



Use Case Scenario Summary

Use Case Scenario Name:	Immunizations for Care Team
Use Case to Which Scenario Belongs	Immunizations
Sponsor:	Michigan Department of Health and Human Services
Date:	March 8, 2019

Executive Summary

This brief section highlights the purpose for the use case scenario and its value. The executive summary gives a description of the use case's importance while highlighting expected positive impact.

Reviewing immunization status is an important step in providing preventative care. Higher vaccination rates reduce the rate of vaccine-preventable diseases and can result in significant savings in medical costs for healthcare organizations.

Records of immunizations are used to support pay-for-performance initiatives that incentivize providers to focus on the quality of patient care. An example is the Healthcare Effectiveness Data and Information Set (HEDIS) reporting for the Centers for Medicare and Medicaid Services (CMS) Star Rating, but there are many others.

Each state in the U.S. has an immunization information system (IIS) that closely tracks and monitors immunizations. In Michigan, the IIS is the Michigan Care Improvement Registry.

As public and private health plans (payers) use immunization data more and more to determine incentive payments for providers, timely access to records housed in the IIS has become critical. This data may also help:

- Reduce costs associated with vaccine preventable diseases
- Decrease burdens on payers to receive immunization information for quality reporting
- Increase revenue through improved quality measures

Purpose of Use Case: The Immunizations for Care Team use case scenario allows participating organizations to receive notifications of verified immunizations from an IIS in real time through the statewide health information network.

Overview

This overview goes into more details about the use case.

“Vaccines are the most economical health interventions known to man. For every \$1 spent on each of the eleven vaccines given routinely to children, our country saves \$10.1 in medical costs by averting costs to treat diseases.”¹

Adherence to immunization schedules results in significant savings. It is estimated that for each U.S. birth cohort who receives the currently recommended vaccine schedule, 42,000 deaths and 20 million illnesses are prevented. This results in a net savings of \$14 billion in direct costs and \$69 billion in combined direct and indirect costs.²

As value-based payment become increasingly common, HEDIS scores have emerged as important metrics to determine reimbursement rates for payer organizations, and often affect provider reimbursement as well. HEDIS measures are used by public and private payers to evaluate quality of care, including several immunization-related measures. Improvement in HEDIS scores, which influence CMS Star Ratings, translate to increased revenue for payer organizations and providers.

Delays in obtaining this information are costly, affecting whether a patient receives the prescribed course of immunizations and affecting incentive payments for providers and health plans. Timely access to immunization data can improve responses to gaps in care, thereby reducing costs associated with vaccine preventable diseases and potentially improving HEDIS measures.

Additionally, most other pay-for-performance initiatives require providers to report the same information as that reported through HEDIS, only in different ways.

In many states, the process for obtaining records presents challenges and inefficiencies. Extracting meaningful data requires significant investment of time and resources for the IIS and payer organizations.

The Immunizations for Care Team use case scenario offers much-needed capabilities:

- It establishes a pathway through which notification of immunizations (which were verified by the state IIS) will be pushed to participating organizations in real time.

¹ “Facts,” Every Child By Two, accessed on June 27, 2016, http://www.ecbt.org/index.php/facts_and_issues/

² “Morbidity and Mortality Weekly Report (MMWR),” Centers for Disease Control and Prevention, accessed November 8, 2017, <https://www.cdc.gov/mmwr/preview/mmwrhtml/su6004a9.htm>

- It creates a workflow which allows participating organizations to obtain information regarding covered individuals quickly as opposed to existing monthly, quarterly, and annual batch processes.
- Since any immunization administered and reported to the IIS is then verified, participating organizations who have declared an active care relationship with a patient will receive a notification once an immunization has been verified.

Creating a streamlined flow of information through this use case scenario creates opportunities for improved quality of care, increased revenue, and improved quality of data reporting.

Persona Story

To explain this use case, this section follows a persona example from start to finish.

Daisy Barnes (Healthcare Consumer)

Two-year-old Daisy Barnes has been receiving her childhood vaccines during regular checkups at her pediatrician's office. When Daisy received her most recent childhood shots, her pediatrician sent an immunization message to the state Immunization Information System through the statewide health information network.

With the Immunizations for Care Team scenario, this immunization information can also be quickly and easily routed to Daisy's health insurance plan.



Regina Klausen (Quality Data Analyst)

As a quality data analyst at a health plan, Regina Klausen is often faced with a new set of challenges and potential solutions in terms of physician quality metrics. On a typical day, Regina may receive numerous electronic reports and data extracts from the various practices and providers that work with her health plan.

