

Use Case Summary

NAME OF UC:

SUBMIT/RECEIVE STATEWIDE ADMISSION, DISCHARGE, TRANSFER (ADT) NOTIFICATIONS

Sponsor(s): NJHIN / NJII NJDOH _____

Date: 5/28/15 _____

The purpose of this Use Case Summary is to allow Sponsors, Participants, and other readers to understand the purpose of the Use Case (UC), the value proposition the UC represents, and what the Use Case does, requires, and how the UC operates at a high level. The summary is intended to assist the HIE and HIT Community understand where this UC fits within the overall roadmap for statewide sharing of health information.

This UC Summary has several sections allowing readers to understand the impact of this UC in the following areas: health outcomes, regulation, cost and revenue, implementation challenges, vendor community, and support.

Executive Summary

In this section provide a brief (3-5 sentence) summary of the UC's function and purpose. Also include a brief description of the importance and highlight the expected positive impact from implementation of this UC.

Admission, Discharge, Transfer (ADT) notification is widely regarded as a keystone to improving patient care coordination through health information exchange. ADT messages are sent when a patient is admitted to a hospital, transferred to another facility, or discharged from the hospital. Alerts are then sent to update physicians and care management teams on a patient's status, thus improving post-discharge transitions, prompting follow-up, improving communication among providers, and supporting patients with multiple or chronic conditions. ADT notifications also support the identification of patients who are frequent or high users of the health care system, which allows providers to steer these patients toward clinical and non-clinical interventions that may reduce unnecessary overutilization by preventing avoidable emergency department (ED) visits and hospital readmissions.

The Submit/Receive Statewide Admission, Discharge, Transfer (ADT) Notifications Use Case supports a way to communicate the status of patients' care transitions with every care team member interested in that patient. When a patient is admitted to a hospital, transferred, or discharged, an ADT message is created by the hospital's Electronic Health Record (EHR) system. The hospital EHR system sends the ADT messages through a Trusted Data Sharing Organization (TDSO) to the New Jersey Health Information Network Shared Services (NJHIN) which operates the Statewide ADT Notification Service. The NJHIN then looks up the patient and the providers who are on that patient's care team using the Active Care Relationship Service (ACRS). ACRS contains information on which providers (e.g. attending, referring, consulting, admitting, primary care physician, etc.) are interested in that patient's health. NJHIN also looks up the providers in the statewide Health Provider Directory (HPD) to obtain the delivery preference for each of those providers and to determine the electronic endpoint and "transport" method by which the

providers wish to receive ADT notifications (e.g. via Direct Secure Messaging, via Health Level Seven (HL7) over LLP, etc.) for their patients.

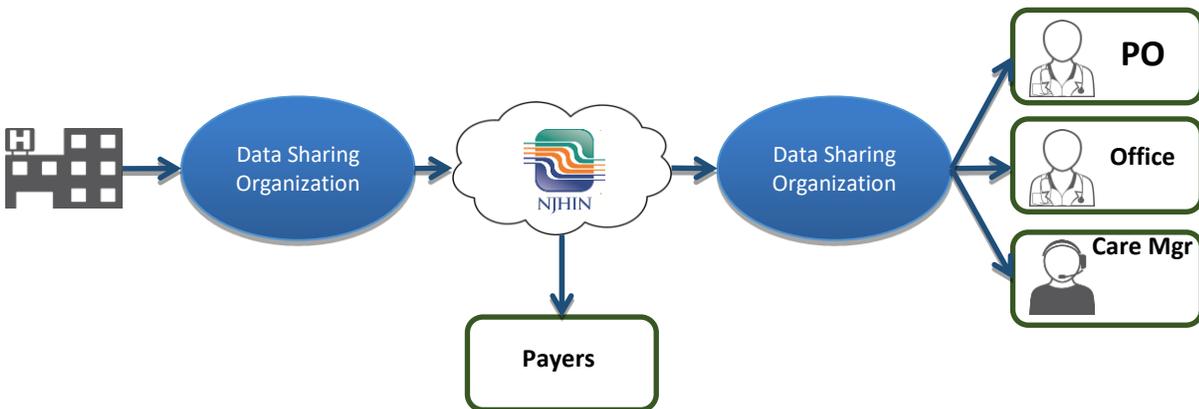
Based on the provider’s delivery preferences, NJHIN notifies each provider who has an active care relationship with a patient upon the following ADT events:

- Patient is admitted to the hospital for inpatient or emergency treatment;
- Patient is discharged from the hospital;
- Patient is transferred from one care setting to another (e.g., to a different location (unit, bed) within the hospital or to another facility outside of the hospital); and/or
- Patient’s demographic information is updated (e.g. name, insurance, next of kin, etc.) by a Participating Organization (PO).

