3.2 Scope and Purpose

Full benefits of electronic health records only accrue with the implementation of effective retrieval and reuse of clinical information. The scope of analysis of health record data may cover:

- An individual patient, across time and/or care providers;
- An individual healthcare worker;
- Patient groups or cohorts, based on demographics, diagnoses, treatments or interventions;
- Enterprise groups, based on teams, wards, clinics, institutions or providers;
- Geographical groups, based on a local area, town, region or country.

Figure 3.2-1 illustrates the three main purposes of analytics with SNOMED CT. These are:

1. Clinical assessment and treatment;
2. Population monitoring; and
3. Research.

SNOMED CT may be used to support analytics that:
• Improves the care of individual patients by enabling:
  • Retrieval of relevant information that better supports clinicians in assessing the condition and needs of a patient
  • Clinical records to be integrated with decision support tools to guide safe, appropriate and effective patient care – for example, allergy checking and potential drug contraindications identified at the point of prescribing
  • Reduction in the duplication of investigations and interventions through the effective retrieval of shared information about the patient
  • Meaning-based sharing of clinical information that is collected by different members of the health care team at different times and places (and potentially in different languages)
  • Identification of patients requiring follow-up or changes to treatment based on updated guidelines
  • Wellness management, for example, using genetic and behavioral risk profiles.
  • Context-sensitive presentation of guidelines and care pathways within the user interface
  • Labor-saving decision support systems for clinicians
  • Adaptive pick lists in clinical user interfaces
  • Professional logs and performance tracking for clinicians
  • Work list generation, for example, patients requiring follow-up based on specific criteria
  • Workload profiling and monitoring.

• Improves the care of populations by enabling:
  • Epidemiological monitoring and reporting, for example, monitoring of epidemic outbreaks, or hypothesis generation for the causes of diseases
  • Audit of clinical care and service delivery
  • Systems that measure and maximize the delivery of cost-effective treatments and minimize the risk of costly errors

• Supports evidence-based healthcare and clinical knowledge research by enabling:
  • Identification of clinical trial candidates
  • Research into the effectiveness of different approaches to disease management
  • Clinical care delivery planning, for example, determining optimum discharge time
  • Planning for future service delivery provision based on emerging health trends, perceived priorities and changes in clinical understanding.