

***PRIMARY CARE CHRONIC DISEASE MANAGEMENT PROGRAM***  
**PROGRAM DESCRIPTION & EDUCATIONAL OBJECTIVES**  
**FOR ENHANCED SKILLS RESIDENTS**

**Introduction**

At present, it is estimated that nearly two in five Canadians (39%), and 72% of Canadians aged 65 and older have one of seven chronic health conditions (diabetes, heart disease, high blood pressure, arthritis, cancer, COPD, and mood disorders) (1). Primary care practitioners are the management foundation for chronic disease management (CDM) with diabetes ranking 3<sup>rd</sup> only behind hypertension and an annual health exam as reasons for why patients book appointments with their general practitioners (GPs) (2). The Primary Care Chronic Disease Management program is a one year Clinical training program, focusing on cardiometabolic diseases, in the Enhanced Skills Program within the Department of Family Medicine at UWO.

As the complexity of patients with chronic diseases increases, the program is designed to provide additional in depth training for residents to not only gain skill in the clinical management of patients with chronic disease, but also to appreciate the complexity and challenges they often face. As the key to success is utilizing the skills of allied health members, it is also a goal for the enhanced skills resident to feel comfortable working in an interdisciplinary team environment. The above described opportunities may be limited in the current two year family medicine residency program.

The main goal of the program is to provide a high quality educational experience for graduates of Family Medicine that are keen to become leaders in their Family Health Organizations and/or their community to ensure that patients are receiving the best guideline and evidence-based chronic disease care possible.

## **Structure and Learning Environment**

Dr. Stewart Harris is the Director of the CDM Enhanced Skills Program, as well as Medical Director of the St. Joseph's Primary Care Diabetes Support Program (PCDSP). Dr. Harris is the current recipient of the Canadian Diabetes Association Chair in Diabetes and a Professor at UWO. Dr. Sonja Reichert was the inaugural Resident to graduate from the Enhanced Program and is currently working at the PCDSP, as well as co-director of the CDM Enhanced Skills Program.

The St. Joseph's PCDSP is an exceptionally unique program that offers timely, multi-disciplinary education and management to patients from London ON and surrounding area with either Type 1 or Type 2 diabetes that may or may not have a GP. In 2011, this patient-focused program had an active caseload of approximately 1 715 patients with 5 831 clinic visits. Overall, 68% of all patients are referred by other General Practitioners, and 14% were identified as not having a GP. Furthermore the Program is dedicated to serving marginalized patients: 12% of patients self-identified themselves as having food security issues, 39% were on social assistance, 30% were immigrants and 34% were found to have mental illness. The team is comprised of a Nurse Practitioner, two nurses with Certified Diabetes Education (CDE) credentials, three Registered Dietitians (CDE), a Social Worker, and full-time assistant.

Dr. Neville Suskin, Assistant Professor, Department of Medicine, Division of Cardiology and Director, Cardiac Rehabilitation & Secondary Prevention Program, London Health Sciences Center has acted as Internal Medicine and Cardiology liaison to assist with organizing cardiovascular rotations with various elective supervisors.

The PGY3 Chronic Disease Management Enhanced Skills Resident will work under the supervision of the attending present at that rotation. A number of Family Practice Residents (PGY1 and PGY2) will also be in attendance for 1 or 2 days a week at the St. Joseph's PCDSP on a longitudinal basis throughout the year and be under supervision of either Dr. Harris or Dr. Reichert.

## Organization of the Program

This would be a 12 month program following successful completion of Family Medicine Residency training with PAIRO regulated vacation time.

At a minimum, one and a half (1.5) to two (2) per week will be spent at the St. Joseph's Primary Care Diabetes Support Program on a longitudinal basis throughout the year to provide continuity of patient care. Key expectations will be to complete both the intake consultation for new patients as well as provide on-going care for patients seen in follow-up. The resident would also interact with, and provide support for the multidisciplinary team as required. As many patients do not have a GP, the resident will also be expected to offer general primary care as needed until a GP has been found for the patient. The advantages to this approach is maintaining patient centered-care, but also affording the resident the opportunity to maintain and continue to develop their skills in family medicine.

At a minimum, two 0.5 days per week will be spent in cardiology clinics, again on a longitudinal basis. Clinic options include attending heart failure clinics under the supervision of Dr. Malcolm Arnold, cardiac rehabilitation with Dr. Neville Suskin and pre/post cardiac rehabilitation stress testing.

At a minimum 0.5 to 1.0 day per week will be reserved for scholarly activity (see description below).

