

8.1 Patient Records for Analytics

Electronic patient record systems typically require high performance, high reliability and no (or limited) downtime. Any operation that effects these key criteria need to be kept to an absolute minimum, so as not to disturb the clinical and documentation activities of busy clinicians.

Many analytics activities require large volumes of data to be processed, which may slow down or even 'lock out' clinical transactions that are being performed at the same time. For this reason, population-based analytics and clinical research is typically not performed directly on patient records in their native clinical system. Instead, analytics directly over 'live' patient records tends to be restricted to point of care analytics activities, such as historical summaries, clinical decision support and point of care reporting. These analytics activities tend to demand the most up to date data possible to ensure its accuracy. They also tend to only require data for a single patient, which can be efficiently accessed using a patient identifier index.

Figure 8.1-1 illustrates a simple architecture in which the data store for patient records is directly used for reporting and analytics purposes.

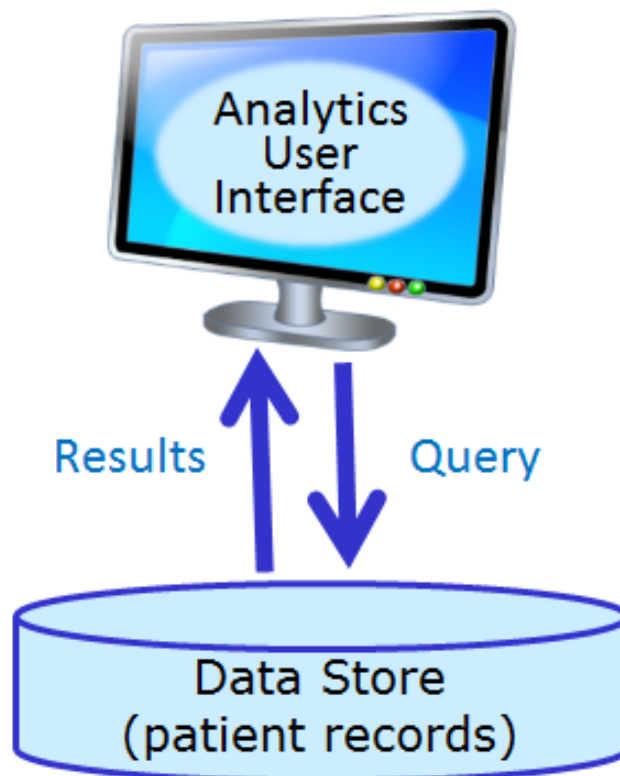


Figure 8.1-1: Analytics directly over patient records
