

Use Case Summary

NAME OF UC:

EXCHANGE MEDICATION RECONCILIATION

Sponsor(s): Blue Cross Blue Shield of Michigan - Pharmacy Services

Date: 5/18/15

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.

Medication reconciliation is the comprehensive evaluation of a patient's medication regimen any time there is a change in therapy in an effort to avoid medication errors such as omissions, duplications, dosing errors, or drug interactions, as well as to observe compliance and adherence patterns. The medication reconciliation process includes a comparison of the existing and previous medication regimens and should occur at every transition of care in which new medications are ordered, existing orders are rewritten or adjusted, or if the patient has added nonprescription medications to his or her self-care. Hospital discharge is a transition of care when patients are at a high risk of medication discrepancies as they transition from hospital to home. Identifying and remedying medication discrepancies is important, as the discrepancies unaddressed may contribute to drug-related problems, medication errors, and adverse drug events.

Several factors create difficulty for providers to manage patient medications and improve patient safety including patient gaps in knowledge regarding medication details (e.g. name, dose and frequency) and patients who receive care from multiple care providers in different locations. The following evidence has been collected:

- Approximately 1.5 million preventable adverse drug events (ADEs) occur annually as a result of medication errors at a cost of more than \$3 billion per year.
- Approximately half of all hospital-related medication errors and 20% of all ADEs have been attributed to poor communication at transitions of care.

- The average hospitalized patient is subject to at least one medication error per day.
- ADEs account for 2.5% of estimated emergency department visits for all unintentional injuries and 6.7% of those lead visits to hospitalization.

The purpose of this Use Case (UC) is to share patient medication information at multiple points of care, including pharmacies, physician offices, hospitals, and transitional facilities such as outpatient tertiary and skilled nursing facilities. Statewide coordination in sharing patient medication information helps minimize Adverse Drug Events (ADEs) and maximize cost benefits. Additionally, this UC leverages the Michigan Health Information Network Shared Services (MIHIN) Active Care Relationship Service (ACRS) for notifying appropriate providers of changes to a patient's medication status.

Note related Use Case requirements: Organizations entering into the Exchange Medication Reconciliation also in general should simultaneously enter into the Submit Data to Active Care Relationship Service Use Case and the Submit Data to Statewide Health Provider Directory Use Case. These Use Cases go together to support Exchange Medication Reconciliation.

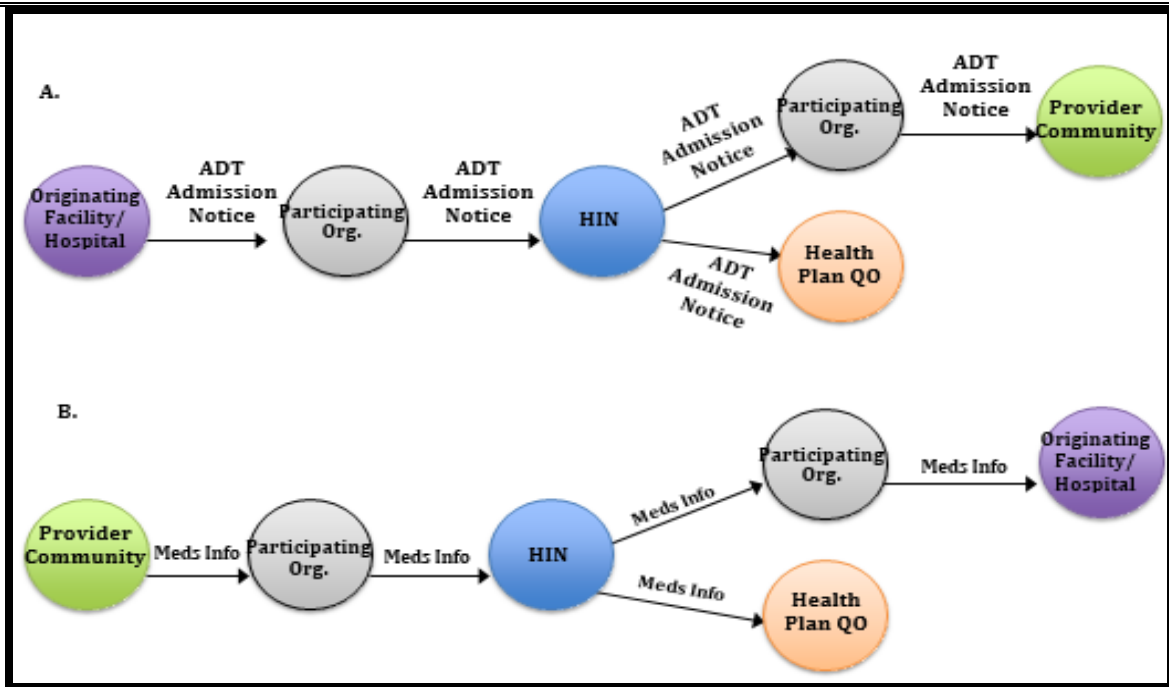
Diagram

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.

