



**Mississippi Department of
Information Technology Services**

NASCIO 2017 State IT Recognition Awards

Mississippi Division of Medicaid
Real-Time Clinical Data Exchange to Support Medicaid Beneficiaries

Category: Cross-Boundary Collaboration and Partnerships

State: Mississippi

Project Initiation Date: March 2015

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Executive Summary

In 2016 Mississippi became the first state in the nation to exchange Medicaid patient clinical data summaries successfully in real time with a provider health system by providing direct connectivity into the provider's Electronic Health Record (EHR) and physician workflow. The Mississippi Division of Medicaid (DOM) partnered with the state's largest public hospital, the University of Mississippi Medical Center (UMMC) to implement a real-time, bi-directional clinical data interface to support beneficiaries as they seek care at UMMC. Physicians can now instantly review the electronic medical history of Medicaid patients, allowing doctors to make better-informed decisions in real-time, natively without leaving their EHR.

This cross-boundary collaboration allows the Mississippi Division of Medicaid to coordinate care among its Medicaid patients at a higher level, particularly given that the University of Mississippi Medical Center is the largest provider of services to Medicaid patients in Mississippi. By increasing health data access for such a high volume of Medicaid patients, the Mississippi Division of Medicaid and the University of Mississippi Medical Center are able to deliver better quality care to citizens, in a more efficient and less costly manner. As a result of the success of this initiative the Mississippi Division of Medicaid has become a model for other state Medicaid agencies in the area of real-time clinical data exchange to support the care coordination and improve the quality of care for Medicaid patients.

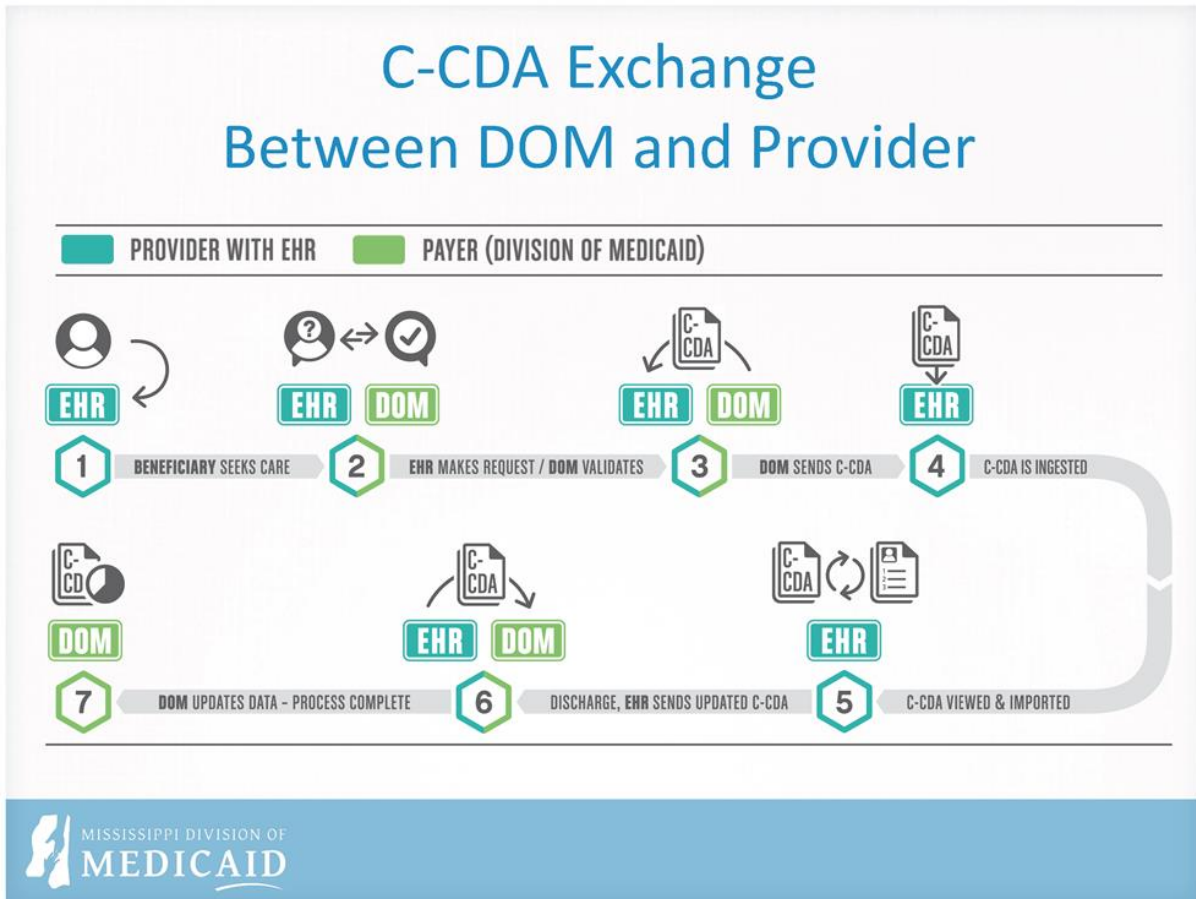
Concept

Mississippi has approximately 800,000 Medicaid beneficiaries out of a population of approximately 3 million. Access to real-time clinical histories and clinical records by a health care provider can save lives, lower the cost of treatment, and improve the health care of the patient.

