



MISSISSIPPI DIVISION OF
MEDICAID

Updated
State Medicaid Health Information Technology Plan
(SMHP)

July 22, 2019

State of Mississippi

Division of Medicaid

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1 Executive Summary

The Mississippi Division of Medicaid (DOM) submits this update to the State Medicaid Health Information Technology Plan (SMHP), in accordance with implementation activities authorized by the American Recovery and Reinvestment Act of 2009 (ARRA) (Pub. L. 111-5). This SMHP update provides a description of the strategic planning process that DOM has undertaken, and continues to undertake to participate in the provider incentive program; the business and operational plan for payment of the incentives; and an HIT Roadmap presenting the direction that DOM plans to take to achieve the HIT vision described in this document.

With a thorough understanding of the current EHR and HIT/HIE landscape, DOM's planning effort for this update focused on the vision of DOM's HIT for the next five years, with emphasis on the next two years (FFY 2020 and 2021). DOM has specific goals to upgrade and transform the existing Medicaid Management Information System (MMIS) with strategically implemented modular components over the next several years as a part of the Medicaid Enterprise System (MES). To align the HIT program and components with the MRP, DOM will conduct a MITA crosswalk of HIT components and services, to allow for complete alignment of HIT with the MITA Care Management initiatives. The DOM HIT program and components will become a module of the MRP, providing rich clinical data for the MRP and also for DOM tools such as Population Health services and clinical quality measurement initiatives. Discussion of DOM's future vision of HIT as a module of the MRP, alignment of MITA and MITA's Care Coordination initiative, and development of Agency tools such as Population Health initiatives can be found in this document at Section 4 – To-Be Landscape.

The new DOM MRP will utilize the rich clinical data from the HIT to-be module to improve care coordination and the quality of care of Medicaid beneficiaries in the State of Mississippi via four goals:

- 1) Achieve greater interoperability with Medicaid providers and provider clinical systems (EHRs, other clinical systems) to aggregate provider-based Medicaid clinical data and store/utilize this data in the existing DOM Clinical Data Repository;
- 2) Utilize the aggregated provider-based Medicaid clinical data in the DOM Clinical Data Repository for Agency goals and programs including the MRP to meet the goals of the MITA Care Management initiatives, for clinical data analytics, for clinical data population health tools and services, and for clinical quality measurement initiatives;
- 3) Offer tools and interfaces to providers so that providers may access and utilize the aggregated clinical data in the DOM Clinical Data Repository, including such tools as a Medicaid clinical data provider portal and real-time, bi-directional clinical data interfaces to support the sharing and updating of Medicaid clinical data interoperability within provider EHRs and provider EHR workflows; and
- 4) Promote adoption of CEHRT for DOM providers with the goal of using CEHRT and HIT/HIE to promote coordinated health care for DOM beneficiaries, better health care outcomes, and improvements in care quality. The effort to promote electronic exchange of clinical data, will be enhanced by the improvement of access to broadband technology for the citizens of Mississippi.

As one of the key elements to this SMHP, DOM underwent a comprehensive technical, business and operational planning endeavor to be ready to pay Mississippi Medicaid Provider Incentive Payments (MPIP) as quickly as possible. This commitment resulted in Mississippi being one of the first states in the nation to make incentive payments to its providers. DOM has implemented rigorous administration and oversight of the MPIP, including A/I/U post payment audits, and continues to promote the adoption of CEHRT for its providers. As part of its promotion efforts, DOM implemented a communication plan to inform providers of the availability of the incentives and will continue to conduct provider outreach and education. The discussion of the MPIP and its processes is found in this document in Section 5 – Provider Incentive Program Blueprint.

Using DOM’s strategy as defined by the To-Be Landscape, DOM defined the Mississippi HIT Roadmap for achievement of its future vision. The HIT Roadmap articulates the major milestones and activities that DOM will achieve as it moves from its current environment (As-Is) to its future vision (To-Be). Discussion of DOM’s HIT Roadmap is found in this document in Section 6 – HIT Roadmap.

Last year per CMS guidance, DOM adjusted our schedule to acquire SMHP update approval prior to submitting the updated IAPD. The SMHP update was submitted in December 2017 and approved on February 20, 2018. DOM received a new Executive Director with an interest in reviewing these documents. Additionally, CMS assigned new HIT reviewers with a change in desired content. DOM submitted an updated IAPD to CMS in July 2018, with a revised submission in August 2018, requesting implementation funding for federal fiscal year (FFY) 2019. The IAPD was approved September 26, 2018

DOM is pleased to submit this updated SMHP dated July 22, 2019, as documentation of its continued activities to comprehensively plan and implement the future vision of DOM as a partner to its providers and stakeholders in the adoption of CEHRT and the promotion of HIT. An updated HIT IAPD will be submitted following this SMHP update to request proposed implementation funding through FFY 2021. With the end of HITECH and HITECH funding at the conclusion of FFY 2021, DOM is planning in FFY 2020 to complete and submit an updated Population Health IAPD, under the MRP IAPD, with appropriate MITA cross-walked HIT components, staff, and future services, as these appropriate HIT programmatic components will become a module under the MRP.

2 Introduction and Overview

DOM submits an updated SMHP annually to provide CMS with a summary of the activities that DOM has completed and expects to undertake in the future to successfully implement its HIT promotion program. For ease of use, an acronym table is attached hereto as Appendix A and a glossary of terms is attached hereto as Appendix B. And, to facilitate CMS review, tables are now provided in Appendix M that cross-reference sections of the SMHP to the CMS Guidelines of April 27, 2010.

In order to submit this FFY 2019 SMHP update, DOM has completed a rigorous planning process designed to consider and incorporate all of the requirements for implementation of its HIT promotion program. These requirements include payment of the incentives for A/I/U and MU of CEHRT for Mississippi Medicaid providers.

The results of DOM's meticulous planning process are incorporated into this SMHP update, including all of the elements required by CMS. This document includes a description of the following elements required by CMS:

- The current and future vision for the MMIS, including the crosswalk of the existing HIT components to the MRP as a module to comply with MITA and MITA's Care Management initiative;
- A re-assessment of the current HIT environment in the State of Mississippi through a 2017 Environmental Scan;
- The State of Mississippi's HIT To-Be landscape, taking into account perspectives learned from the 2017 Environmental Scan;
- The State of Mississippi's HIT Roadmap and plan;
- A description of how the SMHP was designed and developed;
- The MPIP payment system and how the MMIS has been considered in developing the HIT Roadmap;
- Infrastructure enhancements that will support the overall goals of DOM;
- Data sharing components of the HIT Roadmap;
- Promotion of secure data exchange in accordance with the Health Insurance Portability and Accountability Act (HIPAA);
- A description of how DOM will promote the adoption and use of data technical standards;
- The process for improvements in health outcomes, clinical quality, or efficiency resulting from the adoption of CEHRT by DOM Medicaid providers, including the methods by which DOM will measure success;
- The method by which DOM will support the integration of clinical and administrative data;
- The method by which DOM will adopt national data standards for health and data exchange and open standards for technical solutions as they become available;

- A list of specific actions completed to implement the MPIP; and
- A Blueprint of the MPIP.

Section 5 – Provider Incentive Program Blueprint, of this SMHP update, details the following processes used by DOM for oversight and administration of the MPIP, as required by CMS:

- The oversight of the MPIP that is conducted to ensure that providers meet all program requirements are met, including:
 - Compliance based upon their participation year;
 - Enrollment eligibility criteria;
 - Patient volume requirements;
 - EH incentive payment calculations remain consistent with CMS rules;
 - A/I/U and MU requirements are met prior to payment;
 - Monitoring and validation information; and
 - A process for combating fraud and abuse;
- Assurance that no amounts higher than 100 percent of Federal Financial Participation (FFP) will be claimed by DOM for reimbursement of expenditures for payments to providers;
- Assurance that no amounts higher than 90 percent FFP will be claimed by DOM for administrative expenses in administering the MPIP;
- Assurance that payments made to the approved providers are paid directly (or to an employer of facility to which the provider has assigned payments) without any reduction or rebate, and that incentive payment reassignments to an entity promoting the adoption of CEHRT as validated by DOM are voluntary for the provider involved;
- Assurance that providers receive only one incentive payment per program year;
- The Mississippi State Level Registry (MS SLR) attestation process, including specific identifiers used by DOM to coordinate with CMS on incentive payments;
- Assurance that only appropriate funding sources are used to make MPIP payments, including the methodology for verification;
- Assurance that MPIP payments are made for no more than a total of six years;
- Assurance that no provider begins receiving payments after Program Year 2016 and incentive payments cease after Program Year 2021;
- Assurance that an EH does not receive payments after fiscal year 2016 unless the hospital has received an incentive payment in the prior fiscal year;
- Executing timely and accurate payment of incentives;
- Recoupment/adjustment of incentive payments incorrectly disbursed; and
- The MPIP appeals process.

As DOM continues to refine this plan and provide updates to CMS, DOM will conduct operational and business planning to provide the following information:

- A description of the process to capture clinical quality data from each provider and a description of the methodology in place to verify this information; and
- The method by which DOM intends to address the needs of underserved and vulnerable populations, including information related to children, individuals with chronic conditions, Title IV-E foster care children, individuals in long term care settings, and the aged, blind, and disabled.

In addition to developing elements for the SMHP update, DOM had been coordinating with the statewide HIE to promote the use of CEHRT to providers throughout the State of Mississippi as well as educate providers on the MPIP. Due to the unforeseen and sudden demise of MS-HIN, the statewide HIE, in the spring of 2019, and the ending of all operational aspects of MS-HIN on June 30, 2019, several HIE updates and unexpected changes had to be made to the To-Be HIT environment in this document.

DOM plans to keep CMS informed of anticipated changes to activities, scope, or objectives. DOM will provide annual updates and as-needed updates to CMS as its plan evolves over the remaining program years.

3 Current HIT Landscape Assessment – The “As-Is” Environment

In the fall of 2010 DOM completed the first Environmental Scan of the State of Mississippi to ascertain the level of readiness of its providers. DOM also considered its current data-sharing partners and evaluated the level of readiness to expand its current data sharing capacity.

As requested by CMS, DOM completed a new Statewide Environmental Scan in 2017. The objective of the 2017 Environmental Scan was to assess the current status of the EHR program as well as HIT and HIE adoption within the State, then use that information to develop plans for the completion of the EHR program through its remaining years. The results of the completed 2017 Scan have been used to significantly update several sections of this SMHPU and its related IAPDU.

3.1 The 2017 Statewide Environmental Scan

This section describes the 2017 Environmental Scan of the State of Mississippi’s Medicaid providers and the level of EHR adoption and Medicaid incentive payments. The subsections provide the assessment documents, the tools used, the analysis applied, and the outcomes of the 2017 Environmental Scan, and a historical context of any relevant HIT/HIE issues. These sections serve as a source of data for the development of the To-Be Landscape and completion of the HIT Roadmap and the IAPD.

DOM has conducted several comprehensive assessments of the current and planned levels of HIT adoption by Medicaid providers. These assessments began in June 2010, and include assessments up to September, 2012, as well as the full, statewide 2017 Environmental Scan. For the purposes of this document, HIT refers to health information technology (IT) that a provider might use, including practice management, health management records, EHRs, Laboratory Information Systems (LIS), ePrescribing Systems, electronic billing, and other clinical systems. The mechanisms utilized to collect this data included interviews, surveys, and focus groups. The entities interviewed or surveyed included all types and sizes of providers in a cross section of urban and rural settings, as well as providers in Federally Qualified Health Centers (FQHCs), Rural Health Clinics (RHCs), Agencies such as the State Department of Public Health and the United States Veterans Administration (VA), and Tribal settings. Data includes information gathered specifically for the SMHP, as well as information gathered for the Statewide HIE Strategic and Operational Plan (SOP), and other HIT related initiatives. As reflected in the information contained in Appendix H, DOM concludes that the incentive program has been a strong motivational factor for the adoption of CEHRT.

3.1.1 Background and Methodology for the 2017 Environmental Scan

The 2017 Environmental Scan was conducted in four phases that included planning, data collection, data analysis and reporting results. The planning process culminated in an Environmental Scan methodology that included data collected from a web survey, targeted interviews, and a focus group.

The web survey results were limited to a qualitative analysis due to a lower than anticipated response rate. The data collected indicates that, as expected, HIT/HIE has expanded significantly in Mississippi since the previous Environmental Scan of 2010.

The targeted interviews were conducted in-person and telephonically, and included provider types across Mississippi. Specifically, interviews were conducted with DOM, the Mississippi State Department of Health (MSDH), the Mississippi Health Information Network (MS-HIN), the Department of Veterans Affairs (VA), hospitals, physicians, professional healthcare associations such as the Mississippi Hospital Association, and community health centers. The results of the interviews reflected the various sentiments and experiences of each different stakeholder, but all were asked a specific set of questions and common themes and key information emerged from the participants.

A focus group was held to supplement the information from the targeted interviews. Discussion facilitated during the focus group related to strategic plans for EHR, technology status, HIE membership status and familiarity with the DOM Provider Access portal.

3.1.2 2017 Environmental Scan: Provider Web Survey

A web-based survey was determined to be the most efficient means of reaching the broadest audience possible. Therefore, although there was no guarantee of widespread participation, the web survey provided an appropriate start to the data collection effort. The survey was used to collect quantitative and qualitative data about adoption and use of electronic health information technology and the level of clinical data exchange throughout the state.

The following activities were completed to inform and develop the web survey approach:

- Analysis of past efforts and lessons learned
- Identification of the key questions and learning objectives for the web survey
- Identification of survey audience and outreach methods

Past survey efforts were leveraged to develop a starting point with the intention of focusing on the new information to be obtained regarding providers' adoption and use of HIT and clinical data exchanges. A comprehensive list of providers throughout the state from varying locations and specialties was developed for survey distribution. The survey was ultimately distributed to over 1,650 providers using an official DOM e-mail address.

After development of a comprehensive set of survey questions and response selections, the survey was distributed to the target audience. As these types of surveys have historically received lower response rates, the survey was also posted on the DOM EHR Incentive Program website to promote the existence and importance of the survey to the provider community. Over the course of the five-week survey, each provider received at least two follow-up e-mails to drive additional responses. A final reminder was sent out one day before the survey closed to generate a last-minute push for increased responses. Understanding that the survey required 10-15 minutes for completion, the 5-week period was provided to allow for a reasonable and flexible window of time for survey completion.

The web survey gathered information from stakeholders and consumers in the Mississippi healthcare industry along strategic, operational and technical lines. The main areas of focus for technical and operational data gathered in the web survey included:

- Organization background
- HIT/EHR adoption

- Meaningful Use/Medicaid EHR Incentive Program
- Envision Web Portal knowledge and participation
- Provider Access portal knowledge and participation
- Electronic clinical data exchange
- Mississippi Health Information Network (MS-HIN) knowledge and participation
- Clinical data exchange trading partners.

The targeted audience for the web survey included a mix of stakeholders from the following types of organizations:

- Community Health Centers and Rural Health Clinics
- Hospital Association(s)
- Hospitals
- Long-term care providers
- Independent Laboratories / Reference Laboratories
- Independent Radiology Providers
- Pharmacies
- Physicians and Physician Practices
- Other healthcare providers.

3.1.3 2017 Environmental Scan: Web Survey Results

The results of the web survey were limited due to a low response rate of 69 respondents. However, the results revealed important findings and trends that indicate a significant expansion of electronic data exchange and technology in health care since the 2010 Environmental Scan.

The data collected from the survey was parsed and analyzed to determine key findings and trends in HIT/EHR adoption and clinical data exchange throughout the state. A statistical and qualitative analysis of the data received from responses was used to complement the focus group and targeted interview findings. The following pages highlight the key findings from the web survey in graphical and narrative form by topic.

Organizational Background

Over 60% of respondents represented primary care and family doctor practices, while 10% were dental, 7% behavioral health, and the remaining 23% were a mix of ophthalmology, pharmacy, radiology, and other organizations. The insurance utilization by patients included 36% Medicaid/CHIP, 23% Medicare, 30% private insurance, and 11% cash or uninsured.

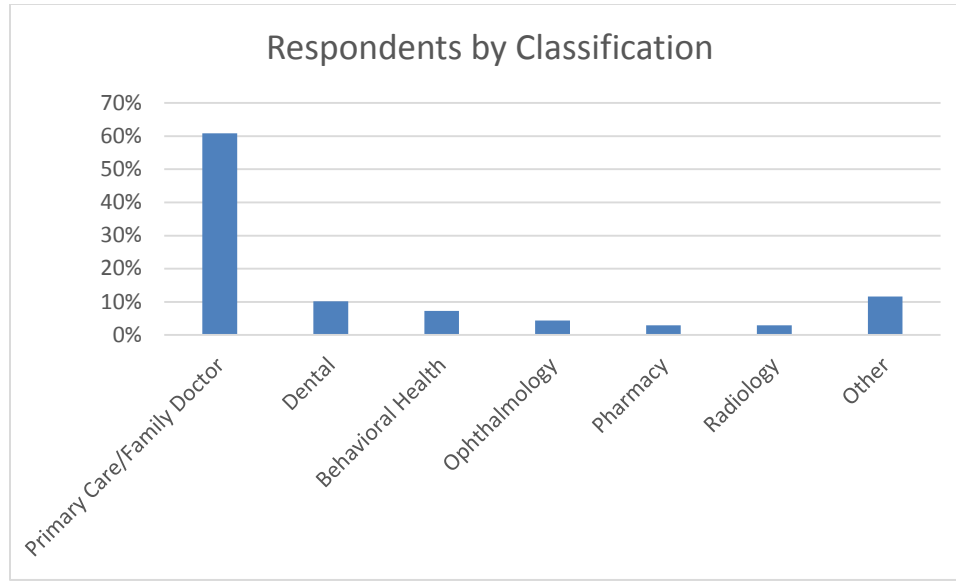


Figure 1: Web Survey Results - Respondents by Classification

Level of HIT/EHR Adoption

EHR adoption tops the list of HIT with a usage rate of 94% among survey respondents, followed by adoption of electronic prescribing at 86%, adoption of practice management software at 75%, and adoption of clinical quality measure tools at 62%. Of those who have adopted an EHR, 56% plan to upgrade their system within the next 6 months.

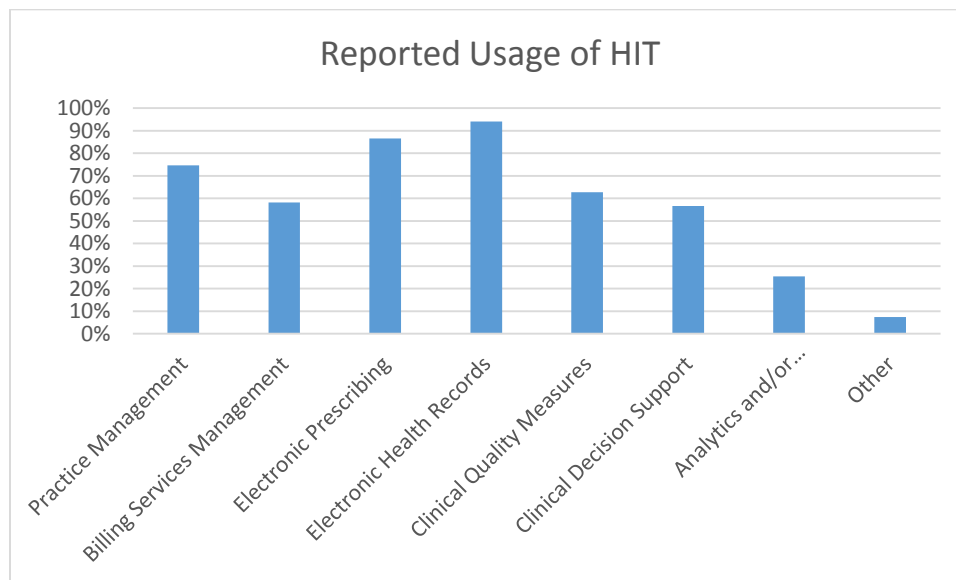


Figure 2: Web Survey Results - Reported Usage of HIT

Respondents indicated that the main reasons preventing the usage of additional EHR functionalities include such functionality would slow clinical staff down (39%), high costs of

additional features (34%), lack of EHR feature knowledge (31%), and staffing and documentation issues (29%). Meanwhile, 26% indicated they have no concerns and use all their EHR features.

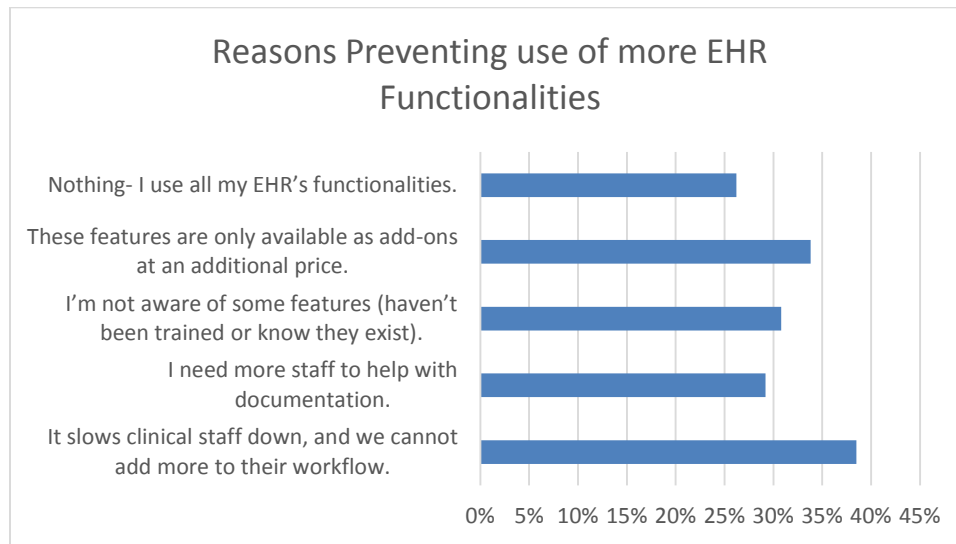


Figure 3: Web Survey Results - Reasons Preventing use of more EHR Functionalities

The web survey also found that telemedicine is used by or planned to be used by 27% of providers primarily for purposes of consultation with other physicians or hospitals, providing care, or viewing patient information at home.

Meaningful Use / EHR Incentive Program Participation

53% of respondents indicated that there are no barriers to participating in the EHR Incentive Program, while 36% found MU requirements to be confusing or burdensome. Only 3% of respondents were not familiar with the EHR Incentive Program. Of those survey participants that are participating in the EHR Incentive Program, 95% have achieved Modified Stage 2. According to information from the EHR incentive program, all participants from 2015-2017 have reached Modified Stage 2 status. There is no longer a Stage 1/Stage 2 classification.

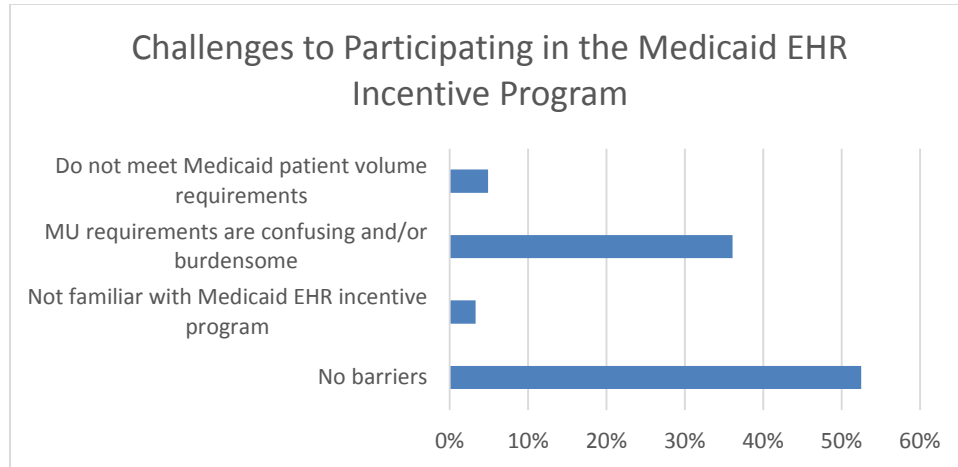


Figure 4: Web Survey Results – Challenges to Participating in the Medicaid EHR Incentive Program

Envision Web Portal

The Envision web portal, Mississippi’s MMIS portal for providers, is known by 77% of survey respondents, and of those, 52% use the portal frequently, 33% use the portal sometimes, while only 15% rarely use the portal. The survey found that the most beneficial Envision features, ranked highest to lowest, are to (1) check beneficiary eligibility, (2) review claim status, and (3) review patient claim information.