Medication information flows three ways:

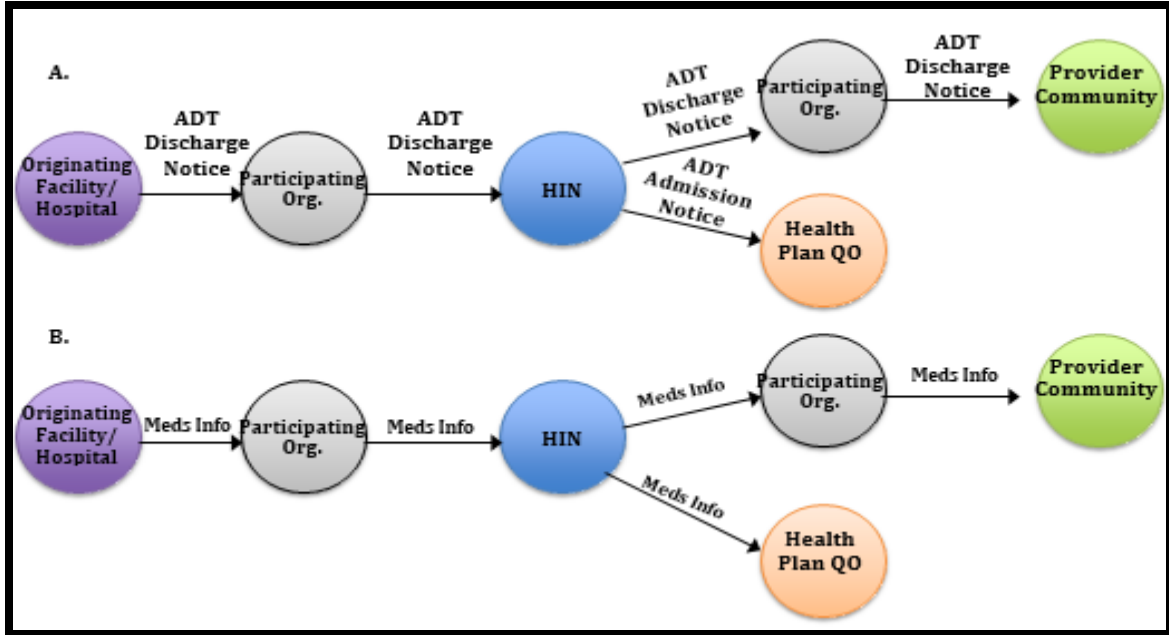
A. An admission notification for a patient is sent from the hospital/facility to the providers in an Active Care Relationship with the patient and to the health plan(s) via the statewide Admission, discharge, transfer (ADT) notification service and Active Care Relationship Service.

B. The provider receiving the ADT acknowledges the admission, generates a summary of care for the patient including active medications for the patient by their Electronic Health Record (EHR) and the summary of care is transmitted back to the originating hospital/facility and to the health plan(s).

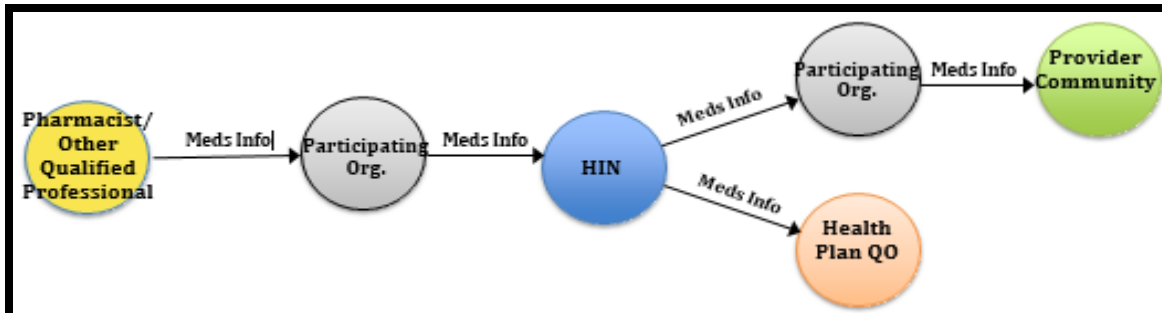


A. A discharge notification for the patient is sent from the originating facility/hospital to the providers in an Active Care Relationship with the patient and the health plan(s) via the statewide ADT notification service.

B. Information containing medication reconciliation at discharge for the patient is sent at the time of discharge from the originating hospital/facility to the providers in an Active Care Relationship with the patient and to the health plan(s) via the statewide medication reconciliation service.



A. Medication information for a patient is generated when a pharmacist/other qualified professional conducts a face-to-face Advanced Medication Reconciliation (AMR) with a patient. The medication information is sent from the pharmacist/other qualified professional to the providers in an Active Care Relationship with the patient and to the health plan(s) via the medication reconciliation service.



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

This use case supports the Meaningful Use Stage 2 Medication Reconciliation measures for Eligible Professionals (14) and Eligible Hospitals and CAH (Critical Access Hospital) (11).

