Use Case Summary

Use Case Name:	Death Notifications
Sponsor:	Michigan Department of Health and Human Services
Date:	March 8, 2019

Executive Summary

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

Deaths are an unfortunate reality in the world of healthcare. When a patient or physician passes away, it is critical to quickly notify multiple healthcare organizations (physician offices, pharmacies, health plans, public agencies, etc.) to help reduce waste and prevent fraud. For example, medical supply companies often continue shipping expensive and non-returnable supplies for weeks or months before learning a person is deceased. Those shipments result in hard-dollar waste in the millions of dollars. This waste is all preventable.

If the deceased is a doctor or other healthcare professional, death notifications may also help pharmacies avoid filling counterfeit prescriptions; since it is possible for criminals to falsify prescription slips from the deceased doctor.

Most importantly, without knowledge of a death, organizations involved in healthcare often initiate uncomfortable communications with grieving families by trying to reach the deceased as if still living.

Purpose of Use Case: The Death Notifications use case helps participating organizations receive notifications of deaths in a timely and accurate fashion. Electronic death notifications help improve awareness of the event, avoid unnecessary and wasteful spending, preclude falsified insurance claims, and stop dispensation of prescribed medications.

Overview

This overview goes into more details about the use case.

There are approximately 90,000 deaths annually in Michigan, a death rate of almost 0.1 percent. Roughly 75% of these deaths are residents over the age of 65 who are likely to have been Medicare beneficiaries.[1]

For many years, delayed death notifications have financially impacted healthcare facilities and government departments. There have also been accounts of people using these delays for fraudulent insurance claims or other criminal activities. For example:

- In 2011 Medicare paid $23 million to deceased patients[2]
- Also in 2011, a Georgia Doctor was billed $2M in fraudulent claims[3]
- In 2015, the United States Accountability Office noted that identities of about 200 beneficiaries received $9.6 million worth of Medicaid benefits subsequent to the beneficiaries' deaths[4]

In addition to benefits listed in the Executive Summary, the Death Notifications use case can help to:

- Inform researchers of a death if the person is involved in a study
- Identify intervention opportunities for suspected fraud and/or substance abuse
- Improve home health, rehabilitation, and hospice organizations' ability to reallocate resources and scheduling availability
- Enable better synchronization between state and local vital records registries

Please note: This use case requires participation in the following additional use cases: Health Directory, Common Key Service, and Active Care Relationship Service® (ACRS®).

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[1] "Number of Deaths and Age-adjusted Mortality Rates for the Ten Leading Causes of Death, Michigan and United States Residents, 2014," accessed on August 5, 2016, http://www.mdch.state.mi.us/pha/osr/deaths/causrankcnty.asp

[2] Lisa Barron, "Medicare Paid Out Millions for Deceased and Undocumented Patients," Newsweek (November 1, 2013), accessed on August 4, 2016, http://www.newsmax.com/US/medicare-deceased-patients-payouts/2013/11/01/id/534326/

[3] "Doctor Pleads Guilty to Billing Medicare and Medicaid for Counseling Sessions with Dead Patients," Federal Bureau of Investigation (June 6, 2011), accessed on August 4, 2016, https://archives.fbi.gov/archives/atlanta/press-releases/2011/doctor-pleads-guilty-to-billing-medicare-and-medicaid-for-counseling-sessions-with-dead-patients

[4] Seto Bagdoyan, "MEDICAID: CMS Could Take Additional Actions to Help Improve Provider and Beneficiary Fraud Controls," Testimony Before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives, United States Government Accountability Office (June 2, 2015), accessed on August 4, 2016, http://www.gao.gov/assets/680/670581.pdf

Persona Story

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

Dr. Julie Lawson (Intensive Care Physician)

Dr. Julie Lawson is an attending physician in an Intensive Care Unit (ICU). Unfortunately, death is part of her day-to-day life. Today she was caring for an elderly patient who passed away from serious complications related to pneumonia.

