions require adequate resourcing to be successful. Given the provincial RFB work around eReferral platform procurement, our promotion and adoption have levelled out regionally. We anticipate upcoming responses and answers to best move forward with adoption.

Another challenge from a system planning perspective is that Two Rivers FHT, North and East Wellington and Guelph are not currently using Diabetes Central Intake, so the data provided is not reflecting the entire region. Hopefully as the electronic system is adopted, they will see the benefit of utilizing a region-wide approach to referring for diabetes care. The OHT boundaries and differing focus priorities impact our program as we cross into, and collaborate with, multiple OHT teams regionally.

An opportunity, as the Ontario health system transforms, is that our program is well positioned to support the larger region or expand to offer a province-wide service. We continue to be consulted by programs throughout the province on how to set up a central intake service. Many programs question if we can expand our service to support the province versus each of them trying to replicate what we have built. We continue to be in active consultation with several areas across the province to support their efforts in initializing a central intake model. We believe this could represent a very efficient and effective win for the province and look forward to the opportunity to further expand our central intake service.

Summary

Waterloo Wellington Diabetes continues to be successful in providing excellent service to residents living with diabetes and those who work to support them. It aligns with the Ontario Health focus of connecting and coordinating our current health system and its many complex parts in new, innovative ways to help ensure that Ontarians receive excellent diabetes care in the most appropriate ways.

Our streamlined process and robust referral management system ensure that no one is lost in the system and that there is communication to the referral sources throughout the patient journey. Our available data provides valuable information for system and program planning. We continue to be consulted by other regions of the province and country on how to design and deliver centralized intake for diabetes services. Many diabetes programs and specialists throughout the province question why they can't have a similar system in their region or if we can offer a provincial program. Our Resource Clinician and Project Lead continues to be a valuable position that will help increase capacity of educators in the region and provide learning opportunities to meet educational needs, address knowledge gaps and support succession through practice development. Our website also provides ongoing education and support.

We continue to work closely with the vendors and the eHealth Centre of Excellence team to offer an eReferral solution to support eReferrals for DCI and provide support to inquiries from other Ocean users. We continue to promote and encourage eReferral to referral sources and referral targets. As mentioned, eReferral offers an effective and efficient transmission solution, but the role of central intake is essential in processing referrals. **The biggest risk for DCI is the limited staffing resources.**

Our co-location and management of Waterloo Wellington Diabetes along with the Regional Self-Management Program, the Regional Orthopedic Central Intake, and the Regional Cataract Central Intake offers great opportunities to expand our services in offering patient-centred care and streamlined coordination, especially in the current changing health care system.

> "I was running a Google search for more information… then I noticed a newsletter from Waterloo Wellington team! By the way, the website for educators is fantastic and I frequently refer to it for upcoming workshops surrounding diabetes."
>
> *- CDE Dietitian, Toronto*

Sign-Off

Langs
Date: May 31, 2024

Director, RCC, Langs	CEO, Langs