The remainder of time during the week may be spent in a variety of different clinics offering the resident the ability to tailor his or her educational experience to their interests and particular needs. It would be suggested that each clinic be attended for a minimum of 4 full days, but the rotations could be organized in block format. Elective options would include:

- Foot care (either with, and/or): a) The London Foot Care Team or b) a chiropodist (Dr. Eva Lock)
- Wound care (Dr. David Keast)
- Gestational Diabetes clinic at St. Joseph's Hospital (Dr. Ruth McMannus)
- Lipid Clinic (Dr. Robert Hegele)
- Hypertension Clinic (Dr. George Dresser)
- Neuropathic Pain (Dr. Dwight Moulin)
- Introduction to insulin pump classes (attended by patients) at the St. Joseph's Diabetes Education Center (DEC) (one or two classes would suffice)
- Obesity/bariatric surgery clinic (if available)
- Stroke rehab
- Outpatient vascular surgery focusing on PAD

- Outpatient renal clinic (Dr. Louise Moist)

### **Scholarly Activity**

- 1) All residents in the Enhanced Skills program are required to complete a scholarly project. A written report is not required but welcome as per Department of FM guidelines. A formal presentation at resident research day in June is required. Topics should be discussed with Dr. Grushka (Enhanced Skills Program Director), Drs. Harris and Dr. Reichert. Please refer to the Enhanced Skills Orientation Manual for more direction regarding project requirements and departmental assistance with funds, ethics approval, literature reviews, etc.

Should the resident be interested in additional research exposure this would be encouraged and could be arranged either through the completion of an additional study, presentation at an additional scholarly forum and/or publication. Appropriate supervision and assistance as required will be available.

- 2) All residents will have the opportunity to attend either Division of Endocrinology Academic Half Day (AHD) and/or Department of Family Medicine AHD on Wednesday.
- 3) The resident is encouraged to teach at PGY-1/PGY-2 academic half day on a topic related to their field of specialization. This can be discussed with the Academic Program Director and the Enhanced Skills Program Director.
- 4) The resident will be required to present a minimum of two “lunch & learn” sessions in a topic of their choosing to the Diabetes Support Program. Topics subject to approval by Dr. Harris and/or Dr. Reichert.
- 5) The resident will be required to attend the annual St. Joseph’s Primary Care Diabetes Support Program retreat so as to gain a full appreciation of the challenges and issues associated with operating a diabetes/chronic disease program.

### **Evaluation**

- 1) The resident will be supervised on a daily basis and will obtain 1 evaluation per 3 blocks from either Dr. Harris and/or Dr. Reichert on the one45 system.
- 2) The resident will meet informally with Dr. Harris and Dr. Reichert at the quarter point through the year to review any concerns.
- 3) A midterm review with the program director will take place to ascertain the resident's progression.

## OBJECTIVES FOR CHRONIC DISEASE PROGRAM AS CONSIDERED BY THE CANMEDS-FM ROLES

### I. Family Medicine Expert

#### 1. The Family Medicine Resident will become knowledgeable in the following:

##### Diabetes:

- 1.1 Awareness of risk factors, and diagnosis of DM1, DM2 and gestational diabetes
- 1.2 Initiation and up-titration of oral diabetic agents
- 1.3 Initiation and up-titration of both basal, rapid insulin and injectable GLP-1 agents
- 1.4 Subcutaneous injection techniques
- 1.5 Familiarity with glucose pattern management principles
- 1.6 Appreciation of pros/cons, and a basic familiarity with various glucose meters
- 1.7 Appreciation of insulin pump principles and basic use

##### Diabetes related complications including:

- 1.8 Ophthalmological complications
- 1.9 Ability to diagnose peripheral vascular disease including familiarity with ABI measurements
- 1.10 Chronic renal failure management
- 1.11 Gastroparesis identification and management
- 1.12 Erectile dysfunction
- 1.13 Identification and management of peripheral vascular disease
- 1.14 Guideline Recommended management of chronic neuropathic pain
- 1.15 Identification and management of diabetic related foot complications including:
  - a) Ability to identify the cause, different types and stages of foot ulcers
  - b) Ability to differentiate between wound contamination, colonization, critical colonization and infection
  - c) Ability to differentiate between dermatitis, cellulitis, stasis dermatitis, Charcot of the foot, and osteomyelitis
  - d) Familiarity with basic wound care dressings and when to use them
  - e) Ability to use antibiotics effectively for diabetic foot ulcers
  - f) Comfort with performing a wound risk assessment and familiarity with wound prevention strategies
  - g) Knowledge of lower limb compression systems; when and how to use them safely
  - h) Appropriate referral use to podiatrists and chiropractors

#### 1.16 Guideline Recommended, Secondary prevention management strategies for:

- a) acute coronary syndrome

- b) heart failure
- c) peripheral vascular disease

**Risk Factor Modification:**

- 1.17 Awareness of Canadian Exercise Guidelines and ability to prescribe basic exercise
- 1.18 Lifestyle and pharmacological management of dyslipidemia
- 1.19 Diet modifications as required in chronic disease i.e. diabetes, cardiac, renal
- 1.20 Smoking cessation strategies
- 1.21 Hypertension identification and management
- 1.22 Familiarity with weight loss strategies including bariatric surgery
- 1.23 Psychological management of patients with chronic disease including depression

