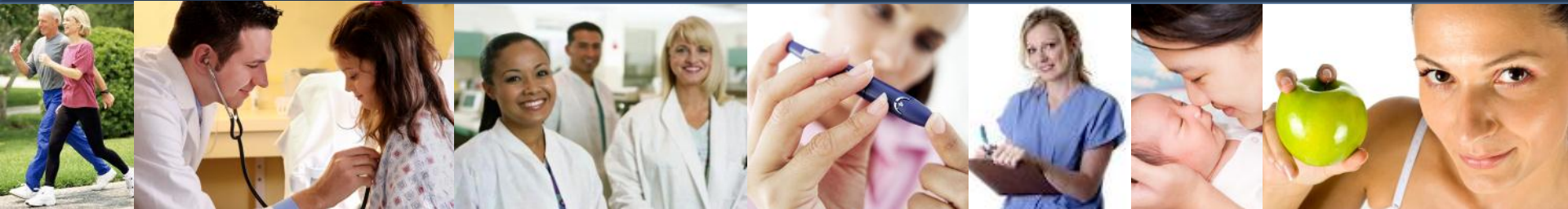




# ***A Business Model for Integrating Community Diabetes Resources in Your Primary Care Practice***



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[www.Maximizeyourhealth.ca](http://www.Maximizeyourhealth.ca)  
[www.Haltonhillsfht.com](http://www.Haltonhillsfht.com)

# Agenda

- Background information
- Diabetes Care Pathway – Halton Hills FHT
- Review and the Challenges faced
- Development of Shared Care Model
- Process Changes
- Critical Success Factors
- Benefits
- Implementation Issues
- Recommendations

# Mississauga Halton Diabetes Regional Coordination Centre

## Diabetes Regional Coordination Centres (DRCC):

- Coordinate diabetes services
- Identify and address challenges in diabetes service
- Facilitate adoption & integration of best practices/guidelines in diabetes care
- Support ODS initiatives & provincial priorities
- Monitor & improve health outcomes
- Share information & best practices with RCCs

## Primary Care Engagement Coordinator

- Engage with Primary Care physicians in the community to;
  - Adopt Best Practices in Diabetes Management, including patient teaching, self management skills
  - Increase the usage of DEPs specifically
  - Connect Primary Care to other diabetes related resources

# Halton Hills FHT

- Based in Georgetown, ON
- Wave 1 FHT
  - 22 doctors
  - 27,000 patients
  - Approximately 1,600 diabetics
  - 15.1 FTE IHPs, spread over three sites
- Diabetes Care Program evolved based on experience
  - Initial program developed early 2010
  - Revised Program 2012



# Challenges faced

- Limited RN resources
- The risk of DEP reduced referrals due to FHT program

**Solution: Partnership!**

# Program Development

Diagnosis Visit (MD/NP)



Halton Diabetes Education Program (3 -6 Months)



Halton Diabetes Education Program Summary Discharge



Initial Visit (RN/MD co-visit)

Allied Healthcare Professionals

Follow-up visits every 3-6 months



1 Year Follow-up Visit (RN/MD co-visit)

# Program Summary



**Goal:** Provide high quality and efficient care in screening, treatment and management of Type 2 Diabetes

**Phase 1:** Only open to newly diagnosed Type 2 Diabetes patients

- Partnership with DEP– Georgetown Site
- Primary case manager: Registered Nurse (consult with NP)
- RN to consult with MD throughout program as a co-visit or via EMR message after each patient visit
- Developed following Canadian Diabetes Association:  
*Clinical Practice Guidelines for the Prevention and Management of Diabetes*
  - Used QIIP tools – process mapping, PDSA
  - Assessed resources
  - Bootcamp to help educate RNs



# Diagnosis Visit

## MD/NP



- \* Patient is newly diagnosed with Type 2 Diabetes
  - FPG, casual PG, OGTT

**Handout: CDM Referral – Diabetes**

- ✓ **Introductory Letter**
- ✓ **Just The Basics**  
(Canadian Diabetes Association)
- ✓ **Referral to Halton Diabetes Education Program (DEP) – Georgetown site**
- ✓ **Lab requisition**



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# Halton Diabetes Program




- 3-6 months
- Group Education + Individual Consults

## Skills for Success 1:

- ✓ After the Diagnosis
- ✓ Blood Glucose Monitoring
- ✓ Exercise
- ✓ Medications
- ✓ Healthy Eating
- ✓ Goal Setting & Action Planning
- ✓ Complications
- ✓ Management (foot care, smoking, dental)
- ✓ Review