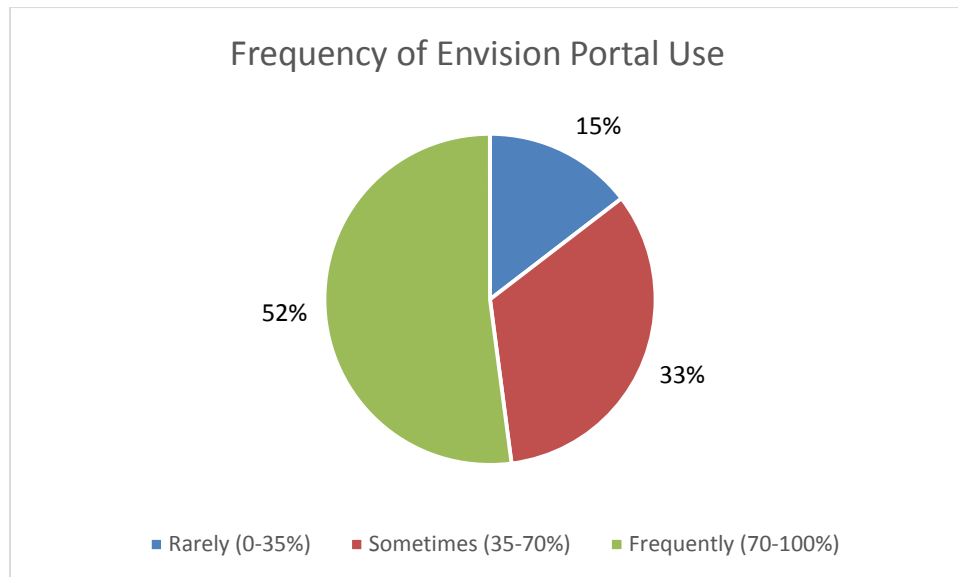


Figure 5: Web Survey Results - Frequency of Envision Portal Use

Provider Access Web Portal

The Medicaid provider clinical web portal, called Provider Access, allows providers to view Medicaid patient data online and was known by 47% of survey respondents. Of those familiar with Provider Access, 30% indicated they use the portal as part of their daily workflow.

Clinical Data Exchange

The most common method of clinical data exchange for survey respondents is via fax at 76%, followed by Direct Secure Messaging at 29%, and EHR systems are used by 22% of respondents for the exchanging of clinical data.

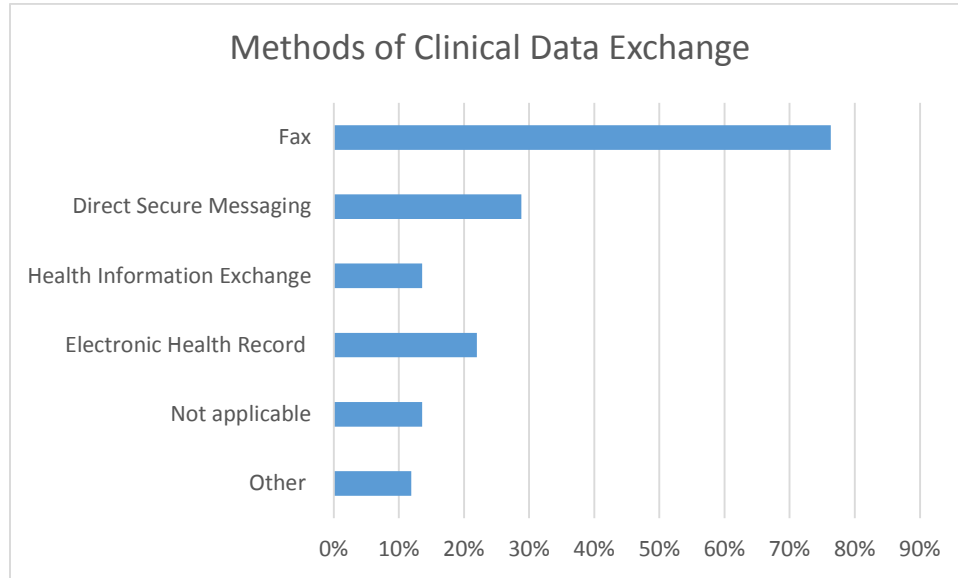


Figure 6: Web Survey Results - Methods of Clinical Data Exchange

The following figure highlights provider usage of various electronic data exchange services (blue) as well as the services that providers would like to use in the future (orange). The top services in use today include order and lab results delivery, patient portals, public health data submission and direct messaging. Services with the highest percentage of provider interest in the future include active care coordination, MU analysis and reporting, historical lists, and discharge summaries.

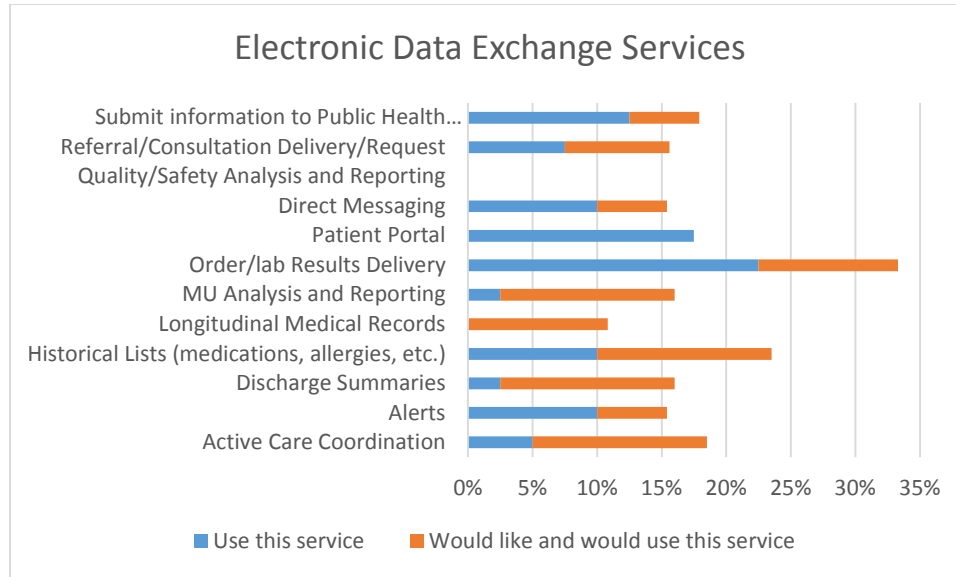


Figure 7: Web Survey Results - Electronic Data Exchange Services

The survey found that the most prevalent challenges faced by providers exchanging clinical data electronically are that referral partners' technology can't support exchanges (41%), software costs are too high (29%), and organizational concerns with sharing data (16%).

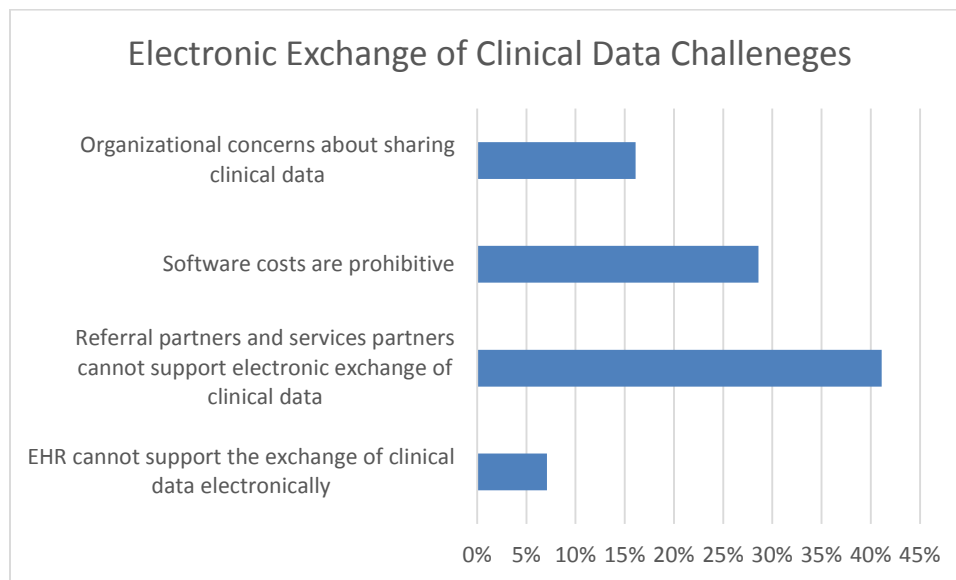


Figure 8: Web Survey Results - Electronic Exchange of Clinical Data Challenges

Mississippi HIE: Mississippi Health Information Network (MS-HIN)

HIE participation among respondents was 38%, or 24 providers. Of the 24, 12 respondents indicated membership with MS-HIN. Of the 12 who were members of MS-HIN, six indicated they use the lookup service less than monthly, while only two respondents use it daily. The MS-

HIN services most commonly used by respondents include the Mississippi Immunization Registry, Direct Secure Messaging, CCD/C-CDA, Community Health Record, and ADTs.

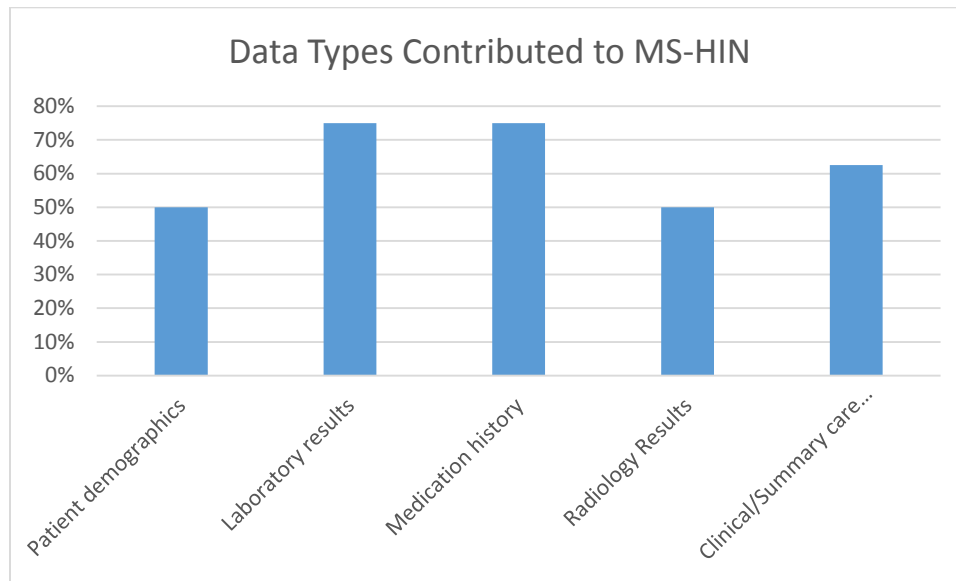


Figure 9: Web Survey Results - Data Types Contributed to MS-HIN

Clinical Data Exchange Trading Partners

The survey found that the majority of Mississippi providers have clinical referrals in the central region (66%), followed by the northeast as the next highest region (36%). When asked who providers exchange or plan to exchange health information with, respondents indicated other physicians (75%), hospitals (62%), pharmacies (62%), laboratories and X-Ray facilities (58%), and governing agencies (26%).

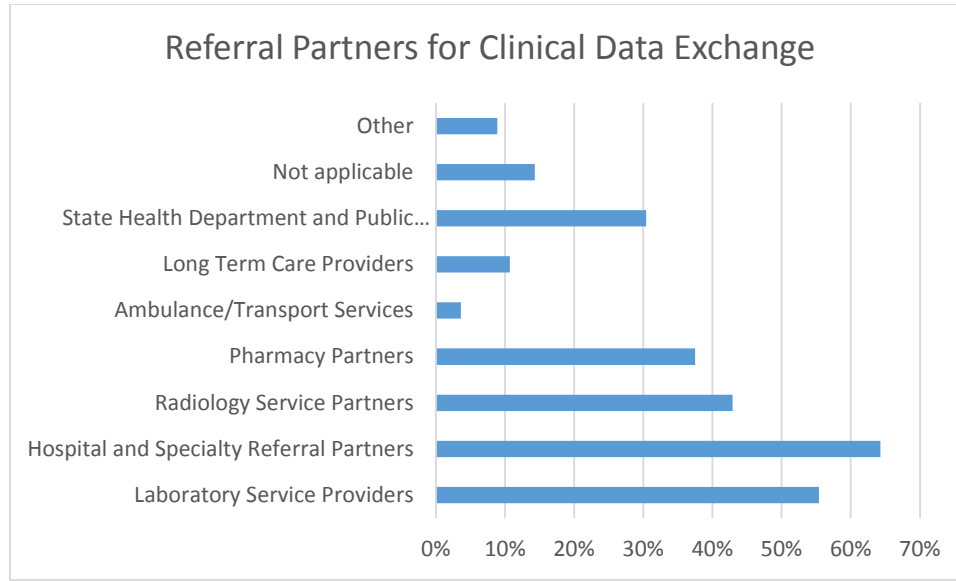


Figure 10: Web Survey Results - Referral Partners for Clinical Data Exchange

3.1.4 2017 Environmental Scan: Targeted Interviews

The use of targeted interviews was the second data collection activity of the 2017 Environmental Scan. The targeted interviews were held with specific stakeholders to discuss positive and negative experiences with EHR and HIT adoption and use, how the EHR incentive program has impacted clinical practice, what barriers may exist to meaningful use, both to meet statutory MU measures as well as having a generally positive impact on clinical decision making and care coordination. The interviews were planned to identify specific activities that the state can do to foster greater HIT adoption and meaningful use.

To prepare for targeted interviews, the team focused on two main items:

- Analysis of the results of the web-based survey
- Identification of key information brokers

The qualitative information from the Web Survey was used to prepare for interviews and identify trends. These findings were paired with the findings from the previous Environmental Scan to identify historical trends as well.

The second preparation step for performing the targeted interviews was to identify key information brokers within the targeted audience. Through a comprehensive stakeholder analysis performed at the outset of the project, key stakeholders were identified who may offer valuable insight and interview questions were tailored specific to each stakeholder. Additional outreach was then conducted to the identified stakeholders to fill in information gaps.

The intent of all targeted interviews was to use an approved interview guide to ensure a consistent approach to obtaining desired information, but also to facilitate a fruitful conversation with the interviewees to gain additional useful information that will be used to

update the SMHP. An interview guide was developed and tailored for unique stakeholders and was also personalized based on the background research conducted prior to all interviews.

The targeted interview process gathered information from various stakeholders along strategic, operational, and technical subject matter. This information gathering method provided the most robust, candid and detailed data regarding HIT/HIE in Mississippi. Examples of the strategic and operational information that were gathered and assessed include, but are not limited to:

- Vision, mission and values
- Strategic plans for EHRs
- Privacy and security plans / concerns
- Oversight and enforcement concerns
- Accountability and transparency

Examples of technical information gathered and assessed include, but are not limited to:

- HIT / HIE / EHR adoption plans
- Utilization of DOM tools such as the Provider Access portal
- HIE membership and utilization
- HIT / HIE / EHR growth plans
- Interoperability

A modular interview guide was developed and used for each interview. The use of a modular guide allowed for quick adaptation to the specific interview audience. This guide was used to make sure the team obtained responses for identified information gaps. However, the targeted interviews were not a strict question and answer session, but instead an opportunity for interactive conversation that allowed more information to be unveiled that was not discovered through other methods of information gathering.

The preliminary list of targeted audiences included:

- Community Health Centers and Rural Health Clinics
- MSDH
- Health Plans and Payers
- Hospitals
- Long-term care providers
- Physicians and Physician Practices
- Trade Associations
- MS-HIN
- Other healthcare providers

In total, 41 stakeholders were interviewed, representing 31 organizations. The largest stakeholder group was hospitals and providers with 21 different organizations. The remaining stakeholder group breakdown is as follows: 6 Trade Associations; 1 Health Plan; 2 State Agencies; 1 Health Information Exchange Organization.



Figure 11: Targeted Interview Hospital and Provider Locations

3.1.5 2017 Environmental Scan: Targeted Interview Results

The results of the targeted interviews reflected the varying sentiments and experiences each stakeholder group had with HIT in Mississippi.

Ongoing analysis of results from interviews was performed to confirm desired information was being discovered. This enabled the team to ensure all key information was being gathered and allowed for modification in tactics to ensure the Environmental Scan will meet its objectives.

Key findings include:

- Majority of health care providers have implemented and are effectively using an EHR
- Majority of electronic clinical data sharing is done through shared EHR vendors
- Common obstacles for exchanging data electronically include:
 - Technical infrastructure challenges (systems do not talk to each other)
 - Difficulties associated with HIT adoption (ex. Training and education of end users; interoperability tools not embedded within workflow)
 - Lack of timeliness of data exchange and accessing exchanged data
- Participation in the Medicaid EHR Incentive Program is high
- Multiple HIEs exist and membership in these multiple HIEs is high, although consistent use of HIEs for electronic clinical data exchange is low
- The most commonly used interoperability applications and/or HIEs include Care Everywhere, CommonWell, Relay Health, and MS-HIN

Results of the targeted interviews were analyzed and interpreted by subject matter experts and organized in a table by themes, examples, and common concerns heard from each stakeholder group.

3.1.6 2017 Environmental Scan: Focus Group

A focus group was used to supplement the targeted interviews and generate conversation among stakeholders to share ideas and future strategic plans of HIT adoption. The focus group further explored the data gathered during the web survey and targeted interviews which concluded the data gathering phase of the Environmental Scan.

The following activities were completed to inform and develop the focus group approach:

- Analysis of past efforts and lessons learned
- Identification of the key questions of the Environmental Scan
- Identification of target audience and outreach methods

The 2010 Environmental Scan was examined to determine what new information could be beneficial for the State and what information could be gained from the focus group. After the previous Environmental Scan was analyzed, gaps in information were identified, and the web survey results were considered, resulting in key learning objectives and questions to guide the focus group discussion.

The focus group methodology was comprised of five categories:

1. Targeted Participants
2. Structure and Design
3. Recruitment and Preparation
4. Focus Group Session
5. Data Analysis

Outreach and communications were conducted to solicit participation once the target audience was identified and the focus group questions were finalized. The following methods and tools were used for the focus group process:

- Communication methods: email (initial, follow-up, and confirmation)
- Documents: recruitment emails, focus group facilitator script, focus group ground rules, consent form, and short-form survey
- Locations: DOM office location
- Focus group sessions: One
- Data analysis: Transcription and recording

Target participants represented a cross-section of the market, such as providers and health care management leaders.

Six major topics were discussed in the focus group based on the results and preliminary analysis of the web survey and interview data. Open-ended questions that begin with “what”, “how”, and “why” were used to draw detailed conversations and answers. The team included three types of questions in the focus group:

1. Engagement: introducing the topic and making participants comfortable with the topic
2. Exploration: asking questions that will produce in-depth discussions
3. Exit: asking for all other opinions or ideas that were not discussed

The focus group was facilitated with a lead moderator and assistant moderator. The role of the moderator was to facilitate conversation and ensure all participants felt comfortable contributing honest viewpoints on each topic. The role of the assistant moderator was to manage the recorder and take notes.

Prior to the start of the focus group, participants were asked to review and sign a consent form acknowledging that the discussion would be recorded and that their identity would remain anonymous in any analysis or report. A facilitation script and ground rules were used to guide the focus group. This promoted professionalism and standardization in the session.

The web survey primarily provided quantitative data, while the targeted interviews provided a significant and productive set of qualitative data. These two data gathering methods were the basis for the 2017 Environmental Scan. However, the focus group was used to complement the targeted interviews by exploring the relationship between stakeholders and clarifying themes and concerns that were raised through analysis of the interview and web survey data.

3.1.7 2017 Environmental Scan: Focus Group Results

The data from the focus group in addition to the targeted interviews shed light on the perceived benefits and concerns of electronic data exchange and electronic health records. The stakeholders that participated in the focus group interviews were in favor of HIEs and EHRs, but also had important concerns and barriers. Workflow disruption, technical capabilities of disparate systems, cost, and prioritization were frequently discussed regarding HIT. The scope of HIE functionalities within each health system varied but clear trends were presented especially with smaller rural health systems versus larger urban health systems.

3.1.8 2017 Environmental Scan: Comparison with 2010 Scan

The team reviewed Section 3 – “Current HIT Landscape Assessment – The “As-Is” Environment of DOM’s most recent CMS approved SMHP. The SMHP As-Is Environment contains a series of findings from the 2010 Environmental Scan. The following table lists the conclusions from the 2010 Environmental Scan (Section 3.1.1.3) and updates the findings based on the 2017 Environmental Scan results.

Table 3-1: 2010 versus 2017 Environmental Scan Results

<i>2010</i>	<i>2017</i>
<i>Hospitals are becoming increasingly aware of the benefits of EHR technology and its positive impact on the quality of care for their patients.</i>	Mississippi paid hospital EHR incentive payments across a three-year span. All hospitals that participated have received full payments.
<i>The exchange of electronic data between hospitals and</i>	Since 2010, Mississippi’s hospitals and networked providers have steadily moved to an integrated EHR model across their facilities.

<i>2010</i>	<i>2017</i>
<p><i>their providers is necessary for improvement of patient care and controlling costs.</i></p>	<p>The providers who have an integrated network can now seamlessly exchange clinical data with their integrated providers. Information from the targeted interviews confirms that hospitals are continuing to join and grow integrated networks to align hospitals and providers across the care continuum. The interview information also indicates that hospitals and providers are continuing to invest in improving and developing their integrated information systems to improve all performance metrics. Many indicated they were seeking population health improvement, and increasing their evidence-based practice to improve quality. Exchange of data across non-networked providers continues to expand, but continues to pose interoperability challenges. Many of the interviewees stated that they were not able to electronically exchange data with non-networked providers. Many indicated that fax is still a main method of data exchange. Examples of the challenges cited include:</p> <ol style="list-style-type: none"> 1) Different EHRs are not on the same platform or set of standards. Although, some hospitals and providers are indicating commitment to sharing through participation in HIEs such as CommonWell, Carequality or MSHIN; the use of a statewide or regional HIE is not a common solution considered. 2) Organizations have direct messaging capabilities, however, they have encountered multiple issues of not being able to find a provider’s information and/or accurate information. 3) Physicians will often not use a portal that is outside of their clinical workflow and EHR workspace. Therefore, HIE portals that require separate logins have limited use. 4) Organizations have cited many competing priorities in regards to advancing their health information technology. Clinical data exchange efforts must be a priority in order for organizations to effectively invest in the technical setup and provider training and outreach.
<p><i>All hospitals recognize the inevitability of moving to an EMR/EHR system with the capability of exchanging clinical health care data beyond the integrated service delivery network</i></p>	<p>All hospitals have moved to an EHR system to meet Meaningful Use. Hospitals recognize the inevitability of moving towards data analytics and population health capabilities to meet MACRA and MIPS. To have full capability for data analytics and population health tools, hospitals recognize the need for more interoperability across the state.</p>

<i>2010</i>	<i>2017</i>
<p><i>The success of participation in exchanges relies on vendor ability to achieve certification.</i></p>	<p>The 2010 finding was unclear whether it was applicable to the EHR vendor or the HIE vendor. Therefore, for 2017, the response includes a description of the current certification landscape and requirements for both EHR and HIE vendors.</p> <p>EHR vendors are required to be certified by the ONC. However, success of participation relies on cost, organizational priority, end user training and provider outreach in addition to having a certified EHR vendor.</p> <p>To participate in the Medicare and Medicaid EHR Incentive Program, EHR software must follow established standards and other criteria for structured data and be certified by CMS and ONC as a Certified Electronic Health Record Technology (CEHRT). Today, all providers must be using a CEHRT to the 2014 Edition Final Rule, or if available, the 2015 Edition Final Rule, or a combination of the two. Throughout this Environmental Scan, EHR certification was not a major concern or barrier to exchange participation.</p> <p>HIE vendors do not have a formal federal mandatory accreditation or certification requirement. However, there are currently multiple different organizations, some national and some state, that assess certain functions, including technology and security. For example, some of the certifications relate to secure messaging functions, some to query-based exchange. Minnesota, Pennsylvania, Vermont and Kansas have some mandatory requirements, and some are voluntary, such as Direct Trust and Healthway. However, there is not one comprehensive testing and certification service for HIE.</p>
<p><i>The NwHIN (HealthWay CONNECT) and the State HIE will provide the mechanisms to facilitate the secure exchange of patient data regardless of the location of the patient and his/her health records.</i></p>	<p>The NwHIN has transitioned from ONC to an independent initiative, the eHealth Exchange, supported by the Sequoia Project (formerly HealthWay) in 2012. The Sequoia Project manages the eHealth Exchange and Carequality interoperability initiatives. Three organizations that were interviewed are a member of the eHealth Exchange. The majority of organizations rely on the interoperability application of their EHR vendor to participate in electronic clinical data exchange. The most cited bi-directional interoperability platforms were Care Everywhere (Epic) and Relay Health (McKesson).</p>
<p><i>HIEs (e.g., the Mississippi Coastal Health Information Exchange (MSCHIE)), RHIOs, and system-wide record sharing will continue to increase in parallel with a statewide HIE effort. The establishment of standards is</i></p>	<p>After Hurricane Katrina in 2008, five health systems (Singing River Health System, Memorial of Gulfport, Hancock Medical, Biloxi Regional and Coastal Family Health Center clinics) partnered to create the Mississippi Coastal HIE. MSCHIE was the pilot project for an HIE in Mississippi. Subsequently, in 2009, HITECH passed, and thereafter, state legislation passed forming MS-HIN and its governance structure. MSCHIE expanded and became part of MS-HIN. The current statewide HIE in Mississippi is MS-HIN. MS-HIN</p>