It is Dr. Lawson's responsibility as an attending physician to complete the patient's death certificate and send it to the state death registry. By reporting the patient's death, Dr. Lawson is initiating a process that ensures the patient's care team is notified of the death event. This is an important part of handling insurance claims, discontinuance of medical supplies, and prevention of prescription fraud.

Dr. David Senoid (Pharmacist)

Dr. David Senoid is the Pharmacy Manager at Pinewood Pharmacy. Dr. Senoid enjoys being able to work directly with patients and helping them get better as quickly as possible.

As a pharmacist, Dr. Senoid has an ethical and legal responsibility to uphold laws surrounding dispensation of controlled substances. He must be aware of situations that can lead to prescription diversions that are not for legitimate medical purposes.

One issue Dr. Senoid faces more often than he'd like is finding out his pharmacy has been filling prescriptions for deceased patients. Either a family member has been continuing to fill the prescriptions illegally, or the prescriptions were on automatic-refill and shipment and his pharmacy received no notification of the death.

By connecting to theMiHIN and enrolling in the death notifications use case, Dr. Senoid can receive notifications from the death registry and can discontinue service for patients who have died.

Oliver Matheson (Insurance Representative)

Oliver Matheson is an insurance representative for Blue Marks Health Insurance. Oliver takes pride in his job, helping people prepare for the future and build their assets.

Oliver has received extensive training on insurance fraud so he can detect and prevent it before it occurs. There are many protocols in place to avoid fraudulent claims for death and funeral insurance but fraud is still a common issue that can cost insurance companies a great deal of money.

Death notifications can help Oliver update his policies and avoid filing fraudulent claims, saving him time and saving his company significant amounts of money.

Elmwood Medical Supply (Medical Supply Organization)

Elmwood Medical Supply offers home medical equipment and other supplies to help with mobility, respiratory, and other aspects of care within the patient's home. Elmwood helps their clients live comfortably in their homes by regularly delivering medical equipment and supplies right to the patient.

Elmwood regularly delivers containers that store oxygen, tubing and related supplies for the delivery of oxygen, and oxygen contents to pneumonia patients. In addition, pneumonia patients often need nebulizers and other medical equipment in instances where pneumonia has caused general loss of function.

When Elmwood is unaware of a client death they continue to deliver these expensive products and cannot restock them when no longer needed. This use case can help Elmwood limit the amount of supplies wasted for patients that are no longer needed in home care.

Diagram

This diagram shows the information flow for this use case.

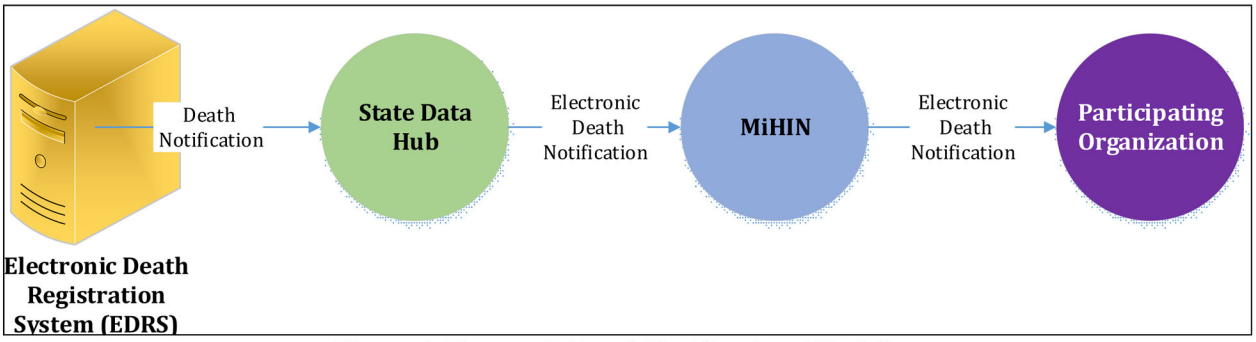

Figure 1. Electronic Death Notifications Workflow

Electronic death notifications are generated on a transactional basis.

