

Diabetes Care Program of Nova Scotia (DCPNS) Diabetes Registry Description

- To help determine the magnitude of diabetes mellitus and its related complications in Nova Scotia.
- To provide useful information to the Diabetes Centre (DC) staff, referring physicians, and district/facility administration. Evidence produced should be used to influence program delivery, operations, and diabetes management decisions.
- To allow for limited cross comparisons and an overview of provincial trends and practices in efforts to discover and apply best/better practice approaches.

Time Frame:	April 1, 1994 to present.
Owner:	Department of Health and Wellness
Custodian:	Diabetes Care Program of Nova Scotia
Access:	<ul style="list-style-type: none">• Through the DCPNS Data Access Policy and Procedure.• Written requests to DCPNS Program Manager/Director Diabetes Surveillance (policy and application available on the DCPNS web-site http://www.diabetescareprogram.ns.ca).
Database Format:	Recently re-written using the CAISIS platform (open source, web-based application) with SQL Database Server.
Unique Identifier:	Health card number.
Data Source:	DCs in Nova Scotia (37 in total). Consists of three main components: <ul style="list-style-type: none">• Diabetes Centre daily statistics--numbers seen by diabetes type, treatment type, visit type, area seen, and age grouping.• Demographics—from the physician referral form (standard)/Meditech/STAR /IWK Meditech Magic interface.• Indicators of care—from the standardized flow sheet used in DCs across NS/Meditech interface.
Contains:	Information from three separate DCPNS databases: <ul style="list-style-type: none">• All new referrals to Diabetes Centres since April 1, 1994.• Information on follow-up cases prior to 1994 for DCs using the on-site registry.• Newly diagnosed cases of diabetes in children < age 19 since 1992.• Indicators of care data:<ul style="list-style-type: none">- 15 months of data on 1300 cases with DM from 13 DCs– variable collection period 1998-2002- on going collection for those DCs using onsite Registry.• Nova Scotia Insulin Pump Program (NSIPP)—NSIPP module
Completeness:	Does not include: <ul style="list-style-type: none">• Information on persons with diabetes not seen by DC staff.• Eskasoni (First Nations Community) diabetes program data.• Stadacona (Department of National Defense) other than number of encounters.
Reports:	Produces: <ul style="list-style-type: none">• Annual reports and data reports for DCs, Nova Scotia Health Authority Management Zones, IWK, and the Province (DC statistics).• Specialized reports from the indicators of care component (FU population, ND population, pediatric population, and re-referral population--pending).• Standardized reports generated on site by DCs—i.e., physician/NP follow-up report, referring physician patient list, summary of visits, active vs. inactive patient list, and quality indicator report.
Analysis Capabilities:	The DCPNS Registry System is a “filter” for the DCPNS database making this data clean, accurate, and reliable for research purposes. Unique identifier allows for linkage with other administrative databases and the data easily transfers to SPSS, SAS, etc., for analysis.
Interfaces:	Interface with Meditech (DHAs 1-8) is complete and runs on an hourly bases. Phase 1 Interfaces with Star (DHA 9) and Meditech Magic (IWK) are complete, and lab interfaces (Phase 2) are in progress. All interfaces reduce double documentation and capture demographic, visit, and applicable lab data.
Additional comments:	To December 2014, the on-site Registry is now being used on-site in all DCs in all DHAs and the IWK. The new CAISIS environment allow us more controlled data collection and completeness of information in terms of continuity of care.

DCPNS Registry Information collected:

Demographics:

Health card number Gender
 Date of birth City, municipality of residence, province, country, and postal code
 Date of diagnosis Co-morbid (complications) conditions at time of referral an ongoing
 Date of referral Date of death
 Name, address, phone and hospital ID to be included upon move to central server (for user use) as well as guardian name.

Diabetes Centre: By age grouping, children/youth (< age 19 years) or adults (≥ age 19 years)

Area seen:	Diabetes type:	Treatment	Visit type:
<ul style="list-style-type: none"> • Inpatient • Outpatient • Satellite site • Phone 	<ul style="list-style-type: none"> • Type 1 • Type 2 • Impaired fasting glucose (IFG) • Impaired glucose tolerance (IGT) • IFG and IGT • Pregnant--preexisting diabetes (date of dx) • Gestational diabetes mellitus (GDM) (date of dx) • Impaired glucose tolerance of pregnancy (IGT Preg) (date of dx) • Other 	<ul style="list-style-type: none"> • Lifestyle only • Non-insulin therapies: <ul style="list-style-type: none"> ○ Oral agents (OAAAs) ○ Injectables • Insulin • Insulin and non-insulin therapies 	<ul style="list-style-type: none"> • <i>New referral:</i> <ul style="list-style-type: none"> - Newly diagnosed - Not newly diagnosed - Not newly diagnosed re-referral • <i>Follow-up visit:</i> As well, sub categories: <ul style="list-style-type: none"> - <i>Insulin start</i> - <i>Pump start</i> - <i>Continuous glucose monitoring (instruct)</i> - <i>Pre-pregnancy counseling</i> - <i>Postpartum care</i>

Indicators of Care Component: Information captured on the Flow Sheet

Clinical Indicators	Self-care Indicators
Weight and Height (BMI) Waist circumference Blood Pressure (including medications) Foot assessment risk-rating (L, M, H), including date Blood glucose (including medications): Fasting 2-hr Other (specify) Cap/lab quality assurance check Glycated Hemoglobin (A1C) Lipids (including medication): Total Cholesterol (TC) HDL-C (ratio TC:HDL-C) LDL-C Triglycerides Creatinine (estimated creatinine clearance--MDRD) TSH Albumin to creatinine ratio (ACR)	Self-blood glucose monitoring: Frequency of testing Use of results Appropriate technique Ketone testing (if applicable) Hypoglycemia (frequency/appropriate tx.) Carries Diabetes ID Smoking status (y/n/quite) Flu vaccination: Date of last appointment Eye examination: Date of last appointment Dental examination: Date of last appointment Physical Activity (Aerobic and Resistance, EVS) Action Plans (yes/no) Personalized goals for A1C, BP, Lipids, and other
Other	
Date of visit (time) Previous diabetes education Physician name (and code), address, and postal code Family history (diabetes, obesity, hypertension, cardiovascular disease....) Nutrition therapy	Type of treatment (name and dosage), change overtime Pump Therapy: Medical Eligibility Criteria Adverse Glycemic Events (severe hypo, DKA) Discharge/Transition information