

USE CASE 4 – Exchanging Structured Clinical Data

Description of Use Case:

This use case describes the capability of a health information system to capture data in a specified structure, with data elements such as clinical vocabularies used in a standardized way. The following scenario would test if a health information system can capture clinical data consistently across multiple instances or of data entered by multiple clinicians.

Goals:

- Exchange data in a readable, structured, and standardized format
- Utilize controlled terminology
- Definition of data/terms for consistency between end users
- Ensure mapping of localized data where applicable
- Leverage core systems of SNOMED CT, ICD-10, LOINC, and RxNorm
- Ensure privacy and security standards are adhered to
- Reduce data fragmentation and therefore, improve patient safety, efficiency, and interoperability

Identify the Actor(s) Involved:

Who is sending and/or receiving this information?

Identify people or things outside the system that act on the system (primary) or are acted on by the system (secondary). Primary actors invoke the use case and benefit from successfully completing it. Actors can be people, systems, objects, etc. Briefly describe the role of each actor. Provide a description of both.

Primary Actors:

- Patients
- Providers
- Vendors
- Health Care Payers
- Regulatory Agencies

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Use Case Specifics

Preconditions/triggers:

- Patient visit can trigger data element retrieval for patient care
- Provider request
- Request from regulatory agency

Basic flow

- Patient arrives at provider organization
- Patient is identified, registered, and standardized data is documented in appropriate record
- Encounter is completed
- Data is transmitted to appropriate third party and/or regulatory agency

Alternate flow

- Patient arrives at provider organization
- Provider is unable to find patient in EMR
- Provider is unable to retrieve and review clinical data and/or document

Are there post conditions that will be true about the system after the use case has been accomplished? List them.

- Improve patient safety
- Reduce data fragmentation
- Improve timeliness and meaningful use of data