<i>2010</i>	<i>2017</i>
<p><i>critical to interoperability and alignment with the existing exchanges.</i></p>	<p>currently has 41 connected facilities. 19 more are being on-boarded with approximately 12 that will be live in the summer of 2017. There has been a 72% increase from 2015 in connected hospitals. MS-HIN offers a community health record, electronic referrals, Direct Secure Messaging, medication history, clinical results delivery, MU reporting, bi-directional immunization gateway, bi-directional CCD/C-CDA gateway, HISP services, orders and results services, and event notification services.</p> <p>MS-HIN remains a gateway for unaffiliated organizations and parties in Mississippi to exchange clinical data electronically. The establishment of agreements on rules of engagement for information sharing and how those rules can be changed is important for healthcare organizations to have trust in the platform and become an active member. CommonWell has created a vendor neutral platform with common standards and policies. Carequality, an initiative managed by the Sequoia Project, has developed similar standards including a common “rules of the road,” technical specifications and a participant director to enable cross network exchange. The eHealth Exchange functions as a HIE and is based on federal standards with which all members agree. Lastly, the Direct Project, which was launched in 2010, enables a secure, standards-based way to electronically send health information and has been a consistently cited method of electronic data exchange among Mississippi providers. Standardized data continues to be important to facilitate aggregation for population health and data analytics in the future.</p>
<p><i>Providers have a strong interest in improving their patients’ quality of care.</i></p>	<p>Since 2010, physician reimbursement has been updated to include incentives for quality of care. First there was MU in 2010 followed by the Medicare Access and CHIP Reauthorization Act (MACRA) in 2015. This legislation created a new payment methodology for quality of care. Part of MACRA is the Merit Based Incentive System (MIPS), and it combines three existing quality initiatives MU, PQRS and VBPM into a single program. Although MACRA and MIPS do not currently apply to Medicaid providers, this shift to value-based payment methodology will likely impact how CMS and states consider payment mechanisms for Medicaid. This is shown in the shift to ACOs, PCMH and other bundled payment models.</p> <p>In conclusion, with MU only continuing to apply to Medicaid providers, and the implementation of MACRA/MIPS quality requirements, providers continue to have a strong interest in improving their patients’ quality of care. Additionally, interviewees noted that the health system a physician is affiliated with, and therefore, the technical capabilities the physician has access to, determines their investment in electronic clinical data exchange. The</p>

<i>2010</i>	<i>2017</i>
	physician's age cohort was also determined to be a factor in their use of electronic clinical data exchange.
<i>Providers are focused on first exchanging data with hospitals and pharmacies.</i>	<p>Health systems have moved to one system for Ambulatory and Inpatient. Smaller providers are also joining larger health systems and accessing the same EHR platform. Therefore, exchanging data from provider offices to hospitals within the same health system has become routine.</p> <p>The most common types of data shared include laboratory results, problem list, patient demographics, allergies, disease management data, and medication data.</p> <p>The top health data exchange partners continue to be other physicians, hospitals, pharmacies, laboratories and X-Ray facilities.</p>
<i>Practices with fewer than ten practitioners are more likely to meet the 30 percent Medicaid requirement.</i>	Practices with fewer than ten practitioners remain more likely to meet the 30 percent Medicaid population served requirement.
<i>Providers show a significant interest in the Health Information Technology for Economic and Clinical Health (HITECH) incentive program.</i>	June 30, 2017 was the deadline for eligible providers to submit for EHR Program Year 2016 and be eligible to receive the full five years of incentive payments. Ninety-two percent of Medicaid providers in Mississippi who registered in the Medicaid EHR incentive program are participating in the program.
<i>The large majority of respondents indicated they intend to apply for the stimulus payments in 2011. Most respondents intend to upgrade or replace their systems.</i>	The majority of respondents indicated they have applied for HITECH stimulus payments since 2011. Some respondents implemented their first EHR systems, others have transitioned to a new vendor, while others upgraded their system because of the EHR incentive program.
<i>Providers need community outreach programs to understand the incentive program details regarding eligibility.</i>	2016 was the midpoint of the EHR Incentive program, and is the last year providers can begin to participate. From the level of continued participation through MU (92%), providers understand their eligibility for the EHR incentive program.
<i>Providers need community outreach programs to understand the requirements of MU and Clinical Quality Measures (CQM) for the Medicaid EHR incentive program.</i>	The majority of providers understand the requirements of MU and Clinical Quality Measures (CQM) for the Medicaid EHR Incentive Program. However, as more value-based purchasing options are introduced for Mississippi providers, outreach efforts should continue as a main priority.

3.1.9 2017 Environmental Scan: Additional Findings

Apart from the updated findings relevant to the conclusions drawn from the 2010 Environmental Scan, additional findings were discovered as a result of changes in HIT and clinical data exchange capabilities across the state. Based on the survey, targeted interviews, and focus group, new findings from the 2017 Environmental Scan include:

- MS-HIN is viewed as one of several HIEs supporting clinical data exchange for hospitals and providers in Mississippi;
- Although Mississippi ranks low on broadband availability (34% of the population without broadband access ranks Mississippi 50th among all states per the Federal Communications Commission), broadband is not a concern nor a limiting factor among the provider community;
- Many organizations offer their own online patient portal;
- Workflow integration has driven value of interoperable EHR platforms that are able to perform all or nearly all of providers HIT needs in one system;
- Clinical data exchange and HIT adoption is generational; those less familiar with technology are more likely to be opposed to new initiatives until penalties become too costly;
- Providers are adopting telemedicine as the technology becomes increasingly more prevalent;
- The EHR Incentive Program has reached maturity so no new registrations will occur after June 2017.

3.2 MMIS Capabilities Assessment

Mississippi's current MMIS is a three-tiered application architecture composed of:

1. A client work station (user interface tier);
2. An application server (business logic tier); and
3. A mainframe backend (data tier).

The business logic and data tier are housed in a secure data center facility in Pennsylvania with MMIS' vendor Conduent. The user interface tier workstations are located in DOM facilities in the State of Mississippi. The workstations run a PowerBuilder runtime client and the presentation layer of the Envision system on the Windows Vista Professional operating system. The workstation application handles primary edit logic prior to sending the data on to the business logic tier for further processing.

The business logic tier provides: 1) middleware connectivity to the mainframe environment; 2) clustering, load-balancing, failover, and two-phase commit control over the database transactions; and 3) additional business logic processing via PowerBuilder and Java objects. The mainframe-based data tier uses IBM Customer Information Control System for transaction processing and DB2 for relational database management.

The major components of the current MMIS include:

- Data Entry
- Claims
- Managed Care Enrollment, Capitation Payment and Reporting
- Financial
- Reference
- Management and Administrative Reporting
- Third Party Liability
- Provider
- Surveillance and Utilization Review
- Beneficiary
- Medicare Buy-In
- Automated Voice Response System
- Provider Lookup
- Bulletin Board System
- WINASAP – Provider claims submission software
- Web Portal
- Electronic Data Interchange (EDI) Processing
- Computer Systems Request

The Decision Support System (DSS) and Data Warehouse (DW) components include:

- Data Warehousing
- Management and Administrative Reporting
- Surveillance and Utilization Review (J-SURS)
- Data Management Tools

Lastly, pharmacy claims processing include:

- Point of sale terminals
- Pharmacy Benefit Management (PBM)

In 2009 DOM began the process to procure a replacement solution for Mississippi's MMIS, PBM, and DSS/DW systems, and accompanying Fiscal Agent operations because the contract with Conduent (formerly Xerox) was nearing Mississippi's maximum contract limitation of 10 years as defined in state statute. When CMS released the Seven Standards and Conditions (7S&C) strategy in 2011, Mississippi envisioned that the MES/MRP RFP would procure a state-of-the-art solution that aligned with CMS's 7S&C and advance Mississippi along the MITA continuum. Mississippi's Medicaid Enterprise System/MMIS Replacement Project (MES/MRP) will culminate in the replacement of the existing monolithic Conduent MMIS/PBM and DSS which will conclude

with the deactivation of this system. DXC will replace the current systems and services via implementation of loosely coupled modular solutions with standards-based, open, documented interfaces. Specifically, this project will replace the functionality of the existing Conduent MMIS/PBM and DSS with the DXC system that contains the interChange core system loosely coupled via industry standard interfaces to mutually agreed upon modular components. A November 2021 go-live is planned.

Additionally, DOM plans to perform a revised State Self-Assessment (SS-A) using the new Medicaid Information Technology Architecture (MITA) 3.0 guidelines concurrent with the new solution preparations for R3 Certification. DOM will consider the appropriate solution to address opportunities identified for MITA level advancement during each subsequent re-procurement effort. Funding for the new MITA SS-A is not included in the corresponding HIT IAPDU, but will be requested in a separate subsequent IAPD.

3.3 Feasibility of Incentive Payment Methodology

The State of Mississippi studied two possible solutions for administering the MPIP – one involving in-house development of a provider incentive payment system; and a second option involving a standalone Web-based hosted solution developed by Conduent. DOM elected to use the Conduent solution, which involved minimal changes to the current MMIS.

The Conduent solution was designed and implemented in conjunction with Conduent’s work on the California replacement MMIS. Since 2011 it has been implemented in multiple states as a Software as a Service (SaaS) solution. Conduent’s solution offers DOM a Web-based State registration, attestation, and tracking system to support provider incentive payments for the A/I/U and/or MU of CEHRT. This Web-based system was designed to provide a State Level Registry (SLR) to document, track, and attest to the provider’s use of EHRs in support of A/I/U and MU requirements. This SLR works in conjunction with and communicates with the CMS Registration & Attestation System in accordance with the published CMS interface specifications.

The Conduent solution provides two separate Web portals: one for the provider access and one for State staff to access.

The provider portal is a single location where providers can securely log in to complete their A/I/U and MU attestation information, including uploading any additional required documentation for acceptance and review by the State. The provider portal allows each eligible provider to complete registration and to review and edit their demographic information. However, data received from the CMS Registration & Attestation System must be edited through the Medicare/Medicaid EHR Incentive Program Registration Website.

As a part of the MS SLR attestation process, providers enter the following information into the provider portal:

- Medicaid patient volume percentage numerator and denominator to achieve eligibility. This will also be analyzed for non-hospital based eligibility;

- Required A/I/U data (or MU data and percentage information, including CQMs); and
- Supporting documentation.

The MS SLR automatically verifies provider data, such as license validation and exclusion checks, and indicates a preliminary approval or denial in accordance with current CMS and DOM requirements. Providers are able to track the status of their application and payments online, and view any messages from DOM.

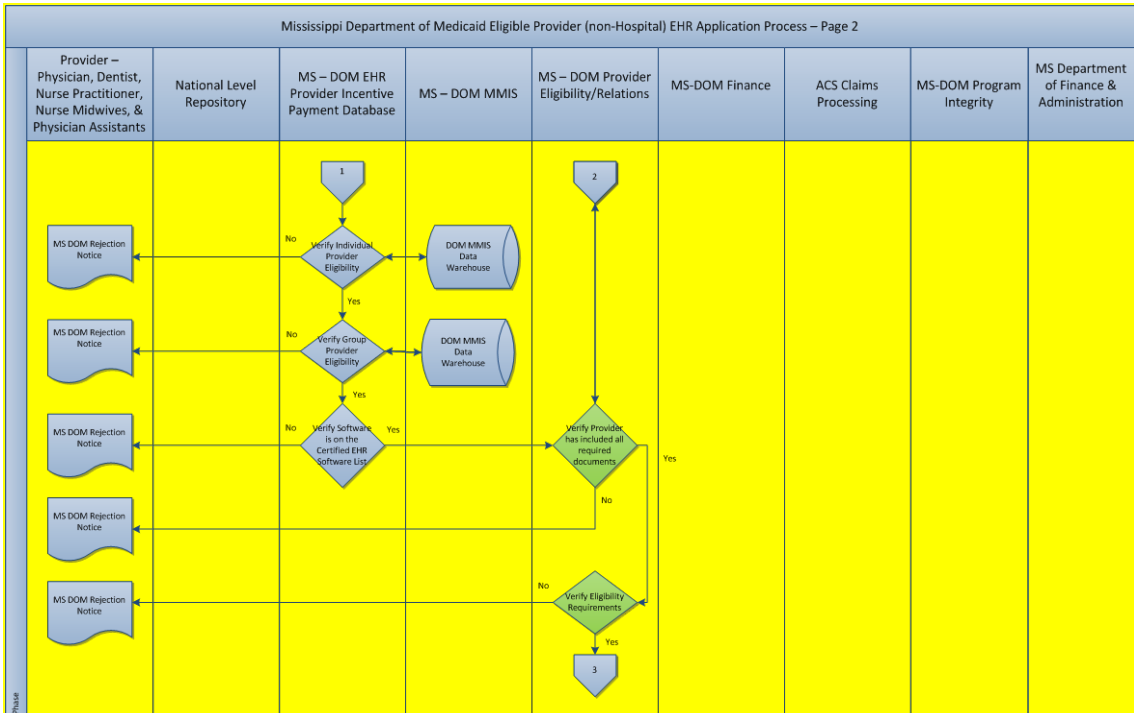
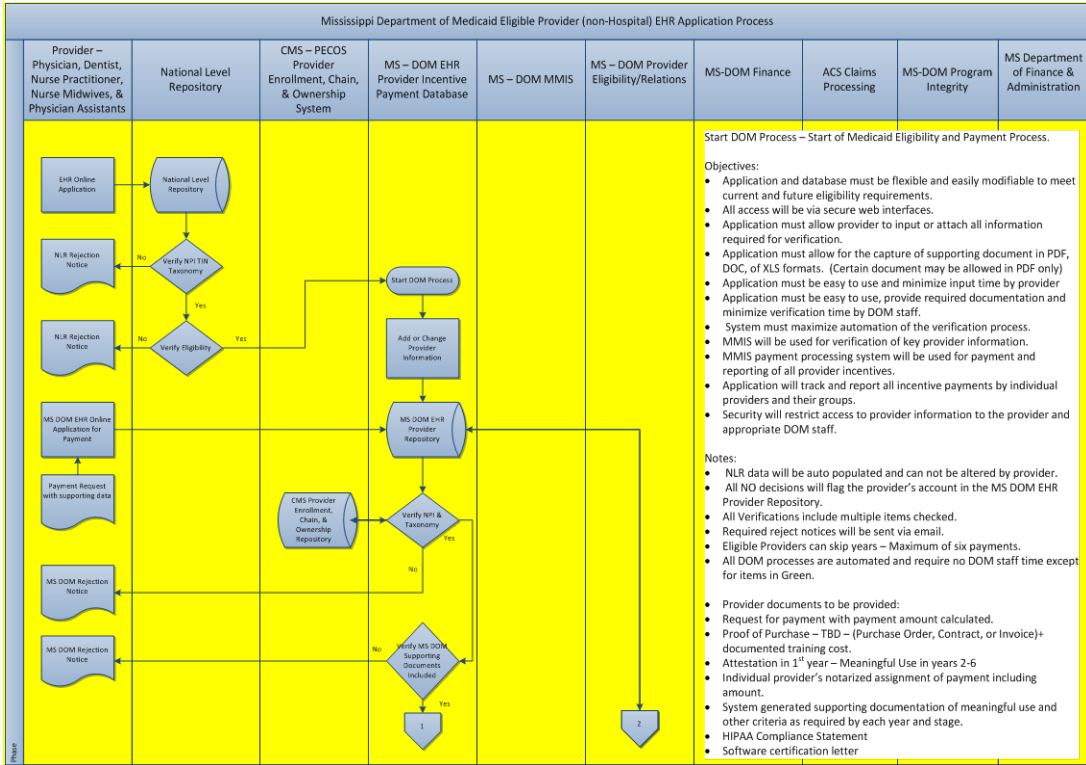
The State access portal provides a location where DOM-approved users can securely log in to access provider attestation information and work queues. The work queues for DOM users are role-based so that the provider registration and attestation information can be routed to the correct user and/or department for approval, action, or denial. The State access portal provides a mechanism by which the State can track incentive payments and communicate with providers through a messaging system. In this way, the State can communicate “directly” with the providers on matters of approval or denial, or to request additional information.

Approved State users utilize the State access portal to:

- Review and approve provider attestation information and supporting materials;
- Calculate and initiate a provider payment cycle using an automated interface to the MMIS;
- Manage the audit, recoupment and adjustment, and appeals processes; and
- Review provider quality metrics.

The following is an alternatives analysis that DOM used to compare the Conduent proposed stand-alone solution with an effort to develop an in-house system to provide functionality needed for issuing provider incentive payments.

The in-house system was investigated and process flows were developed to show the required changes in workflow to accommodate provider payments. The outcome of that process is represented in the figures shown below. The first set of figures represents the proposed new process flow for EPs and the second set of figures represents the proposed new process flow for EHs.



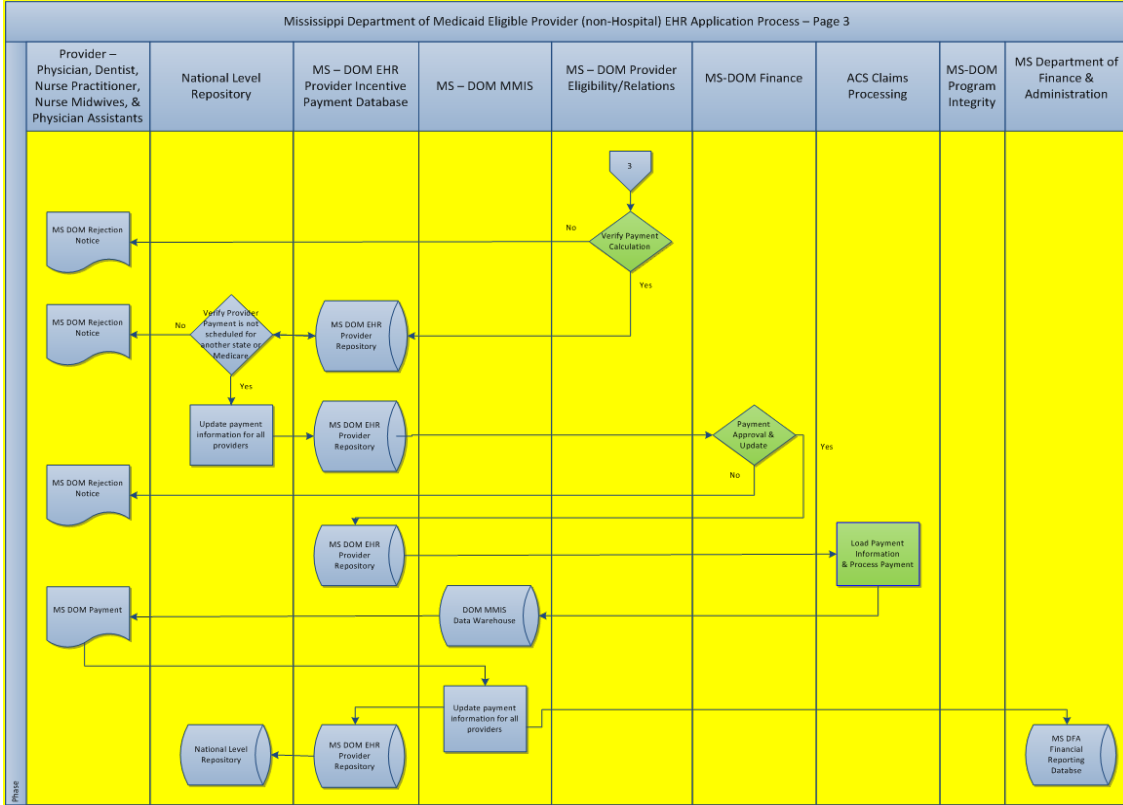
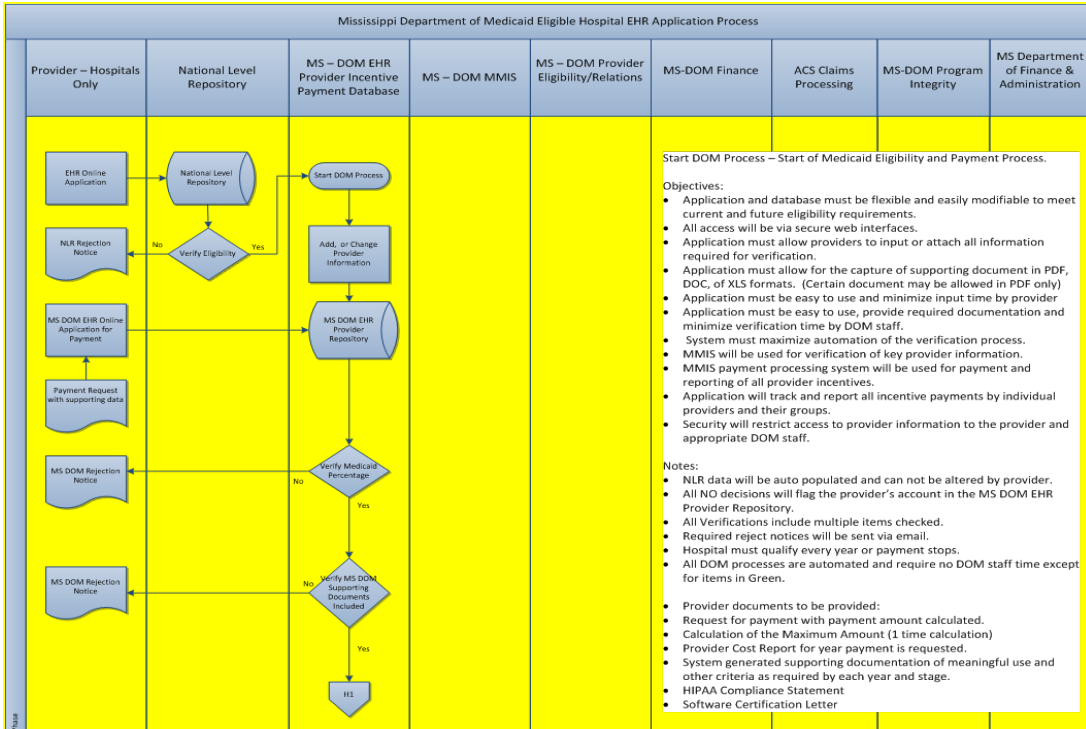


Figure 12: Internal Process Flow - Professional Eligibility



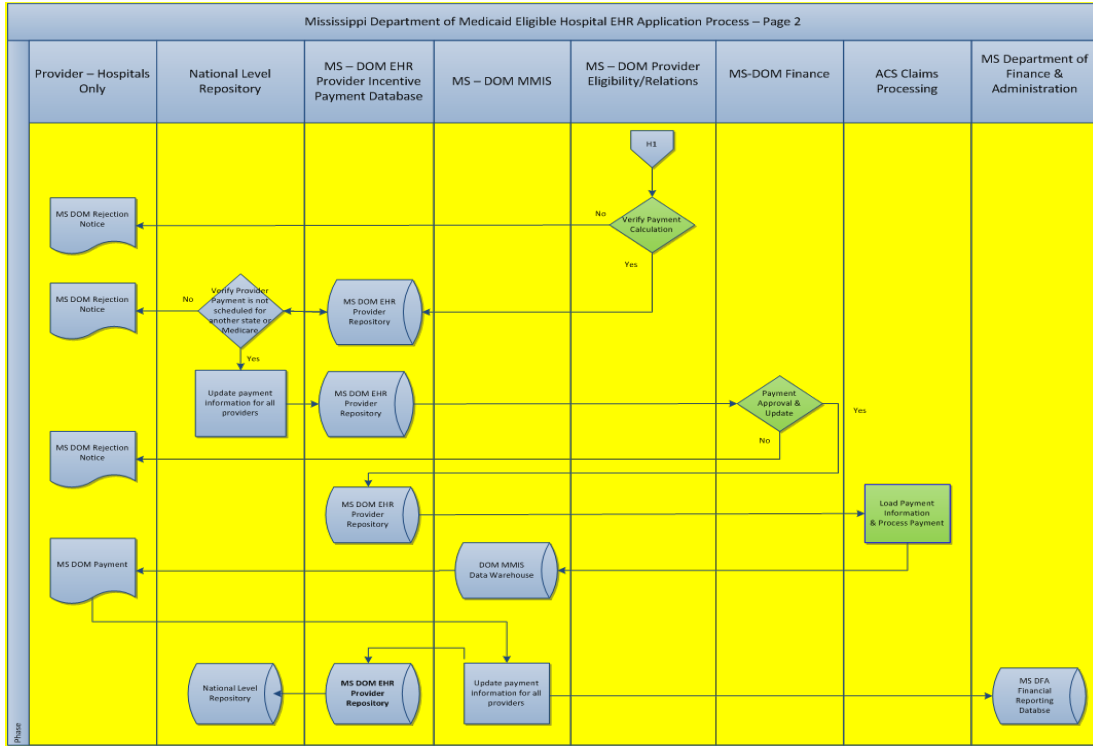


Figure 13: Internal Process Flow - Hospital Eligibility

The following table shows the comparison that DOM made between the internal solution and the Conduent solution. As noted above, the Conduent option was used as an adjunct to the current MMIS, requiring only minimal changes to the current MMIS. This option had several advantages that are discussed below. Critical factors in DOM’s decision-making process were critical timeline, availability of qualified staff, and investment in infrastructure.