Additionally, the Joint Commission, effective January 1, 2014, has released Hospital National Patient Safety Goals (NPSG) including NPSC.03.06.01: Maintain and communicate accurate patient medication information. The rationale for this goal is the large body of evidence that medication discrepancies can affect patient outcomes. Medication reconciliation is intended to identify and resolve discrepancies.

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, provide 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.

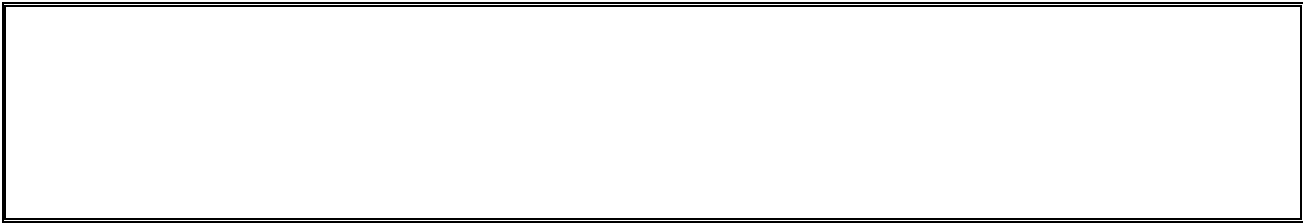
This Use Case includes the following cost components:

- Cost to establish medication reconciliation alignment through the BCBSM High Intensity Care Management Program
- Cost to develop HL7 message protocols compatible with certified EMR/EHR systems to receive standardized patient medication data
- Cost for Health Information Exchange Qualified Organizations (HIE-QOs) to develop and implement the medication reconciliation UC
- Costs for Participating Organizations (POs) and Hospitals to implement this UC
- Costs to pilot medication information transmission to hospitals upon ADT (admission) notification i.e. medication history from ADT receiver (this would be replaced when medication history is available by query)
- Costs to pilot medication information transmission of medication discharge and reconciliation notification

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).

Practices, provider organizations and hospitals will need to ensure that workflows are in place that capture Admission, Discharge, Transfer (ADT) messages and medication history information for a patient that can be utilized at the inpatient setting and shared with the “pharmacist” team and all caregivers who are in an active care relationship with the patient to ensure timely intervention and consistent reconciliation at all points of the transition (admission, discharge, transfer). The biggest challenge is not the technology but the workflow challenges this new process introduces.



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.

Because medication reconciliation is a component of the menu set for Stage 2 Meaningful Use, vendors certified for Stage 2 must pass certification criteria. This criteria includes Clinical Information Reconciliation (170.314 (b)(4)). The criteria enable a user to electronically reconcile the data that represent a patient’s active medication, problem, and medication allergy lists as follows.

For each list:

- (i) Electronically and simultaneously display (i.e., in a single view) the data from at least two list sources in a manner that allows a user to view the data and their attributes, which must include, at a minimum, the source and last modification date.
- (ii) Enable a user to create a single reconciled list of medications, medication allergies, or problems.
- (iii) Enable a user to review and validate the accuracy of a final set of data and, upon a user’s confirmation, automatically update the list.

Hospitals and providers are currently utilizing certified technology that tracks medication history, active medications, problems and allergies. These systems have the ability to communicate via the State’s qualified organizations via multiple transmission protocol including HL7.

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, MI HIT Commission, Michigan State Departments, CMS/ONC/CDC, MiHIN 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
- Michigan Legislature
- HIT Commission
- MDCH or other SOM Department
- CMS/ONC
- CDC
- MiHIN Board
- Other: Blue Cross Blue Shield of Michigan

Payers, hospitals, and physicians all have incentives to perform medication reconciliation, including the following:

- Meaningful Use incentives
- Payer incentives to providers for population health
- Improved transitions of care, reducing hospital readmissions

Concerns/Oppositions: None noted

Sponsor(s) of Use Case

Who are the major sponsors of the use case?

Blue Cross Blue Shield of Michigan – Pharmacy Services
MiHIN Shared Services

Metrics of Use Case

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

Number of discrepancies identified and remedied

- Number of ADEs prevented
- Percentage reductions in discrepancies and ADEs
- Reduction in admissions due to medication issues
- Number of messages generated and transmitted
- Number of HIE-QOs participating
- Number of providers participating
- Number of pharmacies participating

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.

This Medication Reconciliation UC identifies foundational concepts for improving care transitions through medication reconciliation and outline the following tenets of medication reconciliation, which can be applied in collaboration with other health care professionals by leveraging the State of Michigan's HIE infrastructure.

1. Medication reconciliation is a key process required to improve patient care and outcomes in care transitions.
2. Medication reconciliation is a patient-centered/family-centered process focusing on patient safety.
3. Medication reconciliation requires an interdisciplinary, collaborative approach.
4. Medication reconciliation must be based on a culture of accountability.
5. Medication reconciliation should be standardized.
6. Effective medication reconciliation requires coordinated communication.
7. Medication reconciliation requires integration of health information technology solutions.
8. Medication reconciliation requires a process of continuous quality improvement.