Note related Use Case requirements: Organizations entering into the Submit/Receive Statewide ADT Notifications Use Case also in general should simultaneously enter into the Submit Active Care Relationships Use Case and the Submit Provider Information to Statewide Directory Use Case. These three Use Cases go together to support Statewide ADT Notifications.

Diagram

In this section, provide a diagram of the information flow for this UC. The diagram should include the major senders and receivers involved and types of information being shared.



Regulation

In this section, describe whether this UC is being developed in response to a federal regulation, state legislation or state level administrative rule or directive. Please reference the precise regulation, legislation, or administrative act such as Public Law 111-152 (Affordable Care Act),

Public Law 111-5; Section 4104 (Meaningful Use), 42 CFR 2 (substance information), MCL § 333.5431 (Newborn Screening), PA 129 (standard consent form), etc.

Additionally, provide information if this UC will allow Eligible Professionals/Providers (EP) or Eligible Hospitals (EH) to meet an attestation requirement for Meaningful Use.

Legislation/Administrative Rule/Directive

- Yes
- No
- Unknown

[Name or number of legislation, rule, directive, or public act]

Public Law 111-152 (Affordable Care Act)
Public Law 111-5; Section 4104 (Meaningful Use)

Meaningful Use:

- Yes
- No
- Unknown

The Statewide ADT Notification Service Use Case supports Meaningful Use Stage 2 Transitions of Care measures (12) for Eligible Professionals and Eligible Hospitals.

Cost and Revenue

In this section provide an estimate of the investment of time and money needed or currently secured for this UC. Be sure to address items such as payer incentives, provider incentives, revenues generated (e.g. SSA transaction payments) or cost savings that could be realized (i.e. reduction of administrative burden).

As information is known or available, provide information on the resources and infrastructure needed to move this UC into production.

Patients whose providers receive ADT notifications are expected to receive more timely and coordinated care, resulting in better health outcomes, more timely treatment and management of health conditions that could otherwise result in a hospital readmission or emergency.

Additionally it is estimated that on average one avoidable hospital readmission saves payers approximately \$15,000.

Payers who subscribe to the Statewide ADT Notification Service based on a monthly rate are charged for each ADT source feed from which the payer receives notifications. One ADT source feed may include multiple hospitals.

NJHIN reimburses Data Sharing Organizations for each ADT source that a subscribing payer uses.

Due to potential cost savings by improving care transitions and reducing avoidable hospital readmissions, both Centers for Medicare and Medicaid Services (CMS) and most Blue Cross Blue Shield accept the following codes from Physician Organizations for reimbursement for follow up with patients of moderate or extreme complexity after discharge.

99495-

- Communication (direct contact, telephone, electronic) with the patient and/or caregiver within two (2) business days of discharge
- Medical decision making of at least moderate complexity during the service period
- Face-to-face visit, within 14 calendar days of discharge

99496 -

- Communication (direct contact, telephone, electronic) with the patient and/or caregiver within two (2) business days of discharge
- Medical decision making of high complexity during the service period
- Face-to-face visit, within seven calendar days of discharge

The potential cost savings are not limited to payers. Hospitals have an incentive to adopt ADT notification due to the fact that CMS will not reimburse hospitals for avoidable readmissions. ADT notifications enable providers and care managers to follow up with patients to improve the process of transitioning from in-patient to community-based care settings, thus reducing the likelihood of readmission.

Implementation Challenges

In this section, as information is known or available, describe challenges that may be faced to implement this UC. Be sure to address whether the UC leverages existing infrastructure, policies and procedures, ease of technical implementation, or impacts current workflows (short term and long term).