Table 3-2: Internal Solution versus. Conduent Solution

Considerations	Internal Solution/SaaS Solution
The State has indicated a desire to participate in Group 1 testing for the provider incentive payments with CMS.	<u>Internal Solution</u> : The changes necessary for participating in Group 1 testing will not be available in time.
	<u>SaaS Solution</u> : Vendor commits to meeting the required timelines.
The State desires a solution that poses the least risk of schedule delay.	<u>Internal Solution</u> : The State does not have the required resources necessary to successfully develop and implement the solution.
	<u>SaaS Solution</u> : The vendor is devoting significant resources to creating a solution for multiple states.
The State desires a solution that requires the least amount of limited	<u>Internal Solution</u> : The required State resources will be significant under this scenario (support, maintenance,

Considerations	Internal Solution/SaaS Solution
State resources.	development, program, help desk, project management, and vendor oversight). The State would struggle to recruit sufficient qualified resources in a timely manner.
	<u>SaaS Solution</u> : The State's required commitment of resources is significantly decreased by focusing its limited resources on the oversight of the proposed solution.
The State desires a solution that meets all Mississippi-specific requirements.	<u>Internal Solution</u> : An internal solution will be able to meet any Mississippi-specific requirements.
	<u>SaaS Solution</u> : The Conduent solution may not meet all Mississippi-specific requirements. Small changes, such as additional fields are included in the cost, but substantial modifications may be expensive or time consuming.
The State desires a solution that conforms to all CMS requirements.	<u>Internal Solution</u> : An internal solution would require additional manual processes for attestation and verification, but will be able to meet all CMS requirements fully.
	<u>SaaS Solution</u> : The Conduent proposal includes a Web-based system to support the MU requirements, incentive payments, and other ARRA HITECH Act requirements. This solution provides a more automated solution for the attestation and verification processes, therefore requiring fewer DOM resources for the oversight of the attestation and verification processes.
The State desires a solution that is flexible, easily modifiable, and maintainable.	<u>Internal Solution</u> : Building applications that are flexible, easy to modify, and maintain is a challenge. The State may struggle to create an internal solution to meet these objectives while altering a legacy MMIS at the same time.
	<u>SaaS Solution</u> : The vendor states that the application will be configurable for state specific requirements, but not enough information is known to verify flexibility.
The State desires a solution that provides as much automation as possible for audit functions.	<u>Internal Solution</u> : An internal solution may be able to automate audit functions fully; but design, development, and implementation would take a significant amount of time beyond the timeline for Group 1 or Group 2.
	<u>SaaS Solution</u> : The Conduent proposed solution provides automation of audit functions. The full extent of those automation capabilities is unknown at this point.

Based on a review of the alternatives, the State chose to pursue the Conduent SaaS solution. The State believed that the SaaS offered the lowest risk and a lower cost alternative, long-term,

than developing a new internal solution. The State worked closely with Conduent to finalize the requirements for the State of Mississippi in the commercial off the shelf (COTS) offering using configuration sessions and user group calls. Since implementation, the Conduent application has successfully accepted provider attestations for A/I/U and MU and DOM continues to work on shaping functionality within the Conduent solution to meet the needs of the MPIP and future regulatory changes to the MU program.

3.4 Medicaid Electronic Health Record System and e-Prescribing System (MEHRS) Transition to the DOM Medicaid Clinical Infrastructure (MCI) subproject

3.4.1 Background on the MEHRS System

With the use of funds from a Transformation grant, a provider Stabilization grant, and the MMIS enhanced funding match, the State of Mississippi implemented a system known as Medicaid Electronic Health Record System and e-Prescribing (MEHRS/eScript). The MEHRS/eScript system was launched in June 2010 and was available to all Mississippi Medicaid providers at no charge.

DOM requested and received funding for MEHRS design, development, and implementation, as well as ongoing support, via an IAPD that was approved by CMS in January 2009. CMS approved a four-year contract term with two two-year renewals with the understanding that the renewals would require further approval.

DOM contracted with the vendor Shared Health to provide a MEHRS/eScript for Mississippi Medicaid providers in 2009. Shared Health subsequently rolled out MEHRS/eScript with over 3,200 Medicaid providers and practice staff users registering for the system, enabling electronic health records with clinical data for over 600,000 Medicaid beneficiaries in MEHRS/eScript.

Shared Health was contracted to upgrade the deployed version of MEHRS/eScript (Version 7) to an Office of the National Coordinator for Healthcare Information Technology (ONC)-certified version, named MEHRS/eScript Version 8. MEHRS/eScript Version 8 was due for delivery to DOM in late 2011, as mutually and contractually agreed by both DOM and Shared Health; however, it was not delivered.

In early 2012, DOM was informed that Shared Health would not be delivering Version 8 of MEHRS/eScript, would not be delivering any ONC-certified version of MEHRS/eScript, and that Shared Health was stopping all development work on the MEHRS/eScript product and platform.

As DOM had providers who were relying on the MEHRS/eScript system for meeting the criteria of Stage 1 Meaningful Use, DOM and Shared Health entered into an agreement to migrate/upgrade the MEHRS/eScript system to a commercially available solution, through new (subcontracted) vendors, Orion Health and Mede/Analytics.

Orion Health began the Operations Phase of the MEHRS/eScript project on July 1, 2013 and continued working on the operations of the project through March 2014. As stipulated in Orion's contract, Orion successfully implemented a certified EHR product to DOM. However, after the implementation of the upgraded ATCB MEHRS/eScript Electronic Health Record and integrated ePrescribing components to DOM, it was determined that many Medicaid providers

had adopted commercially available EHR/ePrescribing solutions to comply with Meaningful Use (MU) requirements. With the deadline looming for the required ONC 2014 certification, and with the diminished need and requirements for the MEHRS EHR/ePrescribing components of the MEHRS solution, DOM made the decision to initiate a strategic realignment of the project as of June 30, 2014.

Core components of the MEHRS/eScript solution were retained and upgraded to support the DOM clinical data interoperability strategy (as defined in the SMHP as the 'To-Be' infrastructure and also defined in the HIT IAPD). These Medicaid-specific clinical data components include the Medicaid Clinical Data Repository (CDR), Medicaid Master Patient Index (MPI), and Provider Access (a provider web portal for Medicaid Providers), and these three components, along with the addition of clinical data Analytics formed the basis for the DOM Medicaid Clinical Infrastructure (MCI).

3.4.2 DOM Medicaid Clinical Data Infrastructure (MCI)

The existing DOM MCI, provided by MedeAnalytics, is composed of a Medicaid Clinical Data Repository (CDR), a Medicaid Master Patient Index (MPI), a Medicaid provider portal (Provider Access), and Medicaid Clinical Data Analytics. A description of each is below:

- **DOM Medicaid Master Patient Index (MPI):** The DOM MPI is a SaaS-based, modular component that is coupled with the DOM MCI. The DOM MPI allows for beneficiary identification via the complex, unattended probabilistic matching algorithm developed specifically for DOM and DOM's use-cases. There are over 2.6 million historical identities in the DOM MPI, with approximately 800,000 active beneficiaries, and a match rate of approximately 92%.
- **DOM Medicaid Clinical Data Repository (CDR):** The DOM CDR is a SaaS-based, modular component that is coupled with the DOM MCI. The DOM CDR allows for the storage and utilization of Medicaid-only clinical data from internal DOM systems and external DOM trading partners. Medicaid clinical data is first validated using a process within the DOM MPI to ensure the data is for an active Medicaid beneficiary, and then stored in the DOM CDR. The existing MMIS provides on a scheduled basis data to the DOM CDR (and validated via the MPI process as previously detailed) for Medical Claims files, Pharmacy Claims files, and other files (detailed in Figure 14. Clinical Data Interoperability Project). These MMIS files are then transformed into clinical data and stored in the DOM CDR. Terminology and Sensitivity services are applied to all incoming and outgoing clinical data, via the CDR. Upon request (demand) from a DOM system or external trading partner (such as UMMC), the CDR generates a CCDA in XML (in real time) for a single or multiple Medicaid beneficiaries.
- **DOM Medicaid Clinical Portal (Provider Access):** The DOM Provider Access portal is a secure portal where Medicaid providers can log in and search, view and download clinical data on Medicaid beneficiaries. MU Stage 2 compliant C-CDAs in XML can be downloaded from Provider Access as clinical summaries, for import into MU Stage 2 certified EHRs.

- DOM Medicaid Clinical Data Analytics: The DOM Medicaid Clinical Data Analytics provides DOM the ability to run custom reports on clinical data, claims data, and clinical data with claims data. Business users within DOM depend on this Analytics solution for program decision making, care and cost review, and responding to Legislative and CMS requests for information, etc.

In 2016, DOM added additional capabilities to the existing MCI when DOM implemented the first real-time EHR interface in the United States between a State Medicaid Agency and a Provider EHR (Clinical Integration). This Clinical Integration allows for the real-time query-exchange of C-CDA clinical data summaries between the DOM MCI and the Provider's EHR, and is occurring with the largest Medicaid provider in the State, the University of Mississippi Medical Center (UMMC).

Specifically, this Clinical Integration allows the UMMC Epic EHR to query the DOM MCI (and the DOM CDR) within seconds, and allows for a Medicaid clinical summary to instantly be sent back to the provider's EHR. By having real-time Clinical Integration and providing the Medicaid C-CDA directly in the provider EHR, providers can now instantly view, import, and utilize the DOM Medicaid clinical data from the DOM CDR for Medicaid beneficiaries. Each Clinical Integration is bi-directional, meaning the Medicaid clinical data in the DOM CDR is updated at the end of each encounter at a provider such as UMMC, thereby further enhancing the rich clinical data in the DOM CDR with every encounter by a Medicaid beneficiary at a provider with a Clinical Integration.

DOM and UMMC are exchanging over 4,000 Medicaid clinical summaries (C-CDAs in XML) daily with the Clinical Integration, and have surpassed three million C-CDAs exchanged in over two years, affecting the care and quality of care for hundreds of thousands of Medicaid beneficiaries, as they seek care, in real-time and within the provider's native EHR workflow. Additionally, DOM has completed Clinical Integrations with the Hattiesburg Clinic, the second largest Medicaid provider in the State, Forrest General Hospital (one of the largest Medicaid hospitals in Mississippi) and has also completed a Clinical Integration with the Singing River Health System, a large Medicaid health system on the Mississippi Gulf Coast.

The Clinical Integrations with the Hattiesburg Clinic, Forrest General and the Singing River Health System have added approximately 6,000 additional clinical summaries (C-CDAs in XML) exchanged daily with DOM, bringing the total with UMMC to over approximately 10,000 clinical summaries exchanged daily between these four health systems and DOM. This daily exchange of clinical summaries (C-CDA in XML) supports approximately 10,000 Medicaid beneficiaries as they seek health care each day.

DOM was working with the Delta Health Alliance (DHA), a large network of Ambulatory providers and several connected FQHCs in the Mississippi Delta to establish a bi-directional connection between DHA and DOM. However, this project has recently been placed on hold indefinitely.

The DOM MCI, including all four Clinical Integrations, is in continued phases of DDI and is supported by Mede/Analytics, as the primary vendor until September 30, 2021. The DOM MCI is one component of the DOM Clinical Data Interoperability Program (CDIP), described below.

3.5 DOM Clinical Data Interoperability Program (CDIP)

As outlined in the Executive Summary of this document, DOM has outlined four goals to accomplish to improve the coordination of care and quality of care of Medicaid Beneficiaries in the State of Mississippi using clinical data and HIT/HIE:

- 1) Achieve greater interoperability with Medicaid providers and provider clinical systems (EHRs, other clinical systems) to aggregate provider-based Medicaid clinical data and store/utilize this data in the existing DOM Clinical Data Repository;
- 2) Utilize the aggregated provider-based Medicaid clinical data in the DOM Clinical Data Repository for Agency goals and programs including the MRP to meet the goals of the MITA Care Management initiatives, for clinical data analytics, for clinical data population health tools and services, and for clinical quality measurement initiatives;
- 3) Offer tools and interfaces to providers so that providers may access and utilize the aggregated clinical data in the DOM Clinical Data Repository, including such tools as a Medicaid clinical data provider portal and real-time, bi-directional clinical data interfaces to support the sharing and updating of Medicaid clinical data interoperability within provider EHRs and provider EHR workflows; and
- 4) Promote adoption of CEHRT for DOM providers with the goal of using CEHRT and HIT/HIE to promote coordinated health care for DOM beneficiaries, better health care outcomes, and improvements in care quality. The effort to promote electronic exchange of clinical data, will be enhanced by the improvement of access to broadband technology for the citizens of Mississippi.

The DOM Clinical Data Interoperability Program includes the infrastructure and personnel for DOM to support the above four goals.

There are several benefits from the aggregation of Medicaid provider clinical data by DOM, including but not limited to:

- Medicaid beneficiary care coordination and improved care management, including future MITA-based Care Management coordination between the clinical data HIT components and the MRP;
- Agency goals and programs, such as Medicaid clinical data analytics and Medicaid clinical data population management initiatives, and clinical quality measurement programs and initiatives; and
- Aggregated and up-to-date Medicaid beneficiary clinical summary documents, clinical reports, clinical data, and decision-making available in real-time and integrated directly into the provider EHRs and clinical system via the CDIP Clinical Integrations for real-time provider utilization in a care setting.

With the sudden and unexpected demise of the State of Mississippi's Health Information Exchange, MS-HIN, the continued DDI and development of the DOM CDIP has become even more critical to supporting the Medicaid providers and Medicaid beneficiaries in the State of Mississippi. With no State HIE, the ability for providers to meet CMS requirements for sharing

data, coordinating care, improving quality of care, meeting the goals of the MU/Promoting Interoperability Program, and lowering costs has become more challenging.

The DOM CDIP allows and continues to allow for sharing of the Medicaid clinical data longitudinal record in C-CDA format, directly at the point of care, when a Medicaid beneficiary seeks care. The record is presented directly into the provider's EHR. With the demise of the State's HIE, providers and especially rural providers (CAHs and FQHCs) will need to rely on the DOM CDIP's Clinical Integrations even more now than previously to access the medical and clinical history on Medicaid beneficiaries at the point of care, and for care coordination. It is important to note that the DOM CDIP is not a Statewide HIE and only contains Medicaid clinical data.

The Clinical Data Interoperability Project consists of **two** subprojects, which are existing and currently functioning:

- **Subproject 1, Medicaid Clinical Infrastructure (MCI)** - DOM has an existing, functional MCI with core clinical components of a Clinical Data Repository (CDR), Master Patient Index (MPI), Medicaid Provider Portal, Medicaid Analytics, and Medicaid Provider Clinical Integrations (EHR Interfaces), as explained in detail in the MEHRS section of this document. The existing MCI has been integrated with the existing DOM Interoperability Platform, and currently supports bi-directional clinical data from providers via the DOM Interoperability Platform. The MCI subproject is required to be interoperable with the other subproject.
- **Subproject 2, Interoperability Platform** – DOM has procured and implemented an Interoperability Platform (**Enterprise Service Bus**) from the vendor DXC Technology (formerly known as Hewlett-Packard Enterprise Services, or HPE) as a single point of connectivity. The DOM Interoperability Platform is a SOA-based, SaaS module, allowing **for future** interoperability between DOM components such as the existing MMIS and the future **MRP**, the modernized Eligibility system, the DOM MCI and Clinical Integrations with Medicaid providers, other DOM internal systems and services, as well as external DOM trading partners such as other State Agencies, etc. The DOM Interoperability Platform has been integrated with the DOM MCI as well as **providing a foundation for** the Clinical Integrations. The DOM Interoperability Platform is a modular service director that assists DOM in connecting all of the modular components of the internal DOM ecosystem, as well as DOM's external trading partners. The Interoperability Platform is key component in DOM's strategy for SOA, modularity, COTS, MITA 3.0 compliance, **as well as the migration of the HIT components to the MRP as a module.** The two major components of the Interoperability Platform include an Enterprise Service Bus (ESB) and an eHealth Exchange Gateway. The DOM Interoperability Platform subproject is required to be interoperable with the other subproject.

Additional Integration Points and Systems for the CDIP and MITA alignment (**DDI**):

- **MMIS**: Currently, DOM's existing MMIS is in the final stages of its natural lifecycle. DOM received approval by CMS for a **MRP (MMIS Replacement Project)** in early 2017, with the DXC Technology (DXC) providing the overall modular solution. The new, replacement **MMIS** will be **crosswalked with the existing DOM CDIP HIT components,**

including the existing DOM MPI and DOM CDR. This crosswalk will ensure the CDIP HIT components are fully aligned with the MRP, MITA and the MITA Care Management initiative. The DOM CDIP HIT components will then be integrated with the DOM MRP as a SOA-based module, and will utilize the existing DOM Interoperability Platform (ESB) as the modular component for connectivity. By utilizing these modular, SaaS-based COTS components, DOM continues to align with the goals of SOA and MITA for modularity and COTS. DOM currently feeds claims data from the legacy MMIS into the Medicaid CDR on a weekly basis. With the transition from MMIS to MRP, an interface will be required to feed claims data from MRP into the Medicaid CDR on a weekly basis.

It is not anticipated that the new MRP will house clinical data for DOM, rather, the new MRP will access the DOM MCI components (the MPI and CDR), via the Interoperability Platform (as a service director) to share data as needed and requested by MRP. Medicaid clinical data will reside in the existing CDR, but will be made available as a service to MRP via the Interoperability Platform. For the time being, Identity Management will remain at the existing individual modules for each program (MPI module for clinical data and at the MRP and E&E modules for administrative data); however, DOM's strategy is to achieve a single Medicaid identity across the SMA using a Federated Master Patient Index, or F-MPI. More information about the F-MPI and alignment of the F-MPI as a module for the MRP and DOM can be found in the To-Be section of this document.

- **Electronic Clinical Quality Measures (eCQMs):** As DOM aggregates rich clinical data in C-CDA (XML) format from providers and various other clinical data sources, DOM utilizes the existing Analytics capabilities of the existing DOM MCI to analyze this data. Additionally, DOM has begun planning for an Electronic Clinical Quality (eCQM) Pilot Program with multiple phases. Phase I of this eCQM Pilot will focus around aggregation of the QRDA clinical quality file from the largest provider in the State's EHR system, the University of Mississippi Medical Center (UMMC). DOM would also have to deploy, as a pilot, an ONC-certified electronic Clinical Quality Measures (eCQM) tool, which will be capable of utilizing the QRDA data file from UMMC. DOM is in ongoing discussions with UMMC to have UMMC submit QRDA files on a regular basis. DOM will work with the DOM clinical staff and UMMC to select several of the approximately 260 eCQMs that are in the ONC certified eCQM tool. DOM could also work with the tool to build out custom reports on the selected eCQM measures, to allow for reporting of quality to DOM, the State, UMMC providers, and CMS.

Depending on the outcomes of Phase I, the eCQM Pilot could be expanded for additional measures and providers and additional custom reports to analyze and evaluate the quality of care and care improvement with Mississippi Medicaid providers. Both Phases of the pilot could allow DOM to evaluate use-cases such as the analysis of at-risk populations, costs, quality among providers and quality of care, and other eCQM-related use-cases. Currently, DOM is not analyzing eCQM data submitted with yearly EHR Attestations since they are submitted in PDF format only, and DOM is only capturing the data that is reported. Mississippi simply reports this data aggregately to CMS through our Annual Report.

- **Outreach and Training Resources:** DOM has **one and a half** full-time outreach and training resources that are responsible for adoption of the DOM Provider Access clinical data portal across the state. DOM's Provider Access portal is populated with **claims and** clinical data from the DOM Clinical Data Repository and is available at no cost to every Medicaid provider in the state. The outreach resources assist with adoption of the portal and provide education about clinical data exchange activities to support Medicaid beneficiaries (improving and coordinating care, etc.).

Mississippi currently conducts extensive training and support each year. This is done through a one-to-one or small group approach as needed. DOM also hosts a number of informative, training webinars. We use our program mailing list to notify providers of yearly changes and webinar invitations.

DOM also uses contact information data from CMS registration for the EHR Incentive program to send reminders. DOM focuses on those that created a program registration but never created a State Level Registry (SLR) Account. Mississippi is in the 80th percentile of EP Registration to Paid (as of February 2017).

CMS requires all Meaningful Use participants to meet the Public Health Reporting Objective, Measure 1 – Immunization Registry Reporting by uploading the evidence of Active Engagement to submit data from an EHR to a Public Health Agency. DOM strongly encourages all providers to complete the Registration of Intent to Onboard with the Immunization Registry survey. Most providers adhere to this recommendation and complete this Registration Survey. However, Providers that claim an exclusion to the measure (due to provider type or specialty) must submit a brief memo describing the reason for the exclusion. DOM has asked for this since 2013 and has seen a large increase in registration with the Immunization Registry.

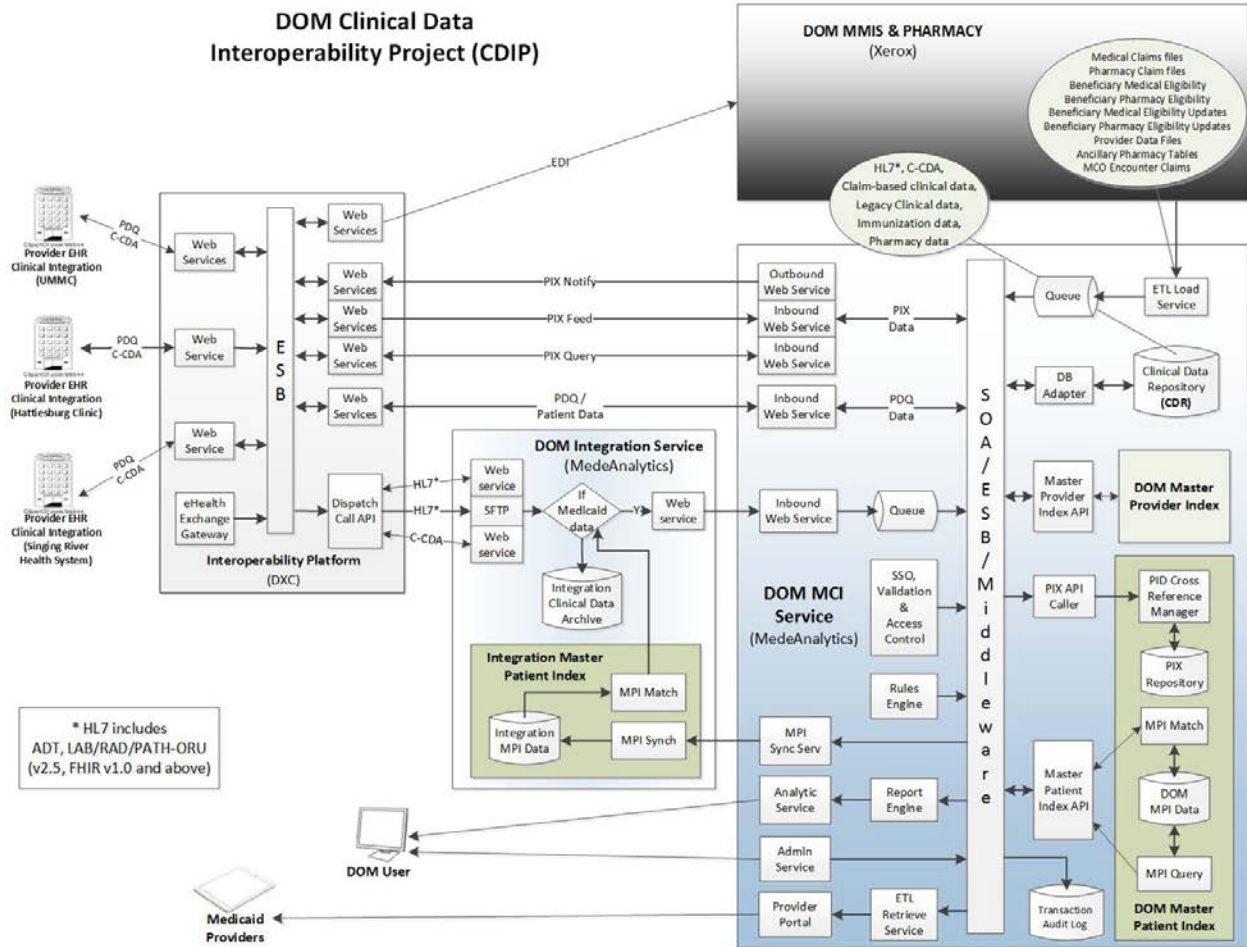


Figure 14: Clinical Data Interoperability Project (CDIP)

3.6 Current MITA Status

MITA is a CMS initiative designed to assimilate business and IT transformation across the Medicaid enterprise to improve the administration of the Medicaid program. MITA is a business-centric architectural framework that provides planning guidelines for states to define strategic business goals and objectives, define business processes, and assess current capabilities as a baseline to measure progress towards these goals.

A key activity within the MITA initiative is performing a MITA SS-A. Requests for FFP for MMIS enhancements must include a formal SS-A which describes the extent to which current MMIS systems reflect MITA and how requested changes will advance their transformation into the new architecture.

HIT, like MITA aims to improve quality of care through an open architecture that supports the integration of clinical and administrative data, promotes interoperability, and coordination with partners to improve health outcomes.

Mississippi completed a MITA SS-A in 2008 and a subsequent Gap Analysis was completed in June, 2010. The purpose of a completed SS-A is to identify the “As Is” state and “To Be” (target) state of a state’s Medicaid business enterprise. The Mississippi Medicaid enterprise has many business processes that are currently in the Level 1 maturity with some business processes in Level 2.

