Diabetes Infrastructure for Surveillance, Evaluation, and Research (DISER)
Health System Clinical and Administrative Database Descriptions

<u>Note:</u> Although each of these source databases may have their own data refresh intervals (from daily to quarterly), the integrated DISER tables may sometimes only be updated on an annual interval.

### Discharge Abstract Database (DAD)

Available from: April 1st, 2002 to Current

Data refresh: Monthly with a month lag (e.g., June available in August)

This database contains information on discharges or separations (e.g., transfers) from all acute care institutions from across the province. While primarily focused on acute inpatient discharges/separations, some inpatient rehabilitation, long-term care, mental health, and day surgery procedures have also been captured over time. These data are generated through a formal abstraction process lead by Health Information Management (HIM) professionals and includes information on the facility, patient demographics, diagnoses (coded using ICD-10-CA), procedures (coded using CCI), length of stay, and discharge disposition. Information captured in DAD does not reflect all aspects of a patient and/or a patient-stay. Instead, the information is heavily weighted to physician discharge documentation for things like diagnoses and interventions that were believed to impact the patient stay (i.e., time or resources).

### National Ambulatory Care Reporting System (NACRS) & Alberta Ambulatory Care Reporting System (AACRS)\*

Available from: April 1st, 2002 to March 31st, 2010 (AACRS); April 1st, 2010 to Current (NACRS)

Data refresh: Monthly with a month lag (e.g., June available in August)

These databases contain information on visits to ambulatory care institutions from across the province. While best used to explore emergency department, urgent care, and day surgery visits. These databases also contain some data from other specialty clinics housed within ambulatory facilities that are collected under the reporting guidelines, using other methods such as mapping data; data entry using paper forms with picklists; Excel spreadsheets; and data extracts from clinical areas, for example,



diagnostic imaging. Emergency department, urgent care, and day surgery data are generated through a formal abstraction process lead by Health Information Management (HIM) professionals and includes information on the facility, patient demographics, diagnoses (coded using ICD-10-CA), procedures (coded using CCI), length of stay, and discharge disposition. Similar to DAD, the information captured does not reflect all aspects of a patient and/or a patient-stay. Ambulatory data is heavily weighted to documentation at the time of discharge for things like diagnoses and interventions that were believed to impact the visit (i.e., time or resources). Specialty clinic reporting is not mandatory for AACRS/NACRS and these data are characterized by a mixture of accuracy, completeness, and availability across the province.

\*Note: while there are many commonalities between the AACRS and NACRS databases, not all information may be available in both.

#### **Practitioner Claims**

Available from: April 1st, 1992 to Current

Data refresh: Quarterly with six month or greater delay

This database contains information on claims submitted for payment by Alberta service providers for health services delivered under the Alberta Health Care Insurance Plan. This includes all claims made by both community-based and institution-based service providers across the province. Please note that under the existing Information Sharing Agreement with Alberta Health & Wellness these data are provided to AHS for quality improvement work only. AHS Data & Analytics will negotiate access and acquire prior approval on behalf of any researchers interested in leveraging DISER. Researchers are encouraged to visit Alberta Health's website to understand approval processes: Health research data access | Alberta.ca

These data are typically generated by administrative staff working with each submitting practitioner and includes information on the location of the provider, patient demographics, practitioner type, service claimed for (coded in Health Service Canadian Classification of Procedures Extended Code), date of service, and associated diagnoses (coded in ICD-9-CA). While the database does have provincial capture across multiple levels of care (e.g., both inpatient and primary care), these data may not capture all services provided during a visit (i.e., only those claimed), will not capture all conditions the patient presents with, and is submitted using different service and diagnosis codes than other administrative systems.



#### Medical Laboratory (General)

Available from: April 1st, 2012 to Current (Complete Provincial Capture)

Data refresh: Daily with a Week Lag

This set of four databases contains information on almost all general lab tests and results performed across the province. These tests include most clinical chemistry, toxicology, hematology, serology, urinalysis, and immunology. The information is also sourced from both inpatient and outpatient labs.

These data are entered at the lab and include information on lab location, patient demographics, test type, test name, test code, test date, and test result. Some clinical results are not available, such as point-of-care testing of blood glucose.

#### Pharmaceutical Information Network

Available from: January 1st, 2008 to Current Data refresh: Weekly with a Week Lag

This database contains information on all prescription drug dispensations from community based pharmacies across the province. Information for this database is sourced from each pharmacy system and then sent to a central repository within Alberta Health.

These data include information on items such as the pharmacy, patient demographics, drug name, drug identification number, World Health Organization's Anatomic Therapeutic Chemical (WHO ATC) code, and dispense date. While the database does have provincial capture, it is limited to community based pharmacies only and contains no information on the prescription used to generate a drug dispensation.



#### **Provincial Registry**

Available from: March 31st, 1994

Data Refresh: Yearly with at a six-month lag

This database contains information on individuals who are eligible to receive publically funded health services within the Alberta Health Care Insurance Plan. This information is sourced from Alberta Health and provides a record of status within the registry at each fiscal year end.

These data include patient demographics, in/out migration, births within a year, deaths within a year, and year-end active status. The database captures almost all Albertans with a few exceptions: 1) Canadian Armed Forces members; 2) RCMP officers; 3) federal inmates; and 4) migrants who have yet to register with Alberta Health. The registry population is often a denominator for rate calculations across time and geography.