## Discharge Summary Form

 <b>Halton Diabetes Program</b> Georgetown Site <b>Summary Discharge to FHT</b> Dr.: _____		Surname: _____ Given Name: _____ DOB: _____ Day Month Year OHIP: _____ Date: _____	
Your patient attended the Diabetes Centre: Initial Assessment: _____			
Group Program: _____		Follow Up: _____	
Medication: _____			
<b>Nursing Summary:</b>	<b>Mastered</b>	<b>Needs follow up</b>	<b>Not Applicable</b>
Monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medication/Insulin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes Physiology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: _____			
Signature			RN
<b>Dietitian Summary:</b>	<b>Mastered</b>	<b>Needs follow up</b>	<b>Not Applicable</b>
CHO sources/balance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regular meals/variety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Portion control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Snacking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carb counting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sweeteners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Label reading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: _____			
Signature			RD

# Discharge Summary Review

MD/RN



- Review Discharge Summary written feedback and determine gaps in education that requires follow-up
- RN to re-enter patient into FHT Diabetes Program
- RN/MD to review the Summary Discharge Form
- RN to confirm current blood work has been completed
- Book RN/MD Co-Visit # 2: Follow-Up to Halton Diabetes Program within 1-2 weeks

# Visit # 2: Follow-Up Co-Visit

RN (20min) MD (10min)



- Use Diabetes Patient Care Flow Sheet stamp
- Provide education based on learning gaps identified in Discharge Summary
- Complete Diabetes Knowledge Pre-Test
- MD to assess patient's health
- Determine next follow-up visit
- Refer as necessary to Allied Healthcare Professionals
- Issue blood work requisition
- Provide patient with Diabetes Passport

Bunny, Bugs birth date 10/03/1969 #102

D. Examination

Wt. Ht. WC:  
General: <normal>  
BP (target <130/80 BP):  
Foot examination: <normal>  
Musculoskeletal Exam of feet: <normal>

Sunny, Bugs birth date 10/03/1969 #102  
Oct 29, 2009 AF

Diabetes Patient Care Flow Sheet

Every 3-6 months:

A. Review

Systemic Control  
Latest HbA1C = never done (never done)  
Hypoglycemic Episodes: <no>  
Diabetic Meds: see Rx  
BP Control/vascular protection  
Patient using ACEi or ARB: <yes>

Weight Management  
Waist-to-Hip Ratio (<0.9 male, <0.85 female): <reviewed>  
Waist Circumference (<40 male, <35 female): <reviewed>

B. Counseling

Self Management  
Motivational Counseling done on: <nutrition>, <exercise>, <smoking>  
Collaborative Goal Setting: <dietary and exercise modifications>  
Self Management Challenges: <monitor intake and exercise frequency>

Preventative Services  
Advised patient to arrange annual eye exam: <done>  
Advised patient to have influenza immunization: <done>  
Advised patient to monitor home sugars: <done>  
Advised patient to attend DM education clinic or FU with Endocrinologist: <done>

DEC  
Diabetic Education Clinic (DEC) note reviewed: <done>  
Highlighted issues of concern:  
--no new changes--

C. Lab Investigations

Latest Cholesterol = never done (never done)  
Latest LDL (<2.0): never done (never done)  
Latest TG = never done (never done)  
Latest eGFR (>1.0): never done (never done)  
Latest TC:Chol (<4.0): <S>  
Latest Microalbumin/Creatinine Ratio (<2 M, <2.8 F): never done  
Latest Creatinine = never done (never done)  
Latest eGFR (>30): never done

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# Referrals to Allied Healthcare Professionals



- Pharmacist
- Dietitian
- Health Educator
- Mental Health
- Group Education Program



# Subsequent Follow-Up Visits: q 3-6 Months for 1 yr PRN

RN (20min) MD (10min)

- ✓ Assess patients health status
- ✓ Review lab work
- ✓ Review self-management
- ✓ Continue Diabetes education
- ✓ At 1 yr:
  - ✓ Re-administer Diabetes Knowledge Post-Test
  - ✓ Administer CDM Program Evaluation
  - ✓ Review lab work

# Evaluation Tools



- Diabetes Knowledge Test (Pre/Post)
  - Assess improvements in Diabetes Knowledge
- Chronic Disease Program Evaluation
  - Assess patient's satisfaction with the program
- Quantitative indicators outlined in stamps to be tracked via EMR scan of program documentation