**CDM Optimization:**

- 1.24 Basic chronic disease management theory i.e. Wagner, Stanford Model, etc.
- 1.25 Appreciate the role of technology and EMR's in assisting with CDM
- 1.26 Measurement and quality improvement principles

**Cardiovascular Specific Objectives**

- 1.27 Demonstrate the ability to complete a graded exercise stress test under supervision:
  - a) Understand the indications for testing and safety considerations
  - b) Describe the equipment and protocols
  - c) Familiarity with test endpoints
  - d) Proficiency in test interpretation
  - e) Ability to risk stratify and/or use test results in rehabilitation treatment
  - f) Knowledge of specifics relating to different testing populations i.e. women, the elderly, asymptomatic patients, post myocardial infarction
- 1.28 Proficiency in interpreting electrocardiograms (ECG)
- 1.29 Be able to describe the core elements, principles of, and team members involved in cardiac rehabilitation

**II. Manager**

**Family Medicine residents will**

- 1. Order appropriate and economical selection of diagnostic and screening tests
- 2. Make referrals effectively
- 3. Demonstrate understanding of roles of all health care providers in the team
- 4. Demonstrate the ability to make effective diagnostic decisions
- 5. Understand the need and ability to assess for risk management, quality assurance and improvement
- 6. Understand the role of information management in the care of community patients

### III. Communicator

<b>Family Medicine Residents will be able to communicate effectively with patients, family members and members of the health care team</b>
--

- |   |
|---|
| <ol style="list-style-type: none"><li>1. Demonstrate listening skills</li><li>2. Demonstrate language skills (verbal, writing, charting)</li><li>3. Demonstrate non-verbal skills (expressive and receptive)</li><li>4. Apply motivational interviewing principles during patient interactions</li><li>5. Demonstrate skills in adapting communication appropriately to a patient's or colleague's culture and age</li><li>6. Demonstrate attitudinal skills (ability to respectfully hear, understand and discuss an opinion, idea or value that may be different from their own)</li><li>7. Apply these communication skills to facilitate shared and informed decision-making</li><li>8. Able to coordinate community resources including knowledge of the Community Care Access Centre (CCAC) and other outreach services</li><li>9. Function within a team composed of members from various health care disciplines</li><li>10. Recognize situations where a specialist consultation is appropriate, and effectiveness in communicating the purpose of the referral, the patient's clinical condition and pertinent previous medical history</li></ol> |
|---|

### IV. Collaborator

<b>Family Medicine Residents will be able to collaborate</b>
--

- |  |
|--|
| <ol style="list-style-type: none"><li>1. Work collaboratively in different models of health care</li><li>2. Engage patients and families as active participants in their care</li><li>3. Understand the role of the GP-Chronic Disease Management expert as a teacher and consultant</li></ol> |
|--|

### V. Health Advocate

<b>Family Medicine Residents will be able to advocate for the health of patients</b>
--

- |  |
|--|
| <ol style="list-style-type: none"><li>1. Acting as an effective patient advocate with employers and social service agencies</li><li>2. Identify patients who are vulnerable or marginalized and assist them in issues (i.e. occupational issues, special diet application forms, etc.) that promote their health</li><li>3. Identify patients at risk because of social, family or other health situations and to work appropriately with social services.</li></ol> |
|--|

### VI. Professional

<b>Family Medicine Residents will have demonstrated professionalism</b>
---

- |  |
|--|
| <ol style="list-style-type: none"><li>1. Demonstrate (i.e. day to day behaviour) that reassures that the resident is responsible, reliable and trustworthy</li><li>2. Identify patients at risk because of social, family or other health situations</li><li>3. Demonstrate leadership, professional and ethical qualities</li></ol> |
|--|

## VII. Scholar

<b>The Family Medicine Resident will have demonstrated their scholarly proficiencies:</b>
---

- |   |
|---|
| <ol style="list-style-type: none"><li>1. Strategies for lifelong learning and continuing maintenance of professional competence</li><li>2. Demonstrates self-directed learning based on reflective practice</li><li>3. Access, critically evaluate and use medical information in health care decisions</li></ol> |
|---|

### References

- 1) Health Council of Canada Helping Patients Help Themselves (Jan 2010)
- 2) Canadian Pharmaceutical Marketing. Disease Dynamics in 2009: Insight and outlook from IMS Health [Internet]. STA Healthcare Communications; 2010 April [cited May 1 2011]. Available from; [http://www.stacommunications.com/journals/cpm/2010/04-April-2010/CPM\\_035.pdf](http://www.stacommunications.com/journals/cpm/2010/04-April-2010/CPM_035.pdf)

Developed by: Dr. Sonja Reichert, Dr. Daniel Grushka, Dr. Stewart Harris  
Last Reviewed Dec. 2018