

USE CASE 6 – Readmissions Tracking

Description of Use Case:

This complex workflow scenario demonstrates the impact of all of the use cases working together. The set of uses cases includes: receiving clinical data, patient referral, reporting clinical results to a regulatory agency, exchanging structured clinical data and query HIE for medical history.

Goals:

- Track readmissions accurately
- Understand the reasons why patients are being readmitted within 30 days after original discharge date
- See which patient populations are being readmitted with the highest frequency, so that their management may be customized to give them the additional support they need to help them not have to come back to the hospital with an unplanned visit.

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:

- Hospital inpatient care team
- ER
- Outpatient primary care clinic
- Outpatient specialty clinic
- Skilled nursing facility
- Patient/family

Use Case Specifics

Preconditions/triggers:

- Assume that our set of use cases has been implemented so that the various organizations through which a readmitted patient flows have some level of interoperability between their respective health information systems, in addition to the usual supporting business relationships that facilitate transfer of patients to and from these organizations.
- Assume that a patient has been discharged from the inpatient hospital setting less than 30 days ago (index admission).
- The trigger is that the patient is admitted to a hospital again during the 30 day period (first readmission).

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Basic flow

In this basic flow, the other relevant use cases are identified via boldface type.

- Patient is admitted to the hospital
- Patient is referred to another facility eg., a skilled nursing facility (SNF) (**Patient Referral use case**).
- The SNF receives clinical data on the referred patient via exchange of structured clinical data (**Exchanging Structured Clinical Data use case**) (**Receiving Clinical Data use case**)
- The patient is transferred to the SNF
- The SNF has questions about the patient, and calls the hospital care team to report on the patient's progress and ask questions. During or after the conversation, the hospital-based physician enters unstructured clinical notes into the EHR.
- The SNF nurse caring for the patient later that day has read-only access to the hospital's EHR, and reviews the hospital physician's notes using the SNF's access to the EHR. (**Exchanging Structured Clinical Data use case**)
- The patient has an acute clinical event and the SNF sends the patient to the hospital ER
- The ER physician logs into an HIE to see if any additional important information about the patient's medical history can be located through the HIE (**Query HIE for Medical History use case**)
- The ER treats the patient and admits them to the hospital within 30 days of the index admission (**Readmissions Tracking use case**)
- The hospital's quality improvement department produces a monthly readmissions report using data from the EHR, that shows which patients or patient populations are being readmitted most frequently (**Reporting Clinical Results to a Regulatory Agency use case**).
- These reports are used in the hospital's Quality Committee meetings to prioritize tactics across the hospital and with other institutions, such as the SNF, to reduce unplanned readmissions.

Alternate flow:

- There are many possibilities for this complex process to go wrong, but when all of these use cases perform together in concert, it is more likely that patients will receive better care at a lower cost.

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

- Patient records are up to date between the various organizations' health IT systems, and physicians and health care professionals from all organizations involved have access to accurate and timely clinical information to provide the best patient care possible.

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Key Resources Recommended:

- Set of resources that must be made available and/or configured to execute the use case. Data, services, systems, etc.

1. ER
2. Hospital
3. SNF
4. Hospital EHR
5. HIE
6. Quality improvement department and hospital committee