DM Core Measures
Total DM Population
Percent of DM pts with A1c $\leq 7$
Percent of DM pts with A1c test in past six months
Percent of DM pts with documented Self-Management goals in last 12 months
Percent of DM pts with BP $\leq 130/80$
Percent of DM pts on ACEI or AARB
Percent of DM pts with LDL $\leq 2.0$ nmol/l
Percent of DM pts with retinopathy screening in past 24 months
Percent of DM pts with comprehensive foot exam in past 12 months
Percent of DM pts w microalbuminuria (ACR) screening in past 12 months

# Phase 1: Critical Success Factors

- Full and visible support of the FHT Board
- Committee input from physicians, RN/NPs, and allied providers
- Acceptance by all to move to a standardized program with common forms, stamps, EMR terminology, and resources.
- Utilization of QI processes (mapping, PDSA) in program development
- Clear understanding and agreement by the FHT and DEP on program curriculum
- Establishment of metrics
- Optimal utilization of all FHT allied providers
- Detailed program rollout



# Program Challenges

- Patients Access Issues
  - Cost barriers
  - Scheduling difficulties
    - Insufficient information to effectively group patients
    - Difficulty managing scheduling
- Communication between DEP and FHT
  - Referral sent to DEP – patients didn't always attend- loss of communication to FHT
  - Lack of consult notes to repatriate patients to FHT
- No opportunity for FHT resources to increase knowledge of how to help manage patients with Diabetes – need for further mentorship
- No processes for complex/unstable patients
- Patient confusion due to having multiple locations/organizations providing care

**Risk/ Concern**  
Redesign would reduce physicians “buy in”

# Phase 2 Same Program: Integrated delivery

## On – Site DEP Education



# Process Changes

Challenge	Solution
<p><b>Patients Access Issues</b></p> <ul style="list-style-type: none"><li>•Cost barriers</li><li>•Scheduling difficulties<ul style="list-style-type: none"><li>•Insufficient information to effectively group patients</li><li>•Difficulty managing scheduling</li></ul></li></ul>	<ul style="list-style-type: none"><li>•Offer the program at the FHT office</li><li>•Group booking and individual follow up completed by FHT RN immediately following diagnosis</li></ul>
<p><b>Communication between DEP and FHT</b></p> <ul style="list-style-type: none"><li>•Referral sent to DEP – patients didn't always attend- loss of communication to FHT</li><li>•No triggers to repatriate patients back to FHT<ul style="list-style-type: none"><li>•Lack of consult note</li></ul></li></ul>	<ul style="list-style-type: none"><li>•Referrals now gathered by FHT RN</li><li>•Discharge notes provided immediately following individual follow up appointment</li><li>•Clear communication paths &amp; triggers were identified</li></ul>

# Process Changes

Challenges	Solution
No opportunity for FHT resources to increase knowledge of how to help manage patients with Diabetes – need for further mentorship	Onsite Diabetes Team allowed for ad hoc mentoring on a patient by patient basis - Enabled in house resources to extend skills and prepare for CDE exam
No processes for complex/unstable patients	Re- referral process created -Ongoing care due to complexity -Stabilize and discharge to FHT

Risk	Solution
Redesign would reduce physicians “buy in”	Modify and evolve the existing program

# Benefits

- ✓ Increased number of patients utilizing education programs
- ✓ Improved quality and efficiencies for both FHT & DEP
- ✓ Reduced patient and provider confusion
- ✓ Improved communication between diabetes educators and primary care clinicians
- ✓ More effective support for complex cases
- ✓ More timely and accurate information
- ✓ Increased capacity within the Family Health Team
- ✓ Enhanced knowledge and skills in diabetes management

# Implementation Issues

- Resistance to change
  - DEP – to provide charting and reports in a timely manner
  - Physicians – to effectively use and refer to outside resources
- Booking issues – Onsite education or not?
  - Patient has two options now, which affects who/how/where the appointments are booked.

# Next Steps

- Expand the program to two other sites
- Investigate after-hours options to accommodate working patients
- Develop an Excel-based patient registry to track the level of usage



# Phase 2: Critical Success Factors

- Design solutions based on patient experiences
- Strength of partnership between FHT and Diabetes Education Program
- Identify challenges faced by each party
- Agreement from both parties of the curriculum to deliver to patients
- Clear communication to both physicians and patients
- Incorporate metrics into your program
- Addressing concerns regarding change
  - Using outside resources
  - Changes to work process

# Recommendations

- Develop a chronic disease team within the FHT
- Identify relevant community resources (DEP Teams etc.)
- Ask FHT physicians which populations is a priority group
- Deploy a consistent program in your FHT (e.g. every physician utilizes the same stamp and naming conventions )

# Questions