Implementation challenges associated with the ADT Notification Service are conformance to standards and the consistency of data elements within the standard structure. There are often limits to the amount and consistency of patient data entered by the source system. Even if data fields are populated as required by the ADT Implementation Guide, and the source system (Data Sharing Organization) sends the correct event types, certain data elements may be omitted. For example, an insurance segment, if omitted, prevents NJHIN from routing the information to the correct Payer. Also, inconsistencies in hospital registration data entry (e.g. gender may be entered as M, F, U at one facility, and as 0, 1, 2 at another) must be addressed so they are interpreted consistently.

Another challenge is inconsistency in how clinical data is entered by the source system. While a formal diagnosis code is preferred, some facilities may include a chief complaint, entered by admission/registration staff who are not qualified to provide a clinical diagnosis. Chief complaint data is typically free field (i.e. patient is experiencing stomach pain). There are inconsistencies with whether or not this data field is included by the Data Sharing Organization, and what type of data is sent.

Patient matching also is an ongoing challenge. There is a lack of common patient identifiers as well as inconsistency with patient demographic information to match patients in a message with the providers that should receive an alert, which makes patient matching difficult in some cases. NJHIN has adopted a

“no false positives rule” and would decline to send a message that is a close, but not exact, match rather than to send the message in error. This challenge is being addressed through the robust patient matching established in the NJHIN Active Care Relationship Service (ACRS).

The ultimate goal of ADT Notification is to supply providers and care managers with information about patient transitions of care so that timely follow up can occur. Ensuring that clinicians receiving the ADT alerts are able to revise workflows to incorporate this new information is critical. To address this challenge, NJHIN may consider providing users with training and workflow integration resources to maximize the benefits of the ADT Notification Service.

Vendor Community Preparedness

In this section, address the vendor community preparedness to readily participate in the implementation of this UC. Speak to whether this UC will utilize current or future technical capabilities of the vendor products. If this UC requires new functionality at the vendor level provide information as known to the timeliness of when product updates may be available and any potential costs to the HIE community.

Implementation of this Use Case is already underway, and ADT messages are being exchanged. In order to participate, sending and receiving Data Sharing Organizations need to be able to process ADT HL7 messages. NJHIN can process the messages and has built custom features to match patients (refer to the ACRS Use Case). The primary challenge among vendors is normalizing the data and integrating it into their customers’ workflow.

Support Information

In this section, provide known information on the support for this UC.

Support can come from multiple levels (Governor, Federal or State Legislative, NJDOH Commission, New Jersey State Departments, CMS/ONC/CDC, NJHIN Board, Qualified Organizations, Payer Community, Interest Group [ex: MSMS, MHA], or Citizen support).

Please note any concerns or oppositions with the Use Case.

Political Support:

- Governor
- New Jersey Legislature
- HIT Commission
- NJ Dept of Human Services
- CMS/ONC
- CDC
- NJHIN Board

Other:

Concerns/Oppositions: The New Jersey Health and Hospital Association (MHA) and some hospitals initially expressed concerns about the security and privacy of the patient information with regard to how

and where it would be shared. These concerns have been addressed. Confidence in the privacy and security is supported by NJHIN's Legal Chain of Trust with participating Data Sharing Organizations and their customers. NJHIN's legal teams developed two opinion letters on this topic, which are available upon request.

Sponsor(s) of Use Case

Who are the major sponsors of the use case?

NJHIN Shared Services

Metrics of Use Case

In this section, define metrics for the Use Case to be successful.

The percent of hospital admissions sent and received through the ADT Notification Service is tracked as a metric to evaluate performance. The measures of success are defined by the following annual goals:

2014

- 80 percent of all hospital admissions in the state are being sent to NJHIN by the end of 2014; and
- 60 percent of Physician Organizations receiving ADT messages by the end of 2014.

2015

- 90 percent of all hospital admissions in the state are being sent to NJHIN by the end of 2015; and
- 70 percent of Physician Organizations receiving ADT messages by the end of 2015.

Other Information

This section is to afford the sponsor(s) an opportunity to address any additional information with regard to this UC that may be pertinent to assessing its potential impact.