Thunder Bay Regional Health Science Centre

Center for Complex Diabetes Care
North West LHIN
2012-2013 North West LHIN Integrated Health Services Plan

- Higher than provincial rates of chronic diseases including diabetes, high BP and arthritis/rheumatism
- Mortality rates for diabetes and arthritis are highest among LHIN areas
- Overall hospital separation rates for diabetes, hypertension, ischemic heart disease (IHD), stroke, COPD, asthma and arthritis are notably higher than provincial rates
2012- 2013 North West LHIN Integrated Health Services Plan

- Residents had the highest rate of hospitalization for diabetes and stroke among LHIN areas
- ED visit rates for diabetes, depression, hypertension, IHD, stroke, COPD, asthma and arthritis are notably higher than provincial rates
  ED visit rates were the highest among LHIN’s for diabetes, asthma and arthritis
2012- 2013 North West LHIN Integrated Health Services Plan

• With incomplete data available for Aboriginal populations, the prevalence is likely greatly underestimated, since diabetes rates in Aboriginal populations alone are estimated to be two to three times that of the general population. Given the high prevalence of diabetes, the NW LHIN was selected as an early participant in the Ontario Diabetes Strategy
Program Integration

TBRHSC recently has completed realignment of services

New program: Chronic Disease Prevention and Management

Adoption of Principles of Chronic Disease through all programs

Self Management Platform: Standford Model
Program Model

New Level 3 Program

- Partnership with:
  - St. Joseph’s Care Group
  - Existing Level 2 programs
  - Northern Diabetes Health Network: NDHN
  - Purchased Services
    Sioux Lookout Meno-ya-win Health Centre
Framework for Diabetes Services in Northern Ontario

*(Based on the Kaiser Permanente Risk Stratification Pyramid and the NHS and Social Care Long Term Conditions Model)*

- **Level 0**: Targeted high risk primary prevention
- **Level 1**: Diabetes self-management support
- **Level 2**: Diabetes care/management by specialized team
- **Level 3**: Complex with co-morbidities

*Population wide prevention and health promotion (Public Health)*
Referral Process

MD/ NP required related to Complexity of Patients

- Internal Referral Meditech
  - Option Level 2
  - Option Level 3
  - Urgency Indicator

- External Referral
The goal of Service Expansion is to provide 50% of people with diabetes in Ontario (in level 1 and 2) with increased access to diabetes care and education.

### Kaiser Chronic Disease Management Model

**Intensive Case Management**
Would benefit from high levels of intensive intervention (5% of this group are the sickest and account for about 50% of all diabetes related health care expenditure).

**Assisted Care or Care Management**
No on going complications but have abnormal glucose levels and would benefit from a diabetes education team with some level of intervention.

**Routine Care Delivered by a Primary Care Provider**
(Family Care Provider Care): Requires evidence based care by a family care provider that includes self-management support.

Stratification of population on the basis of level of need to ensure patient receives the right care, by the right provider, at the right time, in the right place.
Who is appropriate for CCDC services

• Must be 18 years or older
• Have **comorbid conditions** associated with their diabetes such as vascular disease, renal failure, neuropathy, impaired vision: and/or
• Have **poor glycemic control** and/or significant comorbidities which impact on glycemic control: and/or
Who is appropriate for CCDC services

- Experience **barriers** to accessing health care system (e.g. individuals with mental illness)
- Have **recurrent diabetes emergencies** or have been hospitalized with poorly controlled diabetes and higher readmission rates: an or
- Have **Diabetes complexities** in other programs without access to specialist medical care (Cardiology, orthopedics)
Clinic Locations

Thunder Bay:
Medical Center immediately adjacent to the Acute Care Site

Sioux Lookout:
Meno-ya-win Health Centre
Staffing Model

Medical Director
Thunder Bay
Sioux Lookout

Nurse Practitioners
Staffing Model Thunder Bay

Clerical
Registered Nurses
Registered Dietitians
Social Worker
Psychologist/Psychometrist
Pharmacist
Native Liaison / Translator
Purchased Services

Physiotherapist
Occupational Therapist
Wound
Chiropody
Support positions

Data analyst
Financial analyst
Telemedicine Support
Information Systems
Information Technology
Satellite Site

Sioux Lookout Meno-ya-win Health Center

Registered Nurse
Registered Dietitian
Social Work
Translator
Referral Triage

• Completed by NP

• Tool
  Demographics
  Reason for Referral
  Past Medical History
  Medication
  Recent Laboratory and Diagnostic Testing
  Acceptance
  • If no - Rationale
  Team Referrals
Meditech Build

Custom build go live Jan 2012

Outcome indicators built into system

Custom reports under development

Communication Linkage with Providers
Meditech Interface

Ongoing project where we will be able to produce interface to our documentation reports

Research

Data Management
Staff Preparation

Educational Events
  Self Management
  Motivational Interviewing
  Hypertension Heart and Stroke
  Insulin Preceptorship: Dr. Cheng

Partnership with Diabetes Health
  Nurse Exchange
Provider Engagement

Introducing Murphy
Provider Engagement

Development of tools and resources including branding

Development of presentations and display tools
  Pull up
  Teleophthalmology
Provider Engagement

First Nations

Translation of tools in culturally sensitive manner with story telling

Syllabics software and keyboard overlay
Research

Hypertension Management in Partnership with Heart and Stroke Foundation

Data Collection for Outcome Measurement in Partnership with Ministry of Health and Price Waterhouse
Teleophthalmology Program
Teleophthalmology Program

Retinal Screening program offered in partnership with OTN
Specialized training program for Nursing Staff
Images stored forward to Ophthalmologist
Reports to clinic
Follow up facilitated as required
Success!

We over our projected targets
Wide range of referral sources with increase in appropriateness of same

Clear identification of gaps in service for clients with multiple complex medical and mental health conditions

Positive response from community partners
Success!

Meditech build providing multiple tools for clinical processes
Common platforms

Integration with complementary Chronic Disease programming
Bariatric
Telehomecare
Renal Service
Challenges

Integration of Self Management into Acute Care Setting

Establishment of Acute Care Diabetes Service within TBRHSC and within region

Access to Endocrinologist services
Challenges

Mental Health barriers to achievement of outcomes

Social Support Networks

Orphaned / Unattached Patients