

**Title:**           **Development of the Nova Scotia Diabetes Repository (NSDR)**

**Introduction**   The Diabetes Care Program of Nova Scotia maintains a comprehensive registry of clinically confirmed diabetes (DM) cases attending NS Diabetes Centres ( $\approx 70\%$  of DM population). The NS Atlee Perinatal Database, maintained by the Reproductive Care Program of NS, and the NS Pharmacare Program for Seniors database also contain data for clinically confirmed DM cases. Combining data from these sources into a single repository would greatly enhance DM case ascertainment in NS.

**Objectives**     To enhance DM surveillance in NS through the development of a NS Diabetes Repository (NSDR) and the accompanying data access and data security protocol.

**Methods**        Work was guided by an advisory group with representatives from each partnering Program and expert consultants. Organization and technical requirements for constructing the NSDR were addressed, and a provisional NSDR was constructed.

**Results**         A Privacy Impact Assessment was completed, ethical and jurisdictional issues were clarified, and a single NSDR data access application was developed to replace Program-specific processes.  
The application of Program-specific case definitions resulted in 107,643 unique DM cases from 1996/97–2005/06 for the provisional NSDR. Of the 81,447 cases in 2005/06, 33% were found in 1 source, 48% in 2 sources, and 19% in 3 sources.  
Several data quality issues were identified and resolved, improving data quality for the NSDR and the Program databases.

**Conclusions**    The broad base of highly engaged partners demonstrated that Provincial Programs can effectively share data while protecting privacy. The potential of the NSDR has been recognized by a wide range of audiences.

*Karlovic Z, Talbot P, & Dunbar P (on behalf of the Nova Scotia Diabetes Repository Advisory Group). Development of the Nova Scotia Diabetes Repository (NSDR). Poster presentation at Canadian Public Health Association Centenary Conference, Toronto, ON (June 13-16, 2010).*