Prior to the start of this project, the University of Mississippi Medical Center already had the ability to view information about a Medicaid beneficiary to support the care and treatment of the beneficiary as they sought care. This information could be viewed via Provider Access, a free portal made available to Medicaid providers by the Division of Medicaid. While physicians understood the importance of the data, they were reluctant to fully adopt the Provider Access portal due to time constraints and workflow inefficiency. When UMMC approached the Mississippi Division of Medicaid about a pilot project to incorporate clinical data summaries from Medicaid directly into the Epic EHR, Medicaid recognized the value of using this unique opportunity to provide critical information to physicians in a way that was useful and meaningful to them.

Since its implementation in 2016, UMMC is able to query, receive, and post clinical summaries (clinical histories on the patient) directly into the Epic EHR in real time for Medicaid beneficiaries at the point of care. Additionally, three hours after the patient encounter at UMMC ends, a clinical summary of the encounter is transmitted back to the Mississippi Division of Medicaid, allowing the Medicaid Agency to update their clinical data systems with the new encounter data.

The Mississippi Division of Medicaid and UMMC are exchanging approximately 4000 clinical summaries daily and over the course of one year have exchanged in excess of 1 million clinical summaries. The exchange of clinical summaries directly impacts the care of thousands of Medicaid beneficiaries in real-time by providing access to relevant information about the patient from within the physician's native Epic EHR system workflow.



The groundwork for this project was laid in 2014 when MedeAnalytics, a national health care data analytics company and the Mississippi Division of Medicaid implemented an Enterprise Master Patient Index (EMPI). To do so, the company analyzed and de-duplicated records from 2.3 million Medicaid beneficiaries that had been collected over more than a decade. The EMPI is the core service that allows Mississippi Medicaid to manage Medicaid patient identities and link them to Medicaid patient records that contain critical information such as medications, allergies and previous diagnoses. This initial work resulted in unique medical records from more than 750,000 Medicaid and Children's Health Insurance Program patients.

The Mississippi Division of Medicaid was recognized by *Health IT News* as the first Medicaid agency in the nation to send and receive clinical data in real-time with a health system using an Epic EHR. As a result of the success of this initiative, the Mississippi Division of Medicaid has become a model for other state Medicaid agencies in the area of real-time clinical data exchange to support the care coordination and improve the quality of care for Medicaid patients.

Significance

Medicaid patients benefit from having a more complete medical history available at the point of care and within the physician's workflow in the Epic EHR, which will improve both safety and care outcomes. With approximately 800,000 Medicaid beneficiaries, getting real-time clinical data summaries from Medicaid to a healthcare provider, such as UMMC, in real-time can impact cost, improve quality of care, and even save lives. The ability of healthcare providers to have clinical summaries presented within their existing workflow, natively within their EHR, allows providers to have access to more data at their fingertips which can be used to streamline care and reduce cost.

The Mississippi Division of Medicaid –University of Mississippi Medical Center cross-boundary collaboration, clinical data integration project allows UMMC providers to have critical, clinical data, displayed within the Epic Electronic Health Record system. As a result of this collaboration, the University of Mississippi Medical Center physicians and providers do not have to leave the Epic EHR system workflow, and can instantly review Medicaid beneficiaries' allergies, immunization, and medications with the patient in front of them. Giving doctors and nurses instant access to important information such as medications, diagnoses and allergies ensures that they can make the best care decisions for Medicaid patients.

Impact

There are many benefits of real-time access, including such use-cases as emergency room care coordination with a more complete patient record, a reduction of duplicative

tests and procedures such as immunizations and better care management. For example, if a Medicaid patient who has never been seen before at UMMC comes to the emergency department, the physician and health-care team have access to their medical records which includes any outside visits to providers, their medication history, their immunization history, and details on just about any other outside procedures or tests. For chronic patients, physicians can see if they've gotten their prescriptions filled or even if the patient has seen their primary care provider. Physicians can now know if the patient had a CT scan in the past, and can go get those records and while not repeating an unneeded test. There should be continued major cost savings to Medicaid and to the University of Mississippi Medical Center, as well as improved care for the patient as a result of this cross-boundary collaboration.

By increasing health data access for such a high volume of Medicaid patients, the Mississippi Division of Medicaid and the University of Mississippi Medical Center are able to deliver better quality care to citizens, in a more efficient and less costly manner. Access to real-time clinical data summaries by a provider can save lives, lower costs, and improve the patient care.

This project's benefits also reach further than the walls of the hospital, due to the fact that three hours after the patient encounter at UMMC ends, a clinical summary of the encounter is transmitted back to the Mississippi Division of Medicaid. This encounter data from UMMC allows the Mississippi Division of Medicaid to update the existing clinical data stored in the existing clinical systems at Medicaid. Medicaid updates and stores the encounter data and the existing clinical data as a single, longitudinal file, giving the Mississippi Division of Medicaid an increased ability to track the overall health of their Medicaid population and detect population health trends. Due to this cross-collaboration project and clinical data exchange, providers such as UMMC will be also able to track immunization trends, trends in tobacco use, and other public health trends across the Medicaid population.