Previously, Regina would have to sort through batch files from the IIS searching for immunization data to determine incentive payments for providers. Now, she can receive notifications of verified vaccinations, like Daisy's childhood vaccinations, from the state's IIS through the health information network. This automated notification saves Regina time with a more transactional flow of data, allows her to quickly spot gaps in care and then take action. Ultimately, Regina feels this capability will improve her company's processes to



accurately capture quality information for HEDIS reporting which will result in improved HEDIS scores.

Diagram

This diagram shows the information flow for this use case.

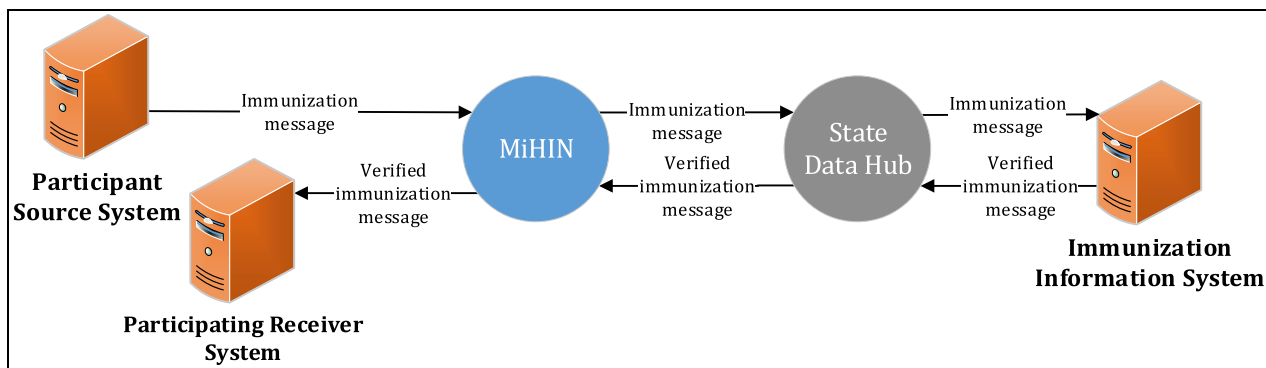


Figure 1. Data Flow for Immunizations for Care Team

1. Healthcare provider administers an immunization and notifies the IIS via the statewide health information network
2. HIN routes the immunization message to the State Data Hub
3. State Data Hub routes that immunization report to the Immunization Information System where it is then verified
4. IIS sends the verified immunization message to MiHIN via the same path
5. MiHIN identifies which organization(s) have an active care relationship with the patient who received the immunization
6. MiHIN routes the verified immunization message to the receiver systems according to their delivery preferences

Regulation

This section describes whether this use case is being developed in response to a federal regulation, state legislation or state level administrative rule or directive.

Legislation/Administrative Rule/Directive:

Yes

- No
- Unknown

Meaningful Use:

- Yes
- No
- Unknown

Cost and Revenue

This section provides an estimate of the investment of time and money needed or currently secured for this use case.

A pricing/revenue model has not been determined as of this writing.

Implementation Challenges

This section describes the challenges that may be faced to implement this use case.

There are three primary implementation challenges:

- Participating organizations must develop the ability to receive and integrate the immunization information into their electronic reporting systems
- The state IIS must develop the ability to generate messages to send to MiHIN
- MiHIN's Active Care Relationship Service® (ACRS®) must be updated by participating providers and health plans at a minimum once per a month to ensure accurate routing

Vendor Community Preparedness

This section addresses the vendor community preparedness to readily participate in the implementation of this use case.

The Immunizations for Care Team use case scenario relies on the state IIS to create the verified vaccination notification that is forwarded to participating organizations. This message is routed to the participating organization based on declared active care

relationships. These participating organizations require integration of these messages into their appropriate systems and workflow.

Support Information

This section provides known information on this support for this use case.

Political Support:

- Governor
- Michigan Legislature
- Health Information Technology Commission
- Michigan Department of Health and Human Services or other State of Michigan department
- CMS/ONC
- CDC
- MiHIN Board

Sponsor(s) of Use Case

This section lists the sponsor(s) of the use case

- Michigan Department of Health and Human Services

Metrics of Use Case

This section defines the target metrics identified to track the success of the use case.

Key metrics for this use case scenario (other metrics may be added as appropriate) include:

- Number of organizations participating in the scenario
- Number of verified immunization records received by MiHIN
- Number of verified immunization records sent to participating organizations by MiHIN
- Reduction in manually prepared files by state IIS.