Since 2010, DOM formalized the business process narratives and mapping as a part of the Mississippi MITA goals. DOM plans to convert these business processes into MITA 3.0 standards in the coming year as a part of the ongoing update process that aligns current MITA status with MITA goals.

DOM has advanced in its use of technology to supply information to providers in the following ways:

- Implementation of Mede/Provider Access product. This assists providers in the appropriate treatment of beneficiaries and reduces unnecessary testing.
- Receipt of a large percentage of claims through electronic data interchange (EDI).
- Electronic funds transfer (EFT) is used to payment nearly all providers.
- Widespread usage of the Envision Web portal.

Although DOM has advanced its use of technology towards the MITA standard, challenges remain. For example, some business processes must still be performed and/or validated manually. DOM has not developed all of the business processes necessary to utilize the DSS to its full capacity. Care planning and care management are fields open to the State for increased gains in population health and cost savings.

3.7 Current Broadband Initiatives

The State of Mississippi has had a public mandate to improve access to broadband technology since 2003 when the Mississippi Broadband Technology Development Act was passed (Miss. Code Ann. § 57-87-1 et. seq.). The Mississippi Broadband Task Force was founded in 2004 to promote citizen use of the Internet with a plan and broadband strategy. Since that time, the State has been moving forward with planning and implementation of improved access to broadband services. Over \$77 million in grant funding was awarded to the Office of the Governor through federal broadband stimulus programs. The funding is to be used to expand broadband access and adoption in communities across the State of Mississippi. Specifically, the State is participating in the national broadband mapping and planning initiative through the Broadband Technology Opportunities Program (BTOP) administered by the Department of Commerce (DOC).

In April 2009, Governor Haley Barbour charged the Mississippi Broadband Task Force with the development of strategies to enhance the broadband infrastructure in Mississippi. The National Telecommunications and Information Administration (NTIA) awarded the State of Mississippi a grant as part of the BTOP, under the ARRA. With this funding, Mississippi is eager to deploy the

Long Term Evolution (LTE) broadband network to better serve the citizens of the State. LTE is a next generation mobile broadband technology designed to support data applications that are currently too bandwidth-intensive for the existing technology. Additionally, on August 18, 2010, the State received a \$7.1 million grant through the Broadband Initiatives Program (BIP) to design, engineer, and construct a broadband network in rural northeastern Mississippi.

In September 2010, the Office of the Governor received an additional award from NTIA of nearly \$5 million for broadband planning and mapping activities under the State Broadband Data and Development Program, a matching grant program that implements the joint purposes of the ARRA and the Broadband Data Improvement Act. This is a supplement to the original \$2 million award the State received in January 2010, allowing the extension of its current two-year broadband data collection program for an additional three years and allowing the State to identify and implement best practices in broadband mapping. The State of Mississippi will utilize a portion of the funding to support the creation of the Mississippi Broadband Connect Coalition, a non-profit, public-private partnership focused on producing a comprehensive statewide strategic plan for improving digital literacy, increasing access to broadband and enabling greater adoption of broadband in the State.

The Mississippi Broadband Connect Coalition (MBCC) began partnering with the Mississippi State University Extension Service in 2011 to develop the statewide strategic plan. This 125-member public-private partnership met for almost 9 months to create the statewide strategic plan titled, "Mapping Mississippi's Digital Future," a long-term plan that addresses recommendations on how to improve broadband usage across several policy areas. The policy areas included education, healthcare, workforce development, government performance and public safety. The long-term plan identifies barriers to further broadband deployment in Mississippi as well as why broadband is not more widely adopted. Finally, the plan looks at ways to improve broadband access specifically with the Delta and Tribal communities in Mississippi.

Although Mississippi ranks low on broadband availability (34% of the population without broadband access ranks Mississippi 50th among all states per the Federal Communications Commission), broadband is not a concern nor a limiting factor among the provider community, per the 2017 Environmental Scan. As previously documented, providers who participated in the 2017 Environmental Scan stated that Broadband access is not a challenge.

3.8 Coordination with Medicare and Federally Funded, State Based Programs

DOM is participating with CMS to pay providers and is using the CMS Registration & Attestation System and MS SLR to coordinate Provider incentive payments with Medicare.

3.9 Coordination with the Statewide Health Information Exchange

MS-HIN was neither re-authorized nor funded by the State Legislature in early 2019, and as such, ceased most operations on April 15, 2019. MS-HIN will fully cease operations on June 30, 2019. As MS-HIN is no longer functional nor operational, the information below is for historical purposes only.

DOM participated in the Mississippi Health Information Network (MS-HIN) SOP effort as a member of the Technical Infrastructure and Finance Domain Groups. The Statewide HIE SOP was submitted to the ONC in September 2010.

The structure for MS-HIN is set forth in Miss. Code Ann. §§ 41-119-1, et seq., entitled Health Information Technology Act, included as Appendix F. The governing body is the MS-HIN Board of Directors. The Board of Directors was appointed at the end of September and the first meeting was held on October 20, 2010. The overall structure for MS-HIN is shown in Figure 6: MS-HIN Organization Structure in Section 4.7.2.

MS-HIN has a broad representation of stakeholders, including Hospitals, clinics, individual providers, and service providers. After hurricane Katrina in 2008, five Mississippi integrated health systems (Singing River Health System, Memorial Hospital of Gulfport, Hancock Medical Center, Biloxi Regional Medical Center and the Coastal Family Health Center clinic system) partnered to create the Mississippi Coastal HIE, or MSCHIE, and MSCHIE acting as the pilot project for HIE in Mississippi. Subsequently, in 2009, HITECH passed, and thereafter, state legislation passed forming MS-HIN and its governance structure. MSCHIE expanded and became part of MS-HIN. MS-HIN currently has 41 connected facilities, which are primarily Hospitals. 19 more are being on-boarded with approximately 12 that will be live by the summer of 2017. There has been a 72% increase from 2015 in the number of MS-HIN connected hospitals. MS-HIN offers a community health record, electronic referrals, Direct Secure Messaging, medication history, clinical results delivery, MU reporting, bi-directional immunization gateway, bi-directional CCD/C-CDA gateway, HISP services, orders and results services, and event notification services.

The MS-HIN Board of Directors maintains oversight responsibility for all HIE activities in the State of Mississippi. DOM is a member of the MS-HIN Board of Directors and works in partnership with the MS-HIN, providing leadership to assure that Medicaid beneficiaries are best represented and served by the MS-HIN. DOM is providing leadership to assure funding for MS-HIN in accordance with the fair share principles and cost allocation defined in guidance from CMS provided as part of the State Medicaid Director Letter dated May 18, 2011, along with subsequent State Medicaid Director Letters, such as the Letter dated February 29, 2016.

DOM continues to coordinate efforts with MS-HIN to support interoperability and a non-duplication of efforts. As a part of this coordination, DOM submitted an HIE IAPD as a part of the 2014 SMHP and IAPD submission process. CMS subsequently approved the HIE IAPD, including budget for FFY 2015, FFY 2016, and FFY 2017, however funding has not been expended as of this point in time. DOM is working with MS-HIN on an updated HIE IAPD for the FFY 2018 and 2019 timeframe, and will utilize the February 29, 2016 CMS Medicaid Director's Letter for ongoing guidance.

DOM and MS-HIN are discussing implementation of technologies and interfaces, per the HIE IAPD, to support interoperability for Medicaid clinical data between MS-HIN and DOM. Data supported in this bi-directional exchange with MS-HIN includes Medicaid specific clinical data including the Consolidated-Clinical Document Architecture (C-CDA) patient summary on Medicaid beneficiaries.

Candice Whitfield was the previous HIT Coordinator for the State and was simultaneously the acting Executive Director of the Mississippi Health Information Network (MS-HIN). Candice

assumed a role with UMMC approximately two years ago and Jeremy Hill took her position at MS HIN. The Department of Health (Public Health) is the entity that provides administrative oversight for MS HIN. Currently, the role of State HIT Coordinator is not filled.

3.10 Current Public Health Initiatives

The Mississippi State Department of Health (MSDH) has implemented a Health Data System (HDS) designed to improve data quality and efficiency of collection, as well as improve the ease of submission. The system is comprised of Rhapsody Connect, an integration broker that includes a rules engine, database, and secure messaging product. The primary goal of the HDS is to establish and maintain a centralized reporting system by collecting hospital discharge data from each licensed health care facility in Mississippi. In addition to the hospital discharge data collection and evaluation, the MSDH's Office of Epidemiology interfaces to the HDS. The HDS will also be used to support disease registry information relating to heart disease, stroke, and asthma. With the future expansion of HDS, the MSDH is planning to interface the system with the State's Trauma Registry, as well as conduct syndrome surveillance and participate in electronic laboratory reporting. As of July 2010, the system will perform automatic reporting of reportable diseases and conditions to the Centers for Disease Control and Prevention (CDC).

At this time, the MSDH communicates with CDC through the PHIN MS Rhapsody. MS-HIN was providing the MS-HIN infrastructure for all MS-HIN stakeholders to connect to MSDH to support these Public Health initiatives. **With the sudden and unexpected demise of MS-HIN, MSDH has expressed the interest to exchanging data with DOM, including the ability for DOM to connect to Public Health Registries such as the Immunization Registry, the Syndromic Surveillance Registry, and the Cancer Reporting Registry. Assuming the State completes an Opioid Registry, DOM will pursue a connection to share data in an interoperable manner with the (To-Be) Opioid Registry.**

DOM and MSDH **will continue** to coordinate on plans for additional future connections with other federal public health and welfare programs (Health Resources and Services Administration, Substance Abuse and Mental Health Services Administration or Indian Health Services), and will continue to collaborate and coordinate, so as not to create a duplication in efforts (connectivity, interoperability, etc.)

3.11 Federally Qualified Health Centers /Rural Health Clinics

Mississippi has 21 FQHCs. The FQHCs and RHCs are working together and exchanging health care information via shared systems. For example, at least four FQHCs are working with the Delta Health Alliance (DHA) and sharing data via the DHA's cloud-based Allscripts EHR implementation.

Before the EHR Incentive Payment Program, Delta Health Alliance (a 501C3 Corporation) received a Beacon Grant to improve the quality of health in the rural farming counties in Mississippi. Delta Health Alliance continues to provide support and services to seventeen counties. Various funding sources are used to improve the quality of life, education and health care in their counties.

Ryan White Grants (HRSA Funding) provide funding for the treatment of patients with HIV/AIDS. Various Mississippi FQHCs, RHCs, and FQHC Lookalikes receive Ryan White grants.

None of the above grants are funded through the State of Mississippi. The Delta Health Alliance Beacon Grant was reviewed with CMS and it was determined not to impact the Mississippi Medicaid EHR Incentive Payment Program.

FQHC, RHC, IHS, and FQHC Lookalikes do not receive any funding from the State of Mississippi outside of the Division of Medicaid fee for service payments. FQHCs, RHCs, and FQHC Lookalikes' base rates were set in 2001 and adjusted in 2002. The rates are adjusted annually based on the Medicare Economic Index. Rates for after-hours visits and Telemedicine have been added to the fee for service payments.

With the demise of MS-HIN, DOM has discussed with CMS the need for assistance with the CAHs and FQHCs in the State and has developed two approaches to support the CAHs and FQHCs. First, beginning in FFY 20 and continuing through FFY 21, DOM will be planning, procuring and developing (DDI) an ADT Alert Notification service for Medicaid providers, Medicaid Hospitals, and the three Medicaid CCOs. The goal of this ADT Alert Notification service is to improve care coordination between Medicaid providers and the Medicaid CCOs, with the initial goal of creating a reduction in the potentially preventable hospital readmission rates for Medicaid beneficiaries. Development of the ADT Alert Notification service to support the CAHs and FQHCs is a critical task for the remaining terms of the HITECH program.

Secondly, after successful deployment of the ADT Alert Notification service, DOM will request funding to support Clinical Integrations with the CAHs and FQHCs, allowing the CAHs and FQHCs to connect with a clinical integration to DOM for C-CDA clinical summary query and exchange to support Medicaid providers and beneficiaries at the point of care.

3.12 Department of Defense and Veteran's Administration

There are three major military installations in the State of Mississippi: two are Air Force bases near Columbus and Biloxi and the third is a Navy facility near Meridian. While the military has expressed an interest in receiving information about off-base treatment of military personnel, they have been unable to connect to the State to retrieve the information due to severely restrictive security constraints.

In addition to the two large Veterans hospital facilities in Mississippi – one in Biloxi and one in Jackson, the Board of Veterans Affairs is located in Jackson, Mississippi. The DoD and the Veterans Administration (VA) are currently migrating to the Cerner EHR system.

The DOM Interoperability Platform, as a part of CDIP, includes a Sequoia Gateway that could be used to connect to the DoD and VA. DOM will continue to evaluate connecting to the DoD and the VA, however DOM currently does not have access to nor retains any administrative data or clinical data on non-Medicaid patients. As most, if not all DoD members and family members are TriCare recipients and not on Medicaid, coupled with the lack of non-Medicaid data in the CDIP, the use cases to connect to the DoD and VA for care coordination at this time appear limited.

3.13 Indian Health Services

Choctaw Indians are the most prevalent minority of the American Indian population in the State of Mississippi. Members of the Mississippi Indian Tribe receive basic health care through a community health service. Representatives of the Tribe indicate they are participating with Indian Health Services.

Presently, the Mississippi Choctaw Reservation has eight communities: Bogue Chitto, Bogue Homa, Conehatta, Crystal Ridge, Pearl River, Red Water, Tucker, and Standing Pine. Currently, there has been no further progress to integrate or share data with the IHS or tribes.

4 To-Be HIT Landscape

This section aligns the current As-Is HIT Landscape with the vision of DOM for adoption, promotion, and enhancement of EHR technology for Medicaid providers and for promotion of electronic exchange of Medicaid clinical data with DOM. This section also describes the goals and objectives and additional functionality that is planned to promote interoperability, providing the greatest benefit from the MMIS data and participation in the exchange of data with Medicaid providers using the DOM Interoperability Platform.

4.1 Future Vision for Providers

A key component of the Mississippi HIT strategy is continual meeting and yearly attestation of EHR Meaningful Use (Stage 3) by providers in the Medicaid EHR Incentive Program. To that end, DOM will continue offering a Web-based system for provider incentive payment attestations. The MS SLR is a public-facing application available over the Internet where providers supply registration and attestation data related to the incentive program. The Website can be reached directly or from a link on the current Mississippi MMIS Envision Web portal and the DOM Website. The MS SLR, described in further detail in Section 4.1.1, below, provides an easily accessible, easy to use system for the providers participating in the MPIP.

DOM will continue providing outreach and training to the provider community to enhance CEHRT updates and understanding of Stage 3 Meaningful Use through 2021. Further information on these efforts can be found in Section 6 – HIT Roadmap, of this document.

Table 4-1 shows DOM’s goals for provider adoption and MU of CEHRT in Mississippi:

Table 4-1: Total Payment Counts (Actual and Projected)

<i>Provider Type</i>	Payment Counts – Actual (FFY 2011 -2017) and Projected (FFY 2018– 2022)									
	FFY 2011 - 2017		FFY 2018		FFY 2019	FFY 2020	FFY 2021	FFY 2022	Totals to Date	Totals to Date
	<i>Adopt Certified EHR</i>	<i>MU of EHR</i>	<i>Adopt Certified EHR</i>	<i>MU of EHR</i>	<i>MU of EHR</i>	<i>MU of EHR</i>	<i>MU of EHR</i>	<i>MU of EHR</i>	Adopted Payments	MU Payments
<i>Hospitals</i>	95	186	0	0	0	0	0	0	95	186
<i>Physicians</i>	1835	2983	0	421	312	1300	1300	1300	1835	3716
<i>Dentists</i>	233	32	0	21	22	36	40	44	233	75
<i>Nurse Practitioners</i>	1167	1374	0	281	214	550	550	550	1167	1869
<i>Certified Nurse Midwives</i>	14	31	0	1	0	7	7	7	14	32

<i>Pediatricians (Reduced Payment)</i>	6	23	0	10	10	10	10	10	6	43
<i>FQHC / RHC PA</i>	5	20	0	5	5	5	5	5	5	30
<i>Optometrists</i>	8	49	0	5	5	7	7	7	8	59
TOTAL	3363	4,698	0	744	568	1915	1919	1923	3363	6410

The following table shows the Performance Measures that DOM will use to gauge progress against the goals listed above:

Table 4-2: Performance Measures for EH/EP and EHR Goals

Performance Measure	Method and Data Sources	Target
Number of EPs who received an EHR Incentive Payment for MU by the end of FFY 2016	Obtain a report from the MS SLR with the number of unique EP's by individual NPI, not Group, that received at least one EHR Incentive Payment for MU	2,983
Number of EHs who received an EHR Incentive Payment for MU by the end of FFY 2016	Obtain a report from the MS SLR with the number of unique EH's that received at least one EHR Incentive Payment for MU.	95

4.1.1 Mississippi State Level Registry Application

The core functions of the MS SLR Web application that are currently active in the MS SLR are categorized into the following five groups:

- MS SLR registration and view of CMS Registration & Attestation System data;
- Verification of Medicaid eligibility;
- Attestation to Meaningful Use under Modified Stage 2 criteria for Program Year 2017 and under Stage 3 criteria for Program Years 2018, going forward
- Review and approval; and
- Submission of payments.

The Current MS SLR functionalities are further detailed in Section 5 – Provider Incentive Program Blueprint.

Conduent continued to enhance functionalities within the MS SLR, including three major areas of development:

- Appeals – detailed appeals tracking and status reporting;
- Audits – initiation, tracking and reporting of provider audits; and

- Recoupments/adjustments – creation of the payment file (positive or negative) for total recoupments or payment adjustments.

These functional areas were released in August 2013. Audits and Appeals are processed through an external system, in accordance with state law and reported to the State Level Registry and to CMS.

Stage 2 changes were incorporated into the MS SLR during 2013 for hospital attestation beginning October 2013 and eligible professional attestation beginning January 2014. These changes included allowing providers to use a 90-day reporting period, regardless of the stage of MU, for 2014 only. In addition, Stage 2 changes included modifications to the Core and Menu Objectives and the Clinical Quality Measures as required in the Final Rule. Mississippi implemented CMS-mandated program changes known as the 2014 Flexibility Rule. Under the 2014 Flexibility Rule, eligible professionals were required to meet 17 core objectives, 3 menu objectives and they would select 9 clinical quality measures (CQMs) from a list of 64. Eligible Hospitals and CAHs were required to meet 17 core objectives, 3 menu objectives, and 16 CQMs from a list of 29. Participants were allowed to select CEHRT software that was certified at either the 2014 level, 2011 level or a combination of both certification levels.

The Modified Stage 2 platform was implemented on April 29, 2016 for Program Years 2015 – 2017. All participants were expected to use only CEHRT software that was certified at the 2014 level and were given some alternate measure exclusion opportunities for those that were expected to demonstrate MU (years 1 and 2) during the 2015-2016 Program Years. There were no alternate measure exclusions available during the 2017 Program Year. Modified Stage 2 criteria created a bridge between the Previous Stage 1/Stage 2 criteria and the upcoming Stage 3 reporting requirements (beginning January 1, 2020). All participants were given a 90-day EHR Meaningful Use reporting period for Program Years 2015-2017 and 2018, in accordance with CMS regulations. CQM reporting for Program Year 2018, going forward will require providers to select six (6) CQMs that best represent their scope of practice. National Quality Domain Restrictions have been lifted All CQMs were manually entered.

The CQMs that DOM has been collecting will be aligned with the CQMs the three Medicaid Managed Care Organizations (MCOs) are required to report to DOM, from the MCOs day to day business of managing and coordinating the care for DOM beneficiaries. All three MCOs are required to report common metrics for Quality to DOM, which will be coordinated with the other DOM collected Quality metrics. In the DOM Quality Strategy Report (which will be delivered to CMS later this year), DOM outlines an overall Quality Strategy, and includes a roadmap to monitor and implement quality improvement (while allowing for periodic updates to strengthen and improve the effectiveness of the program). This DOM Quality Strategy provides a framework to communicate the State's vision, objectives and monitoring strategies addressing issues of health care cost, quality and timely access. The Quality Strategy contains the following domains: Maternal Health, Child Health, and Disease-Based Initiatives for Diabetes, Influenza, Hepatitis, and Hemophilia. As a part of the DOM Quality Strategy, the following quality measures will be monitored and published on DOM's website annually beginning in 2018 for the 2017 measurement period.

ADULT CORE SET MEASURES

Primary Care Access and Preventive Care

Cervical Cancer Screening (CCS-AD)

Chlamydia Screening in Women Ages 21–24 (CHL-AD)

Flu Vaccinations for Adults Ages 18 to 64 (FVA-AD)

Screening for Clinical Depression and Follow-Up Plan (CDF-AD)

Breast Cancer Screening (BCS-AD)

Adult Body Mass Index Assessment (ABA-AD)

Maternal and Perinatal Health

PC-01: Elective Delivery (PC01-AD)

PC-03: Antenatal Steroids (PC03-AD)

Contraceptive Care – Postpartum Women Ages 21–44 (CCP-AD)*

Prenatal and Postpartum Care: Postpartum Care (PPC-AD)

Care of Acute and Chronic Conditions

Controlling High Blood Pressure (CBP-AD)

Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing (HA1C-AD)

Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%) (HPC-AD)

Diabetes Short-Term Complications Admission Rate (PQI01-AD)

Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate (PQI05-AD)

Heart Failure Admission Rate (PQI08-AD)

Asthma in Younger Adults Admission Rate (PQI15-AD)

Plan All-Cause Readmissions (PCR-AD)

HIV Viral Load Suppression (HVL-AD)

Annual Monitoring for Patients on Persistent Medications (MPM-AD)

Behavioral Health Care

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET-AD)

Medical Assistance with Smoking and Tobacco Use Cessation (MSC-AD)

Antidepressant Medication Management (AMM-AD)

Follow-Up After Hospitalization for Mental Illness: Age 21 and Older (FUH-AD)

Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD-AD)

Follow-Up After Emergency Department Visit for Mental Illness or Alcohol and Other Drug Dependence (FUA-AD)*

Diabetes Care for People with Serious Mental Illness: Hemoglobin A1c (HbA1c) Poor Control (>9.0%) (HPCMI-AD)*

Use of Opioids at High Dosage in Persons Without Cancer (OHD-AD)

Adherence to Antipsychotics for Individuals with Schizophrenia (SAA-AD)

Experience of Care

Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Health Plan Survey 5.0H, Adult Version (Medicaid) (CPA-AD)

CHILD CORE SET MEASURES

Primary Care Access and Preventive Care

Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents – Body Mass Index Assessment for Children/Adolescents (WCC-CH)

Chlamydia Screening in Women Ages 16–20 (CHL-CH)

Childhood Immunization Status (CIS-CH)

Well-Child Visits in the First 15 Months of Life (W15-CH)

Immunizations for Adolescents (IMA-CH)^a

Developmental Screening in the First Three Years of Life (DEV-CH)

Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life (W34-CH)

Children and Adolescents' Access to Primary Care Practitioners (CAP-CH)

Adolescent Well-Care Visit (AWC-CH)

Maternal and Perinatal Health

Pediatric Central Line-Associated Bloodstream Infections (CLABSI-CH)

PC-02: Cesarean Section (PC02-CH)

Audiological Evaluation No Later Than 3 Months of Age (AUD-CH)

Live Births Weighing Less Than 2,500 Grams (LBW-CH)

Contraceptive Care – Postpartum Women Ages 15–20 (CCP-CH)*

Frequency of Ongoing Prenatal Care (FPC-CH)

Prenatal and Postpartum Care: Timeliness of Prenatal Care (PPC-CH)

Care of Acute and Chronic Conditions

Ambulatory Care: Emergency Department (ED) Visits (AMB-CH)

Medication Management for People with Asthma (MMA-CH)

Behavioral Health Care

Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication (ADD-CH)

Follow-Up After Hospitalization for Mental Illness: Ages 6–20 (FUH-CH)

Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment (SRA-CH)

Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics (APP-CH)*

Use of Multiple Concurrent Antipsychotics in Children and Adolescents (APC-CH)

Dental and Oral Health Services

Dental Sealants for 6–9 Year-Old Children at Elevated Caries Risk (SEAL-CH)

Percentage of Eligibles Who Received Preventive Dental Services (PDENT-CH)

Experience of Care

(CAHPS®) Health Plan Survey 5.0H – Child Version Including Medicaid and Children with Chronic Conditions Supplemental Items (CPC-CH)

The MS State Level Registry will implement the Stage 3 requirement set for Program Year 2017 reporting for those EPs that have successfully upgraded their CEHRT software to the 2015 certification level. Full Stage 3 Implementation is expected to be available for all providers (EP and EH) that remain in the EHR Incentive Program for Program Year 2018, going forward. All participants will have a 90-day EHR Meaningful Use reporting period for Program Year 2018, in accordance with CMS regulations. Program Year Attestation Submission windows will open each year in January and will close each year on the last day of April. This more closely follows the Medicare or MIPS attestation season and allows additional time for state staff to work with the increased number of Medicaid attestors in Mississippi.