1. The Electronic Death Registration System (EDRS) receives a death record from a healthcare provider such as a hospital.
2. State's Data Hub generates an electronic death notification message and forwards it to MiHIN.
3. MiHIN queries the death notification against ACRS®. MiHIN also utilizes the Common Key Service to aid in patient matching, identifying participating organizations.
4. The Health Directory determines the proper destination and routes to the appropriate participating organizations accordingly.

NOTE: Participating organizations include any members of the patient's care team, which can include the following: clinicians, practices, hospitals, care coordinators, pharmacies, medical supply companies, specialists, rehabilitation centers, and more as appropriate based on need for death notifications.

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

The State of Michigan developed a revised death certificate to be used for all deaths that occur on or after January 1, 2004. The revision was necessitated by a change to the national standard death certificate issued by the Centers for Disease Control (CDC). Michigan law M.C.L. 333.2811[5] requires the national standard form be followed as nearly as possible.

For more information on the national standard forms please see "Revisions of the U.S. Standard Certificates of Live Birth and Death and the Fetal Death Report," National Center for Health Statistics, National Vital Statistics System at https://www.cdc.gov/nchs/nvss/revisions-of-the-us-standard-certificates-and-reports.htm.

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.

Costs

There are two projected costs associated with this use case.

[5] "Death Certificate (revised)," Michigan Department of Health and Human Services, accessed October 5, 2017, http://www.michigan.gov/mdch/0,4612,7-132-2945_5221-81945--,00.html

- The first cost is around the implementation of this use case, which utilizes existing infrastructure
- The other cost for this use case is the cost of not implementing it. This lost opportunity cost is projected to be in the millions of dollars in waste and fraud that exist today

The waste and fraud described in this summary can be greatly reduced or in some cases possibly eliminated. The return on investment for successfully implementing and adopting this use case is very high. Implementing this use case can also reduce the annual costs for maintaining and supporting a statewide EDRS, which can be in the range of a million dollars per year.

Revenues

The cost savings achieved by adjusting services upon receipt of electronic death notifications should prompt stakeholders to subscribe to this notification service.

The Social Security Administration presently pays a premium to be notified within seven days of a death occurrence. Together with the Michigan Department of Health and Human Services (MDHHS), MiHIN is preparing a pricing model for subscriptions to sustain this notification service.

The pricing model will likely vary by recipient and may be similar to a data plan offered by a wireless carrier. This would include a base fee for a certain number of notifications with additional per-transaction fees for notifications beyond that baseline on a monthly basis. Different stakeholders who may wish to receive electronic death notifications may include (but are not limited to):

- Payers
- Pharmacies (especially interested in notifications related to physicians and other healthcare providers that write prescriptions)
- Medical supply companies
- Providers
- Hospitals
- Specialists (for research)
- Home health care/Long term post-acute care/skilled nursing facilities
- Rehabilitation centers

It is possible that different stakeholders may ascribe higher value to certain kinds of notifications. For example, pharmacies may be willing to pay a premium for deceased doctor notifications, and researchers may also be very interested in receiving all notifications for death from certain causes related to their research.

The full revenue model for this use case and an updated revenue section are of this summary are forthcoming.

Implementation Challenges

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

Data sharing examples illustrated in Figure 1 are straightforward to implement on the existing MiHIN platform.

This workflow takes advantage of current processes for reporting deaths to EDRS, the existing highly secure virtual private network connection between MiHIN and the MDHHS Data Hub, ACRS and the statewide Health Directory. Each of these processes are already in full production.

Some new development will be required to identify subscribers.

Vendor Community Preparedness

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

The readiness of vendors to receive death notifications in systems (like electronic health record [EHR] systems) is unknown.

However, every type of stakeholder listed in the Cost and Revenue section can easily receive electronic death notifications that are attached to Direct Secure Messages (or Diretto) just as easily as receiving email with attachments.

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.

Metrics to measure the success of the use case include:

- Volume of death notifications received from MDHHS by MiHIN
- Number of subscribers to this use case
- Volume of death notifications sent from MiHIN to subscribers
- Change in volume for total electronic death notifications received by MDHHS/EDRS