4.2 Future MES Capabilities

The State of Mississippi completed final contract negotiations to procure a new solution referred to as the **Mississippi Medicaid Enterprise Solution / MMIS Replacement Project (MES/MRP)** to include a state-of-the-art MMIS, including pharmacy claims processing, a DSS / DW solution and Fiscal Agent services to meet the business needs of DOM. As a result of recent CMS directives for modular solutions, DOM and the awarded vendor have evaluated the vendor's solution sets for an implementation that will meet the new CMS requirements by defining components of the proposed solution that will be modularized during implementation or that can facilitate future modular procurements. The ambition is to preserve as much of the procurement effort to-date possible to upgrade the DOM core systems and services while accommodating the new CMS modularity requirements and respecting state and federal procurement guidelines. Due to limited state resources, a four-year implementation is still planned for the new system and services but a phased approach will be used where possible.

It is the goal of DOM MES/MRP to:

- Improve communication and administration of the Medicaid Program;
- Provide timely and accurate adjudication of Medicaid claims;
- Increase data storage and improve data retrieval and reporting capabilities for Medicaid and the CHIP;
- Replace proprietary systems (e.g., clearinghouse and DSS/DW) with more technologically advanced and less costly products, which will result in more efficient operation of the Medicaid Program;
- Meet the requirements of MITA 3.0 standards, such as Service Oriented Architecture (SOA) using Enterprise Service Bus (ESB) infrastructure; and
- Interface with the DOM Interoperability Platform.

The State MRP is designed to move DOM forward in its vision of a Medicaid Enterprise that:

- Meets CMS certification requirements;

- Is aligned with the current MITA framework and future MITA frameworks¹;
- Is aligned with CMS Enhanced Funding Requirements: Seven Conditions and Standards²
- Implements all MITA business processes with the maximum business capability level possible – identifying any business processes that are at Level 1 or Level 2 and moving progressively to Level 3 or higher;
- Provides support for an open, flexible, and cost effective Medicaid Enterprise architecture;
- Utilizes an ESB for interfaces, including to the DOM Interoperability Platform, the MMEDS and/or new eligibility system, MS SLR, DOM CDIP and associated clinical systems, and other associated systems and environments, SOA, and Web services technology to allow for disparate system communication;
- Implements the latest technology standards - International Classification of Diseases (ICD-10), NCCI edits, Health Level Seven (HL7 – including offering increased support for the HL7 C-CDA), HIPAA version 5010 transactions, including the HIPAA 278 transaction, and the National Council for Prescription Drug Programs (NCPDP) Version 3.0 pharmacy claims;
- Uses a rules-based engine for ease of definition and update of eligibility and operational rules processing;
- Presents a browser-based Medicaid Enterprise system for minimal desktop footprint, ease of application update, and ubiquitous access for all users;
- Provides an interface to the **enhanced** MMEDS eligibility system. The new MMIS may require a future interface to a new eligibility system when MMEDS is re-procured; and
- Provides architecture for an interface to the DOM Interoperability Platform **and DOM CDIP HIT components**, with the support of both clinical and administrative transactions with DOM trading partners.

¹ MITA Framework 3.0 was released in 2012 and includes final policies on everything but eligibility and enrollment. Enhanced funding requirements – Seven Conditions and Standards will be incorporated into MITA 3.0.

² CMS has issued new standards and conditions that must be met by the states in order for Medicaid technology investments (including traditional claims processing systems, as well as eligibility systems) to be eligible for the enhanced match funding, details can be found on the document Medicaid IT Supplement (MITS-11-01-v1.0), <https://www.cms.gov/Medicaid-Information-Technology-MIT/downloads/Enhanced-Funding-Requirement-Seven-Conditions-and-Standards.pdf>

4.3 Future Vision for DOM Clinical Data Interoperability Program (CDIP)

As described in the As-Is, DOM implemented the DOM MCI and DOM Interoperability Platform, as core subprojects in the DOM Clinical Data Interoperability Program (CDIP). DOM intends to support **these HIT** subprojects, as well as the interoperable exchange of Medicaid clinical data with DOM Medicaid providers, Medicaid trading partners, and Medicaid stakeholders, while improving care for Medicaid beneficiaries. **DOM also intends to crosswalk the existing CDIP HIT components with the MRP and MITA / MITA Care Management initiatives, to align and migrate the CDIP HIT components to the MRP as a SOA-based module.**

The DOM Strategy and Vision depicts an ecosystem of connected, interoperable Medicaid Providers, Medicaid trading partners and Medicaid stakeholders in the State of Mississippi. The expectation of DOM is to fully align with the SMHP and IAPD, as well as federal HIT-enabled health reform(s), including CMS Medicaid Information Technology Architecture (MITA) missions, goals and objectives.

The DOM CDIP includes the infrastructure and personnel for DOM to support the stated four goals in the Executive Summary section of this document, including, the aggregation of Medicaid clinical data from Medicaid providers, DOM utilization of the aggregated Medicaid clinical data for Agency goals and programs, DOM offered tools and interfaces to allow the sharing of the aggregated Medicaid clinical data with provider clinical systems (EHRs, LIS, and other clinical systems) and current clinical workflows, and promoting and supporting the adoption of CEHRT and HIT/HIE technologies by Medicaid providers.

There are several benefits from the aggregation of Medicaid provider clinical data by DOM, including but not limited to:

- Medicaid beneficiary care coordination and improved care management **with providers at the point of care (with and in the provider's EHR);**
- Agency goals and programs, such as Medicaid clinical data analytics and Medicaid clinical data population management, **and alignment of the CDIP HIT components with the MRP as a module to support MITA and the MITA Care Management initiative;** and
- Aggregated and up-to-date Medicaid beneficiary clinical summary documents, clinical reports, clinical data, and decision-making available in real-time and integrated directly into the provider EHRs and clinical system for real-time provider utilization in a care setting.

The Clinical Data Interoperability Project consists of **two** subprojects, as detailed in the As-Is section of this document. **As both projects are in an ongoing DDI phase of implementation and integration with providers via Clinical Integrations, both subprojects** have upgrades, modifications, and enhancements, as described below.

- **Existing Subproject 1, Medicaid Clinical Infrastructure (MCI)** - DOM has an existing, functional MCI with core clinical components of a Clinical Data Repository (CDR), Master Patient Index (MPI), Medicaid Provider Portal, Medicaid Analytics, and Medicaid Provider Clinical Integrations (EHR Interfaces), as explained in detail in the As-Is section

of this document. The existing MCI has been integrated with the existing DOM Interoperability Platform, and currently supports bi-directional clinical data from providers via the DOM Interoperability Platform. The MCI subproject will be interoperable with the other two subprojects.

The MCI To-Be Environment includes additional Clinical Integrations, and harmonization of systems with other State Agencies, including:

- Future additional Clinical Data Integrations, to support clinical data exchange between DOM and Medicaid providers, Payers, and State Agencies;
 - Future harmonization between DOM systems and other State Agency systems to allow for data exchange;
 - Future connectivity and integration services, including to the MRP via the DOM Interoperability Platform, to align with MITA and provide clinical data to the MRP.
- **Existing Subproject 2, Interoperability Platform** – DOM has procured and implemented an Interoperability Platform from DXC Technology (formerly known as Hewlett Packard Enterprise Services, or HPE) as a single point of connectivity. The DOM Interoperability Platform is a SOA-based, SaaS module, allowing interoperability between DOM components such as the existing MMIS and the future MRP, the modernized Eligibility system, the DOM MCI and Clinical Integrations with Medicaid providers, other DOM internal systems and services, as well as external DOM trading partners (such as other State Agencies, etc.). The DOM Interoperability Platform has been integrated with the DOM MCI as well as the Clinical Integrations, and will support future integrations. The DOM Interoperability Platform is a modular service director that assists DOM in connecting all of the modular components of the internal DOM ecosystem, as well as DOM’s external trading partners. The Interoperability Platform is a key component in DOM’s strategy for SOA, modularity, COTS, MITA 3.0 compliance, as well as the migration of the HIT components to the MRP as a module. The two major components of the Interoperability Platform include an Enterprise Service Bus (ESB) and an eHealth Exchange Gateway (Sequoia Project). The DOM Interoperability Platform subproject will be interoperable with the other subprojects.

The MCI To-Be Environment includes connectivity to additional trading partners, including providers, payers, State Agencies, and other stakeholders, in coordination with the To-Be environment as outlined in the To-Be sections.

With the sudden and unexpected demise of the State HIE, MS-HIN, the DOM CDIP and ability to share clinical data with and to Medicaid provider EHRs (as well as rural, Medicaid providers such as CAHs and FQHCs) in real-time, at the point of care, is a critical component to improving and coordinating care for Medicaid beneficiaries within the State. Continued planning and development of the CDIP program will be critical for DOM, to not only connect providers to DOM with clinical integrations, but also to comply with new CMS and federal requirements and laws, as well as to map CDIP HIT components with MITA and MITA’s Care Management so that CDIP HIT components

may become a module to support the MRP with rich clinical data (via the DOM Interoperability Platform).

Anticipated solutions, programs, and DDI activities for the CDIP include:

- The continued onboarding of large Medicaid provider health systems for Medicaid clinical data exchange to support care coordination,
- *Development of Phase I of the multi-phase approach to support CAHs and FQHCs: DDI of an ADT Alert Notification service to support the coordination of care between Medicaid providers, Hospitals, and the Medicaid CCOs while assisting in the reduction of re-admission rates for Medicaid Beneficiaries.*
- Upgrading the DOM CDIP Master Patient Index (MPI) to a Federated MPI (F-MPI) to support local programmatic as well as Agency-wide identity management (Master Data Management) for DOM,
- Implementing a DOM electronic clinical quality measures (eCQM) technology pilot to begin the aggregation and analysis of eCQMs for quality evaluation of Medicaid providers in the State,
- Development of a crosswalk to map the current CDIP HIT project with MITA and the new MRP to allow for the migration of CDIP to the MRP project as a module and full MRP alignment,
- Integration of CDIP with the new MES to support the Care Management MITA use-cases and requirements for clinical data interoperability with the MRP,
- Integration of the CDIP with Public Health registries, including the immunization registry, Syndromic Surveillance Registry, Cancer Reporting Registry, as well as Opioid initiatives, programs and registries as they become available,
- Development and deployment of solutions to comply with recent CMS and federal requirements, including multiple State Medicaid Director's Letters, TEFCAs, the 21st Century Cures Act, and the CMS NPRM 45 CFR 156. These solutions could include, but are not limited to:
 - Implementation of the Fast Healthcare Interoperability Resources, HL7 FHIR, to allow for connectivity and interoperability using open APIs,
 - Implementation of REST and open APIs between systems,
 - Development of a Provider Directory for publishing provider information and managing Medicaid providers and provider identities,

- Development of a FHIR based service to allow Medicaid and CHIP beneficiaries access to their clinical and administrative data,
 - Coordination with CMS Medicare for dual-eligible beneficiaries, including administrative data, clinical data, and identity management,
 - Coordination with the Medicaid MCOs to allow MCO data to be available to Medicaid and CHIP beneficiaries.
- In response to the recently released SMD #18-006 regarding enhanced funding for leveraging Medicaid technology with the Prescription Drug Monitoring Plan (PDMP), DOM is planning enhancement and integration activities with the Mississippi Prescription Monitoring Program (MS-PMP), beginning in FFY 20. These integration activities will lead to improvements in the coordination of prescriptions, reporting and alerts, patient identity management and integration of the MS-PMP with provider EHRs.

Specific activities and coordination with the MS-PMP, DOM, and provider certified EHRs include:

- Coordination of technology to allow for identity management and identity coordination between DOM and the existing MS-PMP;
- Coordination and integration of technology to allow for faster identification and flagging of MCO controlled substance claims for review and analysis, including Opioid claims and MCO controlled substance claims, as well as identifying Medicaid beneficiaries with Opioid prescriptions;
- Integration of PDMP data into the Medicaid CDIP for analytics and reporting; and,
- Integration of provider EHRs directly with the MS-PDMP to allow for seamless query of controlled substances and opioids.
- SMD #18-006 enhanced funding opportunity allows DOM, the MS-PDMP and providers to improve their ability to identify potential misuse of controlled substances and opioids in near real-time.

With the end of HITECH and HITECH funding at the conclusion of FFY 2021, DOM is planning to complete and submit an updated HIT IAPD in conjunction with this SMHP update to request proposed implementation funding through FFY 2021 for the DOM CDIP.

After completion of the crosswalk and alignment of the existing DOM CDIP HIT components with the MRP, as well as with MITA and MITA's Care Management initiative, DOM plans to complete and submit an updated Population Health IAPD for FFY 2021, to reflect the appropriate CDIP HIT components and staff migration (and associated request for funding), to be reflected as a module of the MES / MRP IAPD.

4.4 Future Alignment with MITA

As noted in Section 4.2 above, the State of Mississippi is currently in the process of implementing a new MRP to upgrade the systems and services that meet the business needs of the DOM. The ultimate goal is to define an Enterprise Architecture encompassing all Medicaid systems for the State of Mississippi that aligns to and advances increasingly in MITA maturity for business, architecture, and data and that includes MITA 3.0 standards, such as SOA using ESB infrastructure.

The MRP will interface with the DOM CDIP, via the Interoperability Platform, to allow for data interoperability between the MRP and the CDIP subprojects, such as the MPI and CDR. This interoperability between the clinical and administrative systems will allow DOM to advance towards MITA 3.0, and specifically the Care Management components of MITA 3.0.

With the sunset of HITECH and associated funding on September 30, 2021, DOM has begun aligning the MRP and CDIP teams and strategy. DOM is now preparing a MITA crosswalk of the HIT components of the CDIP with the MRP, so that the CDIP will align with the MRP, as well as all of the MRP's documentation and funding (APDs, etc.). The CDIP team and MRP team have been meeting to define and refine requirements for interoperability between the CDIP and the MRP, due to the MRP currently being in the requirements definition phase. After completion of the requirements and the crosswalk, it is DOM's expectation that the HIT component and resources of the CDIP will be fully aligned with the MRP, and have the future capability of supporting the MRP with rich clinical data for the MITA Care Management requirements as well as laws and CMS rules and regulations (21st Century Cures Act, TEACA, Medicaid Directors Letters, and 45 CFR 156).

The MITA-enabling guidelines, processes, and tools provide a framework for the continuous improvement of service delivery and business processes based on efficient technology utilization. The MITA framework depicts this evolution as a progression of maturity levels that reflect DOM's ability to execute business functions in the rapidly changing health care environment. DOM will use the MITA framework as a tool to assist in the strategic application of technology and enhancements that provide value and contribute to a continuous improvement in the Medicaid program's maturity.

DXC will employ SOA to take advantage of system components reuse across business functions as services. SOA is an approach to loosely coupled, protocol independent, standards-based distributed computing where software resources expose their functionality as services and are available on the network. SOA requires the use of business services in addition to technical services. The business services support business functions within the MRP and map all applicable MITA business processes within the MITA Business Process Model, unless they are Mississippi-specific business processes. Each business service must meet the MITA definition of a business service. The SOA architecture must also enable the agency business units to build business applications quickly and efficiently in the future by reusing resident SOA infrastructure and application service components.

CMS requires a MITA roadmap that delineates how the proposed system enhancements for eligibility and enrollment functions will fit into the states' greater MITA framework. Such a

requirement will align CMS' expectations to see states continuing to make measurable progress in implementing their MITA roadmaps.

DOM has completed remediation of the eligibility system under amendment to the existing contract with the current fiscal agent. DOM has retired the MEDS and MEDSX systems with a new rules based system, Modernized MEDS (MMEDS), that determines MAGI based eligibility. DOM is now developing a rules based system that will combine MAGI and Non-MAGI eligibility determinations into one system. This system will be integrated to use the Federal Data Services Hub for needed verifications and referrals.

DOM's roadmap will be aligned with MITA maturity target levels as follows:

- As-Is:
 - State Medicaid Agency complies with State regulations to maintain an adequate Provider network and pay claims promptly to encourage Provider participation and ensure access to care;
 - Many steps require manual intervention;
 - Data Content is nonstandard; and
 - Appropriateness of care is assessed retrospectively.
- Target MITA Maturity Levels 3 & 4 (5 years):
 - State Medicaid Agency coordinates with other payers to offer one-stop shop entry points to applicants for service and provider enrollment, provider reimbursement, and coordination of benefits;
 - Patients make personal healthcare decisions;
 - State Medicaid Agency accommodates cultural, linguistic, and health needs;
 - Clinical and Administrative systems (MRP and DOM CDIP) interoperate and share data for improved, and where possible, automated decision making for improved care coordination;
 - State Medicaid Agency uses national standards for data content and exchange; and
 - Coordination and collaboration across healthcare programs intrastate contributes to improved outcomes.

The SOA will feature:

- Technology Independence: The service components will be invoked from multiple platforms and utilize standard protocols.
- Standards-Based Interoperability: The system will support multiple industry standards, including, at a minimum: HL7; XML; Extensible Stylesheet Language Transformation (XSLT); Web Services Interoperability (WS-I); WSDL; SOAP1.1 or

2.0; Universal Description, Discovery, and Integration (UDDI); Web Services (WS)-BPEL; Representational State Transfer (REST) (in place of SOAP); and WS-Message Transmission Optimization Mechanism (MTOM) Policy.

- Life Cycle Independence: Each service component will operate in a separate life cycle.
- Loose Coupling: Service components will be defined independently, with the interface components bridging the gap between components. For example, the Service Consumer Component specification must be defined independent of the Service Provider Component. The alignment of the two specifications is defined in the interface component.
- Invocable Interfaces: The Service interfaces will be invoked locally or remotely.
- Communication Protocol: A Service will be invoked by multiple protocols. The choice of protocol must not restrict the behavior of the service. Binding to a specific protocol will take place at run-time/deployment-time, and not at the design or development time.
- Flexibility: The selected vendor will focus on the business processes that comprise the systems, with the following in mind:
 - Ability to adapt applications to changing technologies;
 - Easily integrate applications with other systems;
 - Leverage existing investments in desired legacy applications; and
 - Quickly and easily create a business process from existing services.
- Metadata Management: SOA commonly provides application and data integration via an abstraction layer. Given the requirements of interoperability and independence, the proper use and management of metadata is extremely important to the effective operation of the SOA. It will also allow for:
 - Separation of the data and structures and convert them to a data layer within the SOA architecture;
 - Development of a Common Data Model and Metadata using the MITA HL7 methodology; and
 - Achievement of the SOA loosely coupled “separation of concern” approach, by separating the data layer from the application layer to more effectively and easily manage the data without changing the application code. This will create the desired more loosely coupled SOA environment and enable the business to accelerate any system changes required in the future.
- ESB: The MES will include an ESB for data transport, messaging, queuing, and transformation. The ESB is a service layer that provides the capability for services to interoperate and to be invoked as a chain of simple services that perform a more complex end-to-end process. The service layer is designed to handle both normal conditions and respond to failures and adapt to changes.

- **MITA Alignment:** The MES will be aligned with MITA. This includes, but is not limited to:
 - Map of business processes to MITA business processes;
 - Alignment of proposed business processes to the MITA maturity level and capabilities;
 - Use of MITA standard interface definitions (expressed in WSDL) and messages (expressed as an XML/schema) for all services;
 - Use of the MITA/HL7 methodology for defining the information model and messages; and
 - Adherence to the MITA governance process for newly developed interfaces and messages.

Because DOM and the MS Department of Human Services (MDHS) have a great deal of overlap in the communities they serve, they have long shared a joint-vision to improve collaboration and introduce technology and programmatic solutions to improve client services. Working together, the agencies explored improved interoperability and integration in technology, business process and workflows, case management, privacy, security, analytics/business intelligence and proper governance across health and human services systems to support integrated and coordinated services. As a result of the planning effort, DOM and MDHS have jointly launched a new phase of eligibility and enrollment enhancement, the Health and Human Services Transformation Project or “HHSTP.” Federal funding for HHSTP is not within the HIT IAPD, but has been approved by CMS and Food and Nutrition Services (FNS) via an Eligibility and Enrollment IAPD.

DOM will develop an RFP to procure services to perform a revised State Self-Assessment (SS-A) using the new MITA 3.0 **guidelines, post implementation of the MES MMIS Replacement Project.** DOM will update this section, as appropriate, in a subsequent SMHPU.

4.5 Future Broadband Initiatives

As described in Section 3.7 – Current Broadband Initiatives, Mississippi has received funding to expand statewide broadband services. Utilizing these funding sources, MBCC continues to move towards implementing broadband expansion using the strategies outlined in their long-term strategic plan, “Mapping Mississippi’s Digital Future.” As a part of this effort, MBCC has launched the Extension Broadband Education and Adoption Team (e-BEAT), which deployed Regional Coordinators throughout Mississippi to work with elected officials, businesses, educators and community leaders on developing tools to increase digital literacy and increase broadband adoption. For example, e-BEAT is currently working on developing a map of broadband availability for inclusion in a comprehensive plan aimed at moving Mississippi towards greater access.

In addition to the ARRA broadband funding for expansion of broadband services, the State of Mississippi continues to participate in broadband connectivity expansion specifically for telehealth initiatives through the Federal Communications Commission (FCC) funding of the University of Mississippi Medical Center (UMMC). UMMC also received a United States Department of Health and Human Services (HHS) Health Resources and Services Administration

(HRSA), Office for the Advancement of Telehealth (OAT) grant for a telemedicine project in the Delta.

The State of Mississippi Health IT Committee Recommendations for Broadband include:

1. Attention to privacy and security concerns, including establishing a NPI system for all participants. The Health Information Technology Policy Committee (HITPC) report can serve as a guide for establishing Health IT growth policy at the state level.
2. Identification of a dedicated spectrum for medical imaging. High costs are associated to medical imaging from the limited supply of spectrum, however, the medical cost savings that could be realized through utilization of this technology in clinical and preventative practices makes the effort to find spectrum important. Once spectrum is found and financed, it could be dedicated to use by hospitals or rural physicians, and managed centrally.
3. Map availability of broadband to hospitals and rural physician groups. Hospitals should be at the top of the list for access to high speed Internet. To accomplish this, existing advocacy groups should unite to prioritize needs for a State Level Rural Health Care application. The first step should be to map the availability of broadband to the State's hospitals.
4. Provision of Health IT-related digital literacy courses at rural hospitals by Mississippi State University Extension Service eBEAT Team. National and state research suggests that geographic location is closely correlated with adoption rates. The challenge is how to introduce citizens who may already be marginalized from broadband usage to the concept of receiving healthcare from the Internet.

Per the 2017 Environmental Scan, Provider access to Broadband is not an issue for Medicaid providers across the state, however, DOM will continue to monitor Broadband access and connectivity issues via the DOM outreach personnel and other DOM Provider-facing personnel.

4.6 Future Vision for Medicare and Federally-Funded, State-Based Programs

4.6.1 Medicare

As Medicare and CMS are migrating towards utilizing standards such as the eHealth Exchange network (Sequoia), it is essential for Mississippi to have the potential for eHealth Exchange connectivity with Medicare and CMS. Therefore, DOM's existing Interoperability Platform supports a variety of communication and interoperability standards and protocols, including eHealth Exchange to enable the potential for connectivity with CMS/Medicare/CMS Agencies for both clinical and administrative transactions. DOM plans to utilize the Interoperability Platform to facilitate connectivity, and use the integrated FHIR protocols to connect to the eHealth Exchange network, the eHealth Exchange Hub, and participants on the eHealth Exchange. DOM is also evaluating the Medicaid Director's letter of April, 2019, for ways to work with CMS Medicare on the dual-eligible population, including data coordination and interoperability.

4.6.2 CDC Coordination

A national initiative of CDC is to facilitate real time, interoperable data exchange between organizations for the promotion of collaboration and rapid dissemination of critical information in the organizations associated with public health. The integration and alignment of DOM with the State of Mississippi, including Public Health, for Public Health related reporting and surveillance to the CDC is important to improving health care outcomes for all Mississippians. DOM will consider implementing the GIPSE profile and other CDC-based reporting formats for interoperable data exchange with CDC using connectivity from eHealth Exchange, including clinical and required (immunizations, syndromic surveillance, etc.) reporting. DOM is working with MSDH to collaborate on standards-based connectivity and interoperability to facilitate reporting to MSDH and to further assist MSDH in reporting to the CDC, including using such standards as GIPSE and eHealth Exchange.

4.6.3 CMS/ASPE Coordination

Based on the recommendation of ONC, DOM is migrating toward utilizing Federal Health Architecture (FHA) standards via the DOM Interoperability Platform to coordinate with Medicare and federally funded, inter/intra-state based programs as they become compliant with FHA standards. By implementing and integrating standards, profiles, and interoperable infrastructure/technologies (including IHE, Healthcare Information Technology Standards Panel (HITSP), and eHealth Exchange standards, profiles, and technologies through the DOM Interoperability Platform, DOM will drive towards and migrate upwards to the higher levels of MITA and MITA compliance, as well as administrative simplification. DOM intends to report any required quality data to CMS. Accordingly, DOM has implemented and plans to continue to incorporate standards, profiles, and interoperable infrastructure such as IHE, HITSP and eHealth Exchange.

4.6.4 HRSA Coordination

HRSA is the primary federal agency for improving access to health care services for low income and uninsured individuals. The CFHC in Biloxi received a HRSA grant to connect 21 FQHC's in Mississippi together for the exchange of health care data. These FQHCs have been connected together via an Allscripts cloud-based EHR. To date, the CFHC has not received any additional HIT grants. Lessons learned in the CFHC study can be used to encourage EHR adoption in other Mississippi FQHCs. DOM, via connectivity to the Delta Health Alliance (DHA) Allscripts EHR integration will support connectivity and clinical data interoperability for C-CDA clinical data exchange with multiple FQHCs, as described in the As-Is Section (EHR Integrations) as well as the As-Is FQHC Coordination Section of this document.

4.7 Future Vision for the Statewide Health Information Exchange

The DOM CDIP is an interoperable, Medicaid-only clinical data exchange system, and as such, can help with the care coordination and improvements in care for Medicaid beneficiaries in Mississippi. The DOM CDIP currently only stores data on active Medicaid beneficiaries. Development of Clinical Integrations to allow for real-time, bi-directional clinical data exchange

directly with the provider's EHR has been planned for several of the remaining top health systems in Mississippi. Additionally, with the demise of MS-HIN, DOM has developed two approaches to support the CAHs and FQHCs, including development of an ADT Alert Notification service for Medicaid providers, Medicaid Hospitals, and the three Medicaid CCOs, and in future FFYs, DOM will request funding to support Clinical Integrations with the CAHs and FQHCs, allowing the CAHs and FQHCs to connect with a clinical integration to DOM for C-CDA clinical summary query and exchange to support Medicaid providers and beneficiaries at the point of care. DOM has identified approximately 30 Mississippi CAHs and 15 Mississippi FQHCs for this two-step approach to further coordinate care, improve the quality of care, and reduce re-admission rates for Medicaid beneficiaries.

4.7.1 DOM Agency-wide Federated Master Patient Index (F-MPI)

DOM is planning to deploy an Agency-wide (Source of Truth) Federated Master Patient Index (F-MPI) for Master Data Management (MDM) to provide patient matching and coordination of patient records and clinical data throughout DOM and across the DOM infrastructure, including for connectivity and interoperability with external stakeholders, State Agencies, and others. The DOM CDIP and the future MRP will each utilize their own existing, specific matching system for Medicaid Beneficiary matching based upon their specific rules and logic, as well as identity management. Therefore, it is critical to have a single, master 'source of truth' patient identifier for DOM beneficiaries via the planned Federated Master Patient Index (F-MPI) for Master Data Management (MDM) to support systems and programs without an MPI as well as to coordinate identities between the CDIP and MRP MPIs, and across the Medicaid Agency.

The DOM F-MPI will allow for a limited number of duplicate beneficiary records, duplicate beneficiary clinical data and administrative data, and allow for more structure in the organization and storage of beneficiary data across the DOM infrastructure (including multiple clinical and administrative systems). Systems that would interface and utilize the DOM F-MPI include the new MRP, the DOM CDIP, and other various services and systems. A governance structure will be established to manage the integrity of the data across the multiple systems of DOM.

4.7.2 MS-HIN Governance

MS-HIN was neither re-authorized nor funded by the State Legislature in early 2019, and as such shut down most operations on April 15, 2019. Final shutdown of MS-HIN will occur no later than June 30th, 2019.

4.8 Future Vision for the Public Health Initiatives

DOM is discussing with MSDH how to utilize the DOM Interoperability Platform to connect to the MSDH to support data exchange with Public Health Registries for such use cases as:

- Bi-directional Medicaid immunization data exchange between the MSDH MIIX Registry and DOM;
- Bi-directional exchange with the Syndromic Surveillance Registry;

- Bi-directional exchange with the Cancer Reporting Registry;
- Interoperability with future Opioid programs, Registries, and other Opioid initiatives in the State (where possible);
- Interoperability with the MSDH Patient Centered Medical Home (PCMH) and other such MSDH Programs.

4.9 Future Vision for Federally Qualified Health Centers/Rural Health Clinics

FQHCs and RHCs are already working together and exchanging health care information. A project connecting 14 of 21 FQHCs is already in place. The CFHC in Biloxi, Mississippi has connected all 21 locations via an Allscripts cloud-based EHR.

The Delta Health Alliance in Greenville, Mississippi received a Beacon Community Grant and has connected all the RHCs in the 18-county Delta region of the State via an Allscripts cloud-based EHR. DOM, via connectivity to the Delta Health Alliance (DHA) Allscripts EHR integration will support connectivity and clinical data interoperability for C-CDA clinical data exchange with multiple FQHCs, as described in the MCI As-Is Section (EHR Integrations) as well as the As-Is FQHC Coordination Section of this document.

With the demise of MS-HIN, DOM is working with CMS to develop a program to connect CAHs and FQHCs in the State. Development (DDI) of an Alerts Notification service to support Medicaid providers, Medicaid Hospitals, and the Medicaid CCOs will allow for care coordination with a goal of reducing re-admission rates. In future FFYs, by connecting the CAHs and FQHCs with Clinical Integrations for bi-directional C-CDA query and exchange, coordination of care and clinical data on Medicaid beneficiaries will occur not only with the large health systems in the State, but also with the rural CAHs and FQHCs. Clinical Integrations will support the care and coordination of care for Medicaid beneficiaries, especially in rural communities.

4.10 Future Vision for DoD and VA

There are three major military installations in the State of Mississippi: two are Air Force bases near Columbus and Biloxi and the third is a Navy facility near Meridian. While the military has expressed an interest in receiving information about off-base treatment of military personnel, they have been unable to connect to the State to retrieve the information due to severely restrictive security constraints.

In addition to the two large Veterans hospital facilities in Mississippi – one in Biloxi and one in Jackson, the Board of Veterans Affairs is located in Jackson, Mississippi.

The DoD and the Veterans Administration (VA) are currently running the VLER EHR, however, recent developments have the DoD and VA moving to the Cerner platform. The DOM Interoperability Platform, as a part of CDIP, includes a Sequoia Gateway that could be used to connect to the DoD and VA. DOM will continue to evaluate connecting to the DoD and the VA,

however, DOM does not currently have access to nor retains administrative data or clinical data on non-Medicaid patients. As most, if not all DoD members and family members are TriCare recipients and are not on Medicaid, the use cases to connect to the DoD at this time appear limited. DOM will continue to evaluate the opportunity to connect to the VA, and share clinical data for care coordination with the VA.

4.11 Future Vision for Indian Health Services

Choctaw Indians are the most prevalent minority of the American Indian population in the State of Mississippi. Members of the Mississippi Indian Tribe receive basic health care through a community health service. Representatives of the Tribe indicate they are participating with Indian Health Services and can connect to DOM via eHealth Exchange connectivity. Therefore, the exchange of health care information can be accomplished by connecting with Indian Health Services using secure protocols and standards.

5 Provider Incentive Program Blueprint

5.1 Introduction

5.1.1 Overview

The Medicaid EHR Incentive Program, defined by the ARRA of 2009, was established to provide incentive payments to eligible providers for their efforts to meaningfully use certified EHR technology, including adoption, implementation, or upgrade (A/I/U).

Through April 2019, DOM has paid \$216,010,542 to 3265 unique eligible professionals (EPs) and 98 eligible hospitals (EHs) for attesting to AIU or Meaningful Use (MU).

This Provider Incentive Program Blueprint (Blueprint) describes the high-level requirements, process flows, and technical requirements of the Mississippi Provider Incentive Program (MPIP) to interface with the CMS Registration & Attestation System to enable providers to register for Medicaid incentives, attest to their eligibility requirements in each year of the program, and allow DOM to pay incentive payments in 2018 and subsequent years. The software application supporting the MPIP is the Conduent solution, currently being offered to multiple states as a software as a service (SaaS) solution. DOM's decision to implement a SaaS solution has helped the MPIP leverage resources across the participating states.

DOM has branded the Conduent solution as the Mississippi State Level Registry (MS SLR) to be specific to the MPIP and DOM policies.

This Blueprint has liberally borrowed from efforts in other states and documentation from CMS.

5.1.2 Purpose

The purpose of this program is to capture and track provider attestations, evaluate eligibility, and collect information in order to make timely incentive payments to qualifying providers for A/I/U and MU of certified EHR technology. The goal of the program is to ensure the right payment was made to the right provider at the right time.

The MS SLR has interfaced with the CMS Registration & Attestation System and is configured to capture and document information regarding the following:

- Eligibility history;
- Payment history;
- Audit (implemented in 2013);
- Appeals (implemented in 2013); and
- Recoupment and/or Adjustment (implemented in 2013).

DOM utilizes the MS SLR for storing, tracking and reporting on attestation data including all the information listed above.

Figure 16 depicts the high level overview of the necessary components of the MPIP:

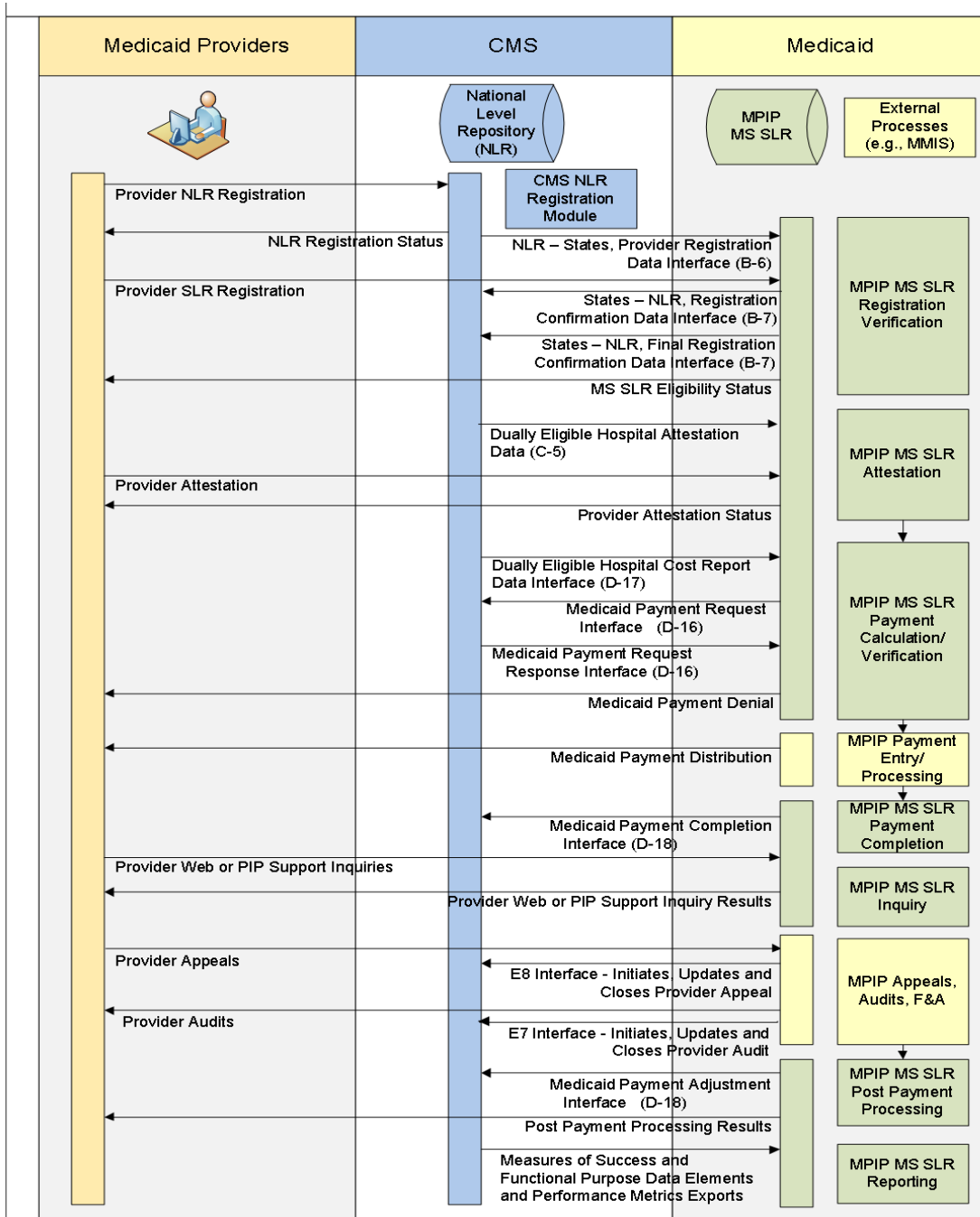


Figure 145: Mississippi Provider Incentive Program Solution

5.2 Eligibility: Provider Type, Eligibility Period, and Patient Volume

Providers must meet the eligibility requirements for provider type (EP or EH) and patient volume to receive EHR Incentive Payments.

5.2.1 EH Eligibility Criteria

EHs must meet the following criteria for the EHR Incentive Payment program. Please note that criteria have been updated to reflect changes to eligibility as stated in the **CMS Stage 3 Final Rule (2015EH Provider Type**

To be eligible for the MPIP, EHs must fall into one of the following hospital types:

- Acute Care Hospital:
 - The CCN has the last four digits in the series 0001 – 0879; and
 - The average length of patient stay is 25 days or fewer; or
- Critical Access Hospital (CAH):
 - The CCN has the last four digits in the series 1300 – 1399; and
 - The average length of patient stay is 25 days or fewer; or
- Children’s Hospital: (None in Mississippi)
 - The hospital is separately certified as a children’s hospital - either freestanding or a hospital within hospital and the CCN has the last four digits in the series 3300-3399; or
 - The hospital is separately certified, either freestanding or hospital within a hospital, which predominately treats individuals 21 years of age or younger and does not have a CCN because they do not serve any Medicare beneficiaries but has been provided an alternative number by CMS for purposes of enrollment in the Medicaid EHR Incentive Program.

5.2.1.1 EH Eligibility Period

For the purposes of calculating hospital patient volume the eligibility period is defined as:

- A representative, continuous 90-day, 3-month, 6-month or full year period from the preceding fiscal year; or
- A representative, continuous 90-day period in the 12-month period directly preceding the attestation date.

DOM requires that the eligibility period start on the first day of the month to ensure that patient volume data self-reported in the eligibility period selected by the provider aligns with the

reporting periods of the data available in the MMIS. Once an eligibility period is used for the purposes of calculating Medicaid patient volume, the same eligibility period may not be used in subsequent attestation years for the purposes of proving Medicaid patient volume.

5.2.1.2 EH Patient Volume

Acute Care and CAHs must have at least a 10 percent Medicaid patient volume based on both the inpatient and emergency room discharges. Children's hospitals are not required to meet a minimum Medicaid patient volume. To calculate Medicaid patient volume, an EH must divide total Medicaid encounters (numerator) by total patient encounters (denominator) using the same eligibility period for both numerator and denominator.

For purposes of calculating hospital patient volume, a Medicaid encounter means services rendered to an individual per inpatient discharge and/or in an emergency department on any one day where:

- Medicaid (or a Medicaid demonstration project approved under section 1115 of the Act) paid for part or all of the service; or
- Medicaid (or a Medicaid demonstration project approved under section 1115 of the Act) paid for all or part of the individual's premiums, co-payments, and/or cost sharing; or
- The individual was enrolled in a Medicaid (or a Medicaid demonstration project approved under section 1115 of the Act), *regardless* of payment liability, in accordance with CFR §495.306.

As noted above, the optional EHR Hospital Patient Volume Calculator can be found at <http://msehrpip.wordpress.com>. Also, see Appendix G attached hereto. Hospitals may use the EHR Hospital Patient Volume Calculator as a worksheet; however it will no longer be required for submission with the attestation.

Hospitals are allowed to count a maximum of one encounter per patient per day. Hospitals will be required to use their discharges from both the inpatient facility (POS 21) and the emergency room (POS 23) to determine their patient volumes.

The authorized data source documents (detailed below) are required documentation to be submitted with EH attestations. Only MS DOM authorized data sources as described below will be used to calculate the Medicaid share percentage.

- The authorized data source for the total Inpatient Discharges (POS 21) will be the annual cost report for the hospital's fiscal year ending in the prior federal fiscal year.
- The authorized data source for the total Medicaid Primary Inpatient Discharges (POS 21) will be the annual cost report for the hospital's fiscal year ending in the prior federal fiscal year.
- The authorized data source for the total Medicaid Secondary Payer Inpatient Discharges will be the hospital's inpatient accounting/billing system. Only

Medicare and Third party claims with Medicaid as the secondary payer showing that the individual was enrolled in Medicaid (or a Medicaid demonstration project approved under section 1115 of the Act) will be used to determine the Medicaid Secondary Payer Inpatient Discharges, regardless of payment liability by Medicaid. Summary data supporting each discharge amount will be attached to the hospital's application. Upon request, the hospital may be required to provide detailed reports including the payer (primary and secondary), patient ID, claim number, date, revenue and procedure codes, and paid amounts.

- The authorized data source for the total Medicaid Primary Payer Emergency Room Discharges will be the hospital's inpatient accounting/billing system. Summary data supporting each discharge amount will be attached to the hospital's application. Each emergency room visit will be considered a single discharge. Emergency room visits that result in transfer to the inpatient unit for other than observation will not be included in the emergency room discharges. Upon request, the hospital may be required to provide detailed reports including the payer (primary and secondary), patient ID, claim number, date, revenue and procedure codes, and paid amounts.
- The authorized data source for the total Medicaid Secondary Payer Emergency Room Discharges will be the hospital's emergency room accounting/billing system. Only Medicare and Third party claims with Medicaid as the secondary payer showing that the individual was enrolled in Medicaid (or a Medicaid demonstration project approved under section 1115 of the Act) will be used to determine the Medicaid Secondary Payer Emergency Room Discharges, regardless of payment liability by Medicaid. Medicare and Third party claims will be reported separately. Summary data supporting each discharge amount will be attached to the hospital's application. Upon request, the hospital may be required to provide detailed reports including the payer (primary and secondary), patient ID, claim number, date revenue and procedure codes, and paid amounts. Each emergency room visit will be considered a single discharge. Emergency room visits that result in transfer to the inpatient unit for other than observation will not be included in the emergency room discharges.

As noted above, hospitals have the option to complete the EHR Hospital Patient Volume Calculator. The EHR Hospital Patient Volume Calculator will no longer be required for a hospital's attestation but may be uploaded with the hospital's attestation as needed. However, all other authorized data sources must be attached to the hospital's attestation as supporting documentation.

5.2.2 EP Eligibility Criteria

Medicaid EPs must meet the following criteria to be eligible for the MPIP. Please note that criteria have been updated to reflect changes to eligibility as stated in the **CMS Stage 3 Final Rule (2015)**.

5.2.2.1 EP Provider Type

To be eligible for attestation to the MPIP, EPs must be licensed as one of the following:

- Doctor of Medicine;
- Doctor of Osteopathy;
- Doctor of Dental Medicine or Surgery;
- Optometrist;
- Nurse Practitioner;
- Certified Nurse Mid-Wife; or
- Physician assistant (PA) when working at a Federally Qualified Health Clinic (FQHC) or Rural Health Clinic that is so led by a PA.

EPs working in a FQHC or RHC will be determined based on prior year claims history for “predominately” status. EPs with at least 50 percent of their encounters (claims) provided through or in a FQHC or RHC environment will qualify as working “predominately” in a FQHC or RHC. Professionals must also be currently performing services in a FQHC or RHC.

5.2.2.1.1 Physician Assistant Criteria

PAs are considered to be EPs if the PA is practicing predominately in an FQHC or RHC that is “so led” by a PA. An FQHC or RHC is considered to be “so led” under the following circumstances:

- A PA is the primary provider in a clinic (for example, when there is a part-time physician and full-time PA, the PA is the primary provider);
- A PA is a clinical or medical director at a clinical site of practice; or
- A PA is an owner of an RHC.

A PA practicing predominately in a FQHC or RHC is eligible to use Needy Individual patient volume. A PA is considered to be practicing predominantly if over 50 percent of his or her total patient encounters over a period of six months in the most recent calendar year occur at a FQHC or RHC.

5.2.2.1.2 Pediatricians

Pediatricians must be board certified or board eligible and must have the appropriate taxonomy code in the MS SLR Provider Master File (PMF). Pediatricians may qualify for a reduced payment if they have greater than 20 percent Medicaid patient volume, but less than 30 percent Medicaid patient volume. Pediatricians may receive the full incentive payment amount if they can demonstrate 30 percent Medicaid patient volume in a given program year. Pediatricians working in an FQHC or RHC that choose to use Needy Individual patient volume must have at least 30 percent Needy Individual patient volume.

5.2.2.1.3 Hospital Based EPs

Hospital based EPs are determined on the EP's services provided in service code areas 21 and 23. In accordance with the **CMS Stage 3 Final Rule (2015)**, hospital based EPs are now eligible to attest for individual incentive payments if they can demonstrate that they have funded, acquired, implemented and maintained certified EHR technology, including supporting hardware and any interface necessary to meet MU, without reimbursement from an EH or CAH.

EPs will be deemed to be hospital based if 90 percent or more of total Medicaid encounters are provided in service code areas POS 21 and POS 23. Total Medicaid encounters include both Medicaid and Medicaid Managed Care encounters. The formula for the computation will be (Total Medicaid encounters provided in service code areas POS 21 and POS 23) / (Total Medicaid encounters for all areas).

The MS SLR assists DOM in identifying non-hospital based EPs by requiring that EPs attest to the fact that they do not perform greater than 90 percent of their services in an inpatient or emergency room setting.

5.2.2.2 EP Eligibility Period

For all program years, EPs may use an eligibility period that falls under the following criteria:

- A 90-day period, 3-month period, 6-month period or a full year period from the preceding calendar year; or
- A 90-day period from the 12-month period directly preceding the EP's attestation date.
- A 90-day period from a previous CY prior to the timeframes used in previous attestation

The length of the period will be identified during attestation in the MS SLR. The numerator and denominator of the Medicaid patient volume equation must use the same eligibility period. Once an eligibility period is used for the purposes of calculating Medicaid patient volume, the same eligibility period may not be used in subsequent attestation years for the purposes of proving Medicaid patient volume. .

DOM requires that the eligibility period start on the first day of the month to ensure that self-reported patient volume data in the eligibility period selected by the provider aligns with the reporting periods of the data available in the MMIS.

5.2.2.3 EP Patient Volume

DOM opted to offer the Medicaid fee for service (standard) calculation for EP Medicaid patient volume. Patient volume can be aggregated from multiple locations or states.

EPs must demonstrate at least 30 percent Medicaid patient volume based on Medicaid encounters and total encounters during a chosen eligibility period. To calculate Medicaid patient volume, an EP must divide total Medicaid encounters (numerator) by total patient

encounters (denominator) using the same eligibility period for both the numerator and denominator. An encounter includes concurrent care or transfer of care visits, consultant visits, or prolonged physician service without direct (face to face) patient contact (telehealth), regardless of financial liability. Providers are allowed to count a maximum of one encounter per recipient per day. No financial obligation is necessary for encounters to be included in Medicaid patient volume calculations.

For purposes of calculating patient volume a Medicaid encounter is defined as services rendered to an individual on any one day where:

- Medicaid (or a Medicaid demonstration project approved under section 1115 of the Act) paid for part or all of the service; or
- Medicaid (or a Medicaid demonstration project approved under section 1115 of the Act) paid for all or part of the individual's premiums, co-payments, and/or cost sharing; or
- The individual was enrolled in Medicaid (or a Medicaid demonstration project approved under section 1115 of the Act), *regardless* of payment liability, in accordance with CFR §495.306.

The EHR Professional Patient Volume Calculator can be found at [Provider Resources \(Calculators, Security, etc...\)](#). There are two versions of the EHR Professional Patient Volume Calculator, one for EPs using Medicaid patient volume only and the other for EPs practicing in FQHCs, RHCs, and IHS. Also, see Appendix G attached hereto. A copy of the EHR Professional Patient Volume Calculator may be attached with the MS SLR application as optional supporting documentation.

All providers are required to attach summary reports from their practice management or billing systems supporting their encounter calculations for their online application. Summary reports must separate the eligible encounters by the primary and secondary payer. Managed Care patient encounters must be identifiable in the Medicaid and all payer encounter counts. DOM will verify that all providers have attached this required documentation with applications submitted.

All Medicaid encounter counts are compared to the provider's practice management or billing reports (regardless of financial obligation) for verification of encounters claimed on their application. Both the total and Medicaid primary and secondary encounters are verified. Medicaid claim counts are available in the MS MMIS as a secondary source of verification or Medicaid encounters.

The MS SLR provides for statistical data to be entered by State and can accept multiple states. Mississippi Medicaid encounters will be compared to the EP's and/or Group's claims data for the appropriate period of time. Out of state claims data will be subject to written verification from the other state at the option of the DOM audit staff. All applications are subject to both prepayment and post-payment audits.

5.2.2.3.1 *Needy Individual Patient Volume*

EPs practicing predominately in a FQHC or RHC may choose to use Needy Individual Patient volume in lieu of Medicaid patient volume for the purposes of meeting the 30 percent threshold. Needy Individual patient volume is calculated using the following formula:

$$((\text{Needy Individual Patient Encounters} + \text{Medicaid Encounters}) / \text{Total Patient Encounters}) \times 100 = n\%$$

To be considered a Needy Individual patient, a patient must meet one of the following criteria:

- Receives medical assistance from Medicaid;
- Receives medical assistance from the Children's Health Insurance Program;
- Receives uncompensated care by the Provider; or
- Receives services at either no cost or reduced cost based on a sliding scale determined by the individual's ability to pay.

5.2.2.3.2 *MississippiCan*

Because MississippiCan was initiated in 2011, applications can include encounters for Managed Care patients in the eligible professional encounters. Managed Care Encounters must be included in the numerator and denominator during attestation in the MS SLR. Additionally, encounters for Managed Care patients should be shown on a separate line in the EHR Professional Patient Volume Calculator (if included in the attestation documentation).

5.2.2.3.3 *Group Medicaid Patient Volume*

EPs may opt to use Group patient volume as proxy for their individual patient volume. An EP may use Group patient volume as a proxy for their own under the following conditions:

- The clinic or group practice's patient volume is appropriate as a patient volume methodology calculation for the EP (for example, if an EP only sees Medicare, commercial, or self-pay patients, this is not an appropriate calculation);
- There is an auditable data source to support the clinic or group practice's patient volume determination; and
- The clinic or group practice and EPs decide to use one methodology in each year (in other words, clinics could not have some of the EPs using their individual patient volume for patients seen at the clinic, while others use the clinic-level data).

The clinic or group practice must use the entire clinic or group practice's patient volume and not limit it in any way. EPs may attest to patient volume under the individual calculation or the clinic or group practice proxy in any participation year.

If the EP works in the clinic as well as outside the clinic (or with and outside a group practice), then the clinic or group practice level determination includes only those encounters associated with the clinic or group practice.

In order to meet the requirements to use Group patient volume, including the requirement of an auditable data source, Mississippi will require the clinic or group practice to include all

servicing providers' claims regardless of the payer or whether or not they are eligible for the incentive payment.

For purposes of calculating Group patient volume for EPs, the clinic or group should divide:

- The total eligible Medicaid encounters for all EPs in the clinic or group practice in the continuous 90-day period, 3 month period, 6 month period, or full year period, in the preceding fiscal year; *or*
- The total eligible Medicaid encounters in the clinic or group practice in the continuous 90-day period in the 12-month period directly preceding the attestation date; *by*
- The total encounters for the clinic or group practice for all servicing providers not limited in any way for the same eligibility period.

For Mississippi, a Group will be defined as having the same NPI, TIN and Payee Medicaid ID. All individual EPs and clinics or group practices must be registered with the DOM with a current license, must be in good standing with CMS, the DOM, and the State of Mississippi and must have an NPI and Mississippi Medicaid provider number. Both the individual EP and Group must have an active status in the DOM PMF, including active licenses, and all individual EP's seeking an EHR incentive payment which is assigned to the Group must dual-affiliation with the Payee Group in the MMIS.

5.3 Provider Registration and Verification

5.3.1 CMS Registration & Attestation System Registration

CMS has ownership of all processes concerning registration at the national level. A brief description is provided here. More detailed information can be found in the document entitled "HITECH Interface Control Document." The most important aspect of the registration process for the MPIP concerns the interface transaction sent from the CMS Registration & Attestation System to the MS SLR once a provider has registered with CMS. More detail on this interface is contained in this Blueprint in Section 5.2.2.1 – CMS Registration & Attestation System – States, Provider Registration Data Interface (B-6) Process.

Regardless of the provider's intent to attest with the Medicare or Medicaid EHR Incentive Program, all providers applying for incentives must first register with CMS Registration and Attestation System. The CMS Registration and Attestation System will capture basic information such as provider type (EP or EH) and whether the provider is applying for Medicare, Medicaid, or both (allowed for certain EHs). To eliminate duplication, CMS has restricted EPs to a single Web account that requires EPs to use their Social Security Number (SSN)/Tax Identification Number (TIN) to establish their registration and has restricted the issuance of the Web accounts to one per SSN/TIN.

If a provider chooses Medicaid, or both Medicaid and Medicare (EHs only), the provider must identify the state selected for attestation. The CMS Registration and Attestation System will check for a valid National Provider Identifier (NPI), TIN (if on record), and for any federal level

sanctions. For EHS only, the CMS Registration and Attestation System will also check for a valid CMS Certification Number (CCN)³. Providers opting for Medicaid who are not included in the Social Security Administration (SSA) Death Master File will be passed through to the Medicaid state selected by the provider. If registration checks complete successfully, the new provider information will be written to the CMS Registration & Attestation System and sent to the State for validation in a data transaction defined by CMS named the “CMS Registration & Attestation System – States Provider Registration Data Interface (B-6).”

Hospitals registering for both the Medicaid and Medicare EHR Incentive Program at the same time that are approved by CMS as a meaningful user will also be deemed a meaningful user by Medicaid. The CMS Registration & Attestation System will send a C-5 record to confirm that CMS has determined the hospital to be a meaningful user of EHR technology. The hospital must still submit their attestation to Medicaid in order to receive their Medicaid MU incentive payment. This is the recommended pathway for dually eligible hospitals that apply for an MU incentive payment.

The CMS Registration & Attestation System communicates the registration status back to the provider.

5.3.2 CMS Registration & Attestation System/MS SLR Data Validation Process

This process will accept and parse the B-6 Interface. The purpose of the B-6 Interface is to inform the states of new, updated, and inactivated Medicaid registrations. The CMS Registration & Attestation System will send batch feeds to the states of new EPs and EHS that registered for the EHR Incentive Program and selected or switched to Medicaid. The data also includes any updates/changes to the EP or EH entries and any registration inactivation events. A detailed description of this interface can be found in the document entitled “HITECH Interface Control Document.”

This process will perform the following actions:

- Accept new transactions;
- Handle duplicate transaction exception; and
- Send back the Provider Registration Confirmation Interface (B-7 Interface) immediately after the first time a B-6 Interface is received, parsed, and stored for a given provider. The B-7 Interface will contain an Eligibility Status of “Pending” and allow CMS to record the fact the B-6 Interface was received by DOM before DOM determines the provider’s registration status with the State.

³ Please note that the CCN was previously known as the Medicare Provider number.

Processes to manage transactions that do not pass Exception Handling are not described because the HITECH Interface Control Document states that CMS does not expect any exceptions from the B-6 Interface.

If the transaction passes Exception Handling and Duplicate Check processing, the process named “CMS Registration & Attestation System/MS SLR Data Validation” (described in this section) is executed.

The CMS Registration & Attestation System/MS SLR data validation process supports the requirements that provider data in the B-6 Interface be verified by the provider. Process execution logic depends on several different scenarios:

- NPI from a B-6 Interface transaction being processed does not match a MS SLR Provider Registration transaction: The B-6 transaction is stored in the MS SLR awaiting MS SLR Provider Registration using the same NPI.
- NPI from a B-6 Interface transaction being processed does match a MS SLR Provider Account transaction: The data from the B-6 transaction is matched against the data input by the provider during MS SLR provider account creation.
- NPI from a MS SLR Registration transaction being processed does not match a B-6 Interface transaction: The MS SLR provider can create an account and can complete the “About You” step. The provider will receive a hard stop after the “About You” step and will be notified that he/she must complete his/her CMS Registration and Attestation System application before proceeding in the MS SLR. The receipt of the matching B-6 transaction will allow the provider to proceed in the MS SLR.
- NPI from a MS SLR Registration transaction being processed does match a B-6 Interface transaction: The data from the MS SLR Provider Registration is matched against the B-6 transaction. If all data matches, the provider can proceed with the completion of their attestation.

In the event that the information entered by the provider and transmitted through the B-6 Interface cannot be validated, the provider may be asked to correct information entered at the CMS Registration & Attestation System. The MS SLR will not allow any changes to the NPI, SSN, CCN or TIN entered at CMS Registration & Attestation System. If an EP or EH needs to change any of this information to proceed, the Help Desk staff will refer them to CMS Registration & Attestation System where the EP or EH will be responsible for correcting the information. Upon completion and update at the CMS Registration & Attestation System, the information will be sent to and incorporated in the MS SLR electronically as an update.

State Reason Codes received on the B-6 transaction will also be interrogated to determine if the provider eligibility should be rejected based on code values sent to the MS SLR from the CMS Registration & Attestation System. The following table lists the codes. The codes designated by a “Hard Stop” will cause the provider’s eligibility to be rejected. If the B-6 transaction includes one of the “Soft Stop” codes, it means the provider’s eligibility was rejected by another state. This will not exclude the provider from being eligible in Mississippi. Normal eligibility determination processes will still be performed.

Table 5-1: State Reason Codes

State Reason Code Description	Reason Code	Key	
Eligible Hospitals			Hard Stop
Excluded / Federal	EH01		
Excluded / State	EH02		
Not Licensed / Credentialed	EH03		
Failed Patient Volume	EH04		
No Certified EHR	EH05		
Failed A/I/U	EH06		
Failed MU	EH07		
Excluded / Federal / 2 nd Check	EH08		
Excluded / State / 2 nd Check	EH09		
Eligible Professionals			
Excluded / Federal	EP01		
Excluded / State	EP02		
Dead	EP03		
Not Licensed / Credentialed	EP04		
Hospital Based	EP05		
Failed Patient Volume	EP06		
Failed Practices predominantly at a FQHC / RHC with 30% needy individual patient volume	EP07		
No Certified EHR	EP08		
Failed A/I/U	EP09		
Failed MU	EP10		
Excluded / Federal / 2 nd Check	EP11		
Excluded / State / 2 nd Check	EP12		
Dead / 2 nd Check	EP13		

The B-7 Interface will be sent back to the CMS Registration & Attestation System the second time as the Provider Final Registration Status Interface (B-7). At this time, the B-7 transaction will contain an Eligibility Status of “Accepted” or “Rejected” notifying the CMS Registration & Attestation System of the provider’s registration status with the MPIP. The rejection reason will be communicated back to the CMS Registration & Attestation System using one of several codes. Please refer to Table 5-1: State Reason Codes above. The Hard Stop/Soft Stop designation has no meaning in this context; they all signify that provider eligibility was rejected. Mississippi may use any of the State-specific codes to specify the reason the provider was rejected.

5.3.3 MPIP MS SLR Registration

The MS SLR registration process will only accept registration requests from Mississippi Medicaid Providers. A provider is considered a Mississippi Medicaid Provider if the provider has an active Mississippi Medicaid Provider number. Providers who work in an FQHC or a Coordinated Care Organization must also have a Mississippi Medicaid Provider number. Any provider who attempts to register in the MS SLR without a Medicaid Provider number will be prohibited by

the application from proceeding with registration. DOM has emphasized the fact that the Medicaid Provider number is a requirement for eligibility in the MPIP training for providers.

This process supports provider registration with the MS SLR. The provider verifies information obtained via the CMS Registration & Attestation System interface and supplies additional information the State may require for determining eligibility before the attestation process. Areas of focus within the MS SLR for Mississippi registration and eligibility verification include:

- Mississippi Medicaid Provider number;
- Professional license number – for providers with licenses in multiple states, the MS MMIS will search for a Mississippi license, regardless of the number of other state licenses associated with a given provider;
- Provider type and any hospital, FQHC, or RHC affiliation; and
- Provider sanctions/exclusions; those checked at the State level by the MS SLR include terminated licenses, expired licenses, State terminations, deceased providers, legal actions, and voluntary terminations by the provider. Based on the CPI Informational Bulletin, CPI-B11-05, issued on 05/31/2011, Mississippi will not permit individuals or entities that are currently terminated or sanctioned under Medicare or any other State Medicaid program to apply for or receive payment.

A Provider Master File (PMF) is generated weekly from the MMIS and holds information on all EPs and EHs that are potentially eligible for the MPIP. This file is sent from the MMIS to the MS SLR each week. The MS SLR Registration Validation from the MMIS and PMF includes the following checklist:

- Provider and Payee NPI are valid;
- Provider is not deceased;
- Medicaid Provider number is valid, including clinic or group practice Medicaid Provider numbers;
- Providers have current licenses issued by the State of Mississippi;
- Provider is not sanctioned by Mississippi DOM; and
- Provider type is included in the attestation and is a valid code.
- Evidence of a previously paid Medicaid claim and date of last paid Medicaid claim.

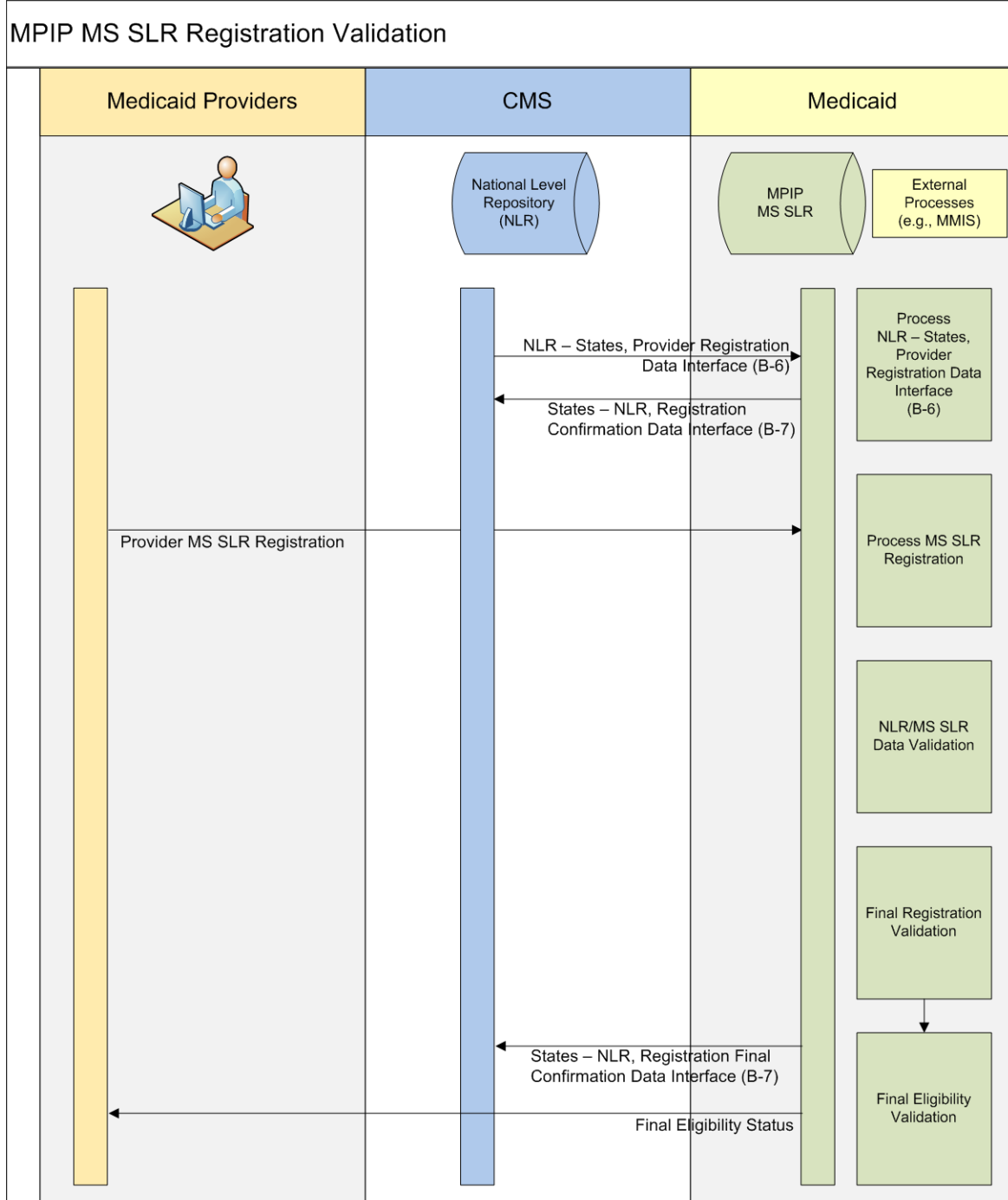


Figure 156: MPIP MS SLR Registration Validation

5.4 MPIP MS SLR Attestation

Once registration is complete, the provider’s next step in applying for the MPIP is to access the MS SLR and answer a variety of questions attesting to the A/I/U or MU of certified EHR technology. EP and EH attestations are subject to eligibility verification processes as described

in Section 5.2 above. As stated, DOM will verify this information using practice management reports for EPs as a part of required documentation to be attached to an attestation. EHs will be verified by a review of cost reports and data sources prior to payment.

DOM will continue using established lines of communication between the SMA and individual providers. Providers are notified via email and phone call when validation issues occur (e.g. missing or incorrect supporting documentation, incorrect data entered into the MS SLR, license expiration, payee affiliation issues, etc.) and when the pre-payment verification steps have been completed and that payment is forthcoming.

5.4.1 Adoption, Implementation, or Upgrade

Program Year 2016 was the last year new participants could begin the MS Medicaid EHR Incentive Program. June 30, 2017 was the end of the MS EHR Attestation Submission collection season for Program Year 2016. After that date, no new providers were allowed to join the program. This coincided with enhancements at the NLR which noted new registrations without previous participation years.

During the attestation process in the MS SLR, the provider is required to supply the following attestation information to qualify for an A/I/U incentive payment: *(The following AIU description is for historical purposes only – detailing the process of first-year AIU attestors)*

- Select Adoption, Implementation, or Upgrade;
- Provide a brief textual description of how the provider meets the criteria for Adoption, Implementation, or Upgrade of certified EHR technology;
- Attach external documents supporting Adoption, Implementation, or Upgrade of certified EHR technology. DOM prefers that a signed contract is uploaded demonstrating proof of a fiscal relationship between the vendor and the EP/EH. The Division of Medicaid expects the following components to be addressed within a vendor contract: Names or Vendor and Name of clinic; CEHRT product name; description; CEHRT ID; Version numbers; Business Associates Agreement; End User Licensing Agreement; Dates of contract execution; contractual terms; contractual updates; nature and scope of updates; Number of end user licenses available; evidence that contract was in effect during specified periods; Issues relating to HIPAA Compliance; Etc... In instances in which a signed contract is not applicable DOM will accept other documentation, including but not limited to, a vendor invoice, an End-User License Agreement (EULA), or other evidence that sufficiently demonstrates A/I/U.
- Certified EHR Technology: Enter ONC certification code. CMS publishes a list of codes identifying all ONC certified EHR technology products. During attestation the provider must enter the code from its EHR vendor to identify the EHR or obtain the certification number from the current ONC CHPL list.
- Attestation Agreement: Sign and attach an Attestation Agreement indicating A/I/U. Attestation Agreement must be executed by the Eligible Provider or the

designated representative of an Eligible Hospital. The EHR Incentive Payment will be made to the designated payee as referenced on the Attestation Agreement. It is the responsibility of the provider to verify accuracy of information contained on the Attestation Agreement, including the designated Payee.

5.4.2 Meaningful Use

Providers are eligible to receive EHR Incentive Payments for demonstrating they are meeting Meaningful Use criteria. Meaningful Users must meet the same certified EHR technology and patient volume criteria as described for A/I/U. In addition, Meaningful Users must meet required Core and Menu objectives and Clinical Quality Measures (CQM).

Meaningful User is defined in 42 CFR 495.4 as a provider that meets the EHR Incentive Payment program eligibility criteria that, for an EHR reporting period for a payment year or payment adjustment year, demonstrates meaningful use of certified EHR technology and meets the objectives and associated measures specified in the regulation and reports CQMs selected by CMS.

By definition, certified EHR technology must include the capability to electronically record the numerator and denominator and generate a report including the numerator, denominator, and the resulting percentage for all percentage-based MU measures (specified in the certification criterion adopted at 45 CFR 170.302(n)).

Please note that providers cannot use a non-certified system to calculate the numerators, denominators, and exclusion information for CQMs. The numerator, denominator, and exclusion information for CQMs must be reported directly from certified EHR technology.

As defined by 45 CFR 170.302(n), MU and CQM measures are a product of a provider's certified EHR technology software. The MS SLR will allow providers to directly enter MU reporting and CQM attestation data. MS SLR will validate that the requirements for MU have been met.)

DOM does not plan to propose any changes to the MU definition. Mississippi will follow the CMS regulations for defining a Meaningful User as outlined in future rule-making.

5.4.2.1 MU Reporting Period

The MU EHR reporting period is a continuous period where the provider successfully demonstrates all the MU objectives of certified EHR technology according to CMS requirements.

In the first year of MU attestation (generally the second year of MPIP participation) all providers including EPs and EHs must meet MU requirements during a single 90-day reporting period within the current calendar year in order to receive the second payment. In subsequent years of participation, the MU EHR reporting period will be a full year, unless specified by future CMS Rule-Making with attestation and payment occurring directly after the close of the calendar (EPs) or federal fiscal year (EHs). In some cases, EPs and EHs may have attested to MU with the Medicare EHR Incentive Program prior to their attestation with the MPIP; EPs and EHs falling under this category would be required to follow the CMS timeline for the MU EHR reporting

period. EHs filing for both Medicare and Medicaid in the same payment year must follow the Medicare guidelines for determining MU.

Beginning with Program Year 2017, Medicaid EHR Meaningful Use participants, that also serve Medicare Part B patients (according to the guidelines and thresholds set forth by CMS), will be expected to report under the Medicare/MIPS ruling, in addition to yearly Medicaid EHR Incentive Program submissions. The Medicare/MIPS Program replaced the Medicare EHR Incentive Program, and will impact all Medicare providers that see more than 100 Medicare patients per year or bill Medicare more than \$30,000 per year. The MPIP staff will work diligently to inform all current Eligible Professionals (EPs) in the MS Medicaid EHR Incentive Program of these changes and will help providers as they transition into this new (additional) way of reporting. Plans to host webinars, send out emails and update our website will be ongoing through the first few years of this reporting, starting in 2017.

CMS Defined EHR Reporting Periods for Meaningful Use and Clinical Quality Measures from 2018 – 2021:

2018 Meaningful Use - 90 days

2018 Clinical Quality Measures (CQMs) – 365 days

2019 Meaningful Use - 90 days

2019 Clinical Quality Measures (CQMs) – 365 days

2020 Meaningful Use - 90 days

2020 Clinical Quality Measures (CQMs) – 365 days

2021 Meaningful Use - 90 days

2021 Clinical Quality Measures (CQMs) –90 days

5.4.2.2 Meaningful Use - EHs

All Mississippi Hospitals have completed all three participation/payment years. The following is for information purposes. This functionality is available in the State Level Registry. However, no dually eligible Mississippi hospitals will be participating with the Medicaid Promoting Interoperability Program, going forward through 2021.

As described above, after attesting to A/I/U in the first program year of the MPIP, EHs will be required to attest to MU to receive incentive payments. For EHs and CAHs, the program year now means the calendar year.

For Modified Stage 2, EHs were required to meet a total of 9 MU objectives, including one consolidated public health reporting objective. They must attest to objectives and measures using EHR Technology certified to the 2014 edition.

DOM will not require any additional MU criteria for EHs. Additionally, as a part of MU, EHs are required to submit Clinical Quality Measures (CQM) data electronically to CMS. Appendix I contains the listing of Modified Stage 2 MU core and menu set objectives.

During the attestation process in the MS SLR for Modified Stage 2, the provider was required to supply the following attestation information to qualify for Meaningful Use incentive payment:

- Select MU (first MU submission only);
- Attach external documents supporting Meaningful Use of certified EHR technology. DOM prefers that a signed contract is uploaded demonstrating proof of a fiscal relationship between the vendor and the EH. In instances in which a signed contract is not applicable DOM will accept other documentation, including but not limited to, a vendor invoice, an End-User License Agreement (EULA), or other evidence that sufficiently demonstrates MU.
- Certified EHR Technology: Enter ONC certification code. CMS publishes a list of codes identifying all ONC certified EHR technology products. During attestation the provider must enter the code from its EHR vendor to identify the EHR.
- Using certified EHR technology, respond to the Meaningful Use Core, and Clinical Quality Measures (CQM) objectives.
- Attestation Agreement: Sign and attach an Attestation Agreement indicating Meaningful Use. Attestation Agreement must be executed by the designated representative of an Eligible Hospital. The EHR Incentive Payment will be made to the designated payee as referenced on the Attestation Agreement. It is the responsibility of the provider to verify accuracy of information contained on the Attestation Agreement, including the designated Payee.

5.4.2.2.1 Dually Eligible Hospitals

Note that the CMS Registration & Attestation System is sending Medicare hospital attestation data to the State for dually eligible EHs via the Dually Eligible Hospital Attestation Data (C-5). The State must receive attestation data for core and menu objectives. The State must also receive attestation data for electronically submitted Clinical Quality Measures (CQM). Once both C-5 data transmissions have been received by the State, the Eligible Hospital is able to use the MS SLR to submit their Meaningful Use Attestations for a Medicaid incentive payment.

If the hospital is eligible for Medicare payment, then the hospital will be deemed eligible to meet Medicaid MU requirements and will not have to complete the MU validation questionnaire. As a result, the attestation agreement will show that the hospital has been deemed a meaningful user by CMS. CMS still requires the State to send the Medicaid Payment Request Response Interface (D-16) transaction prior to issuing payment. EHs that are dually eligible will still have to meet the Medicaid patient volume requirements.

5.4.2.3 Meaningful Use - EPs

After attesting to A/I/U with the MPIP, EPs will be required to attest to MU in subsequent program years to receive incentive payments. For EPs, “year” means calendar year.

Beginning with Program Year 2019, all Providers (regardless of participation years) will be Stage 3 participants. All EPs will be required to meet a total of 8 Meaningful Use Objectives. Appendix I contains the listing of MU Stage 3 Objectives. Some MU objectives are not applicable to every provider’s clinical practice, eliminating any eligible patients or actions for the measure denominator. In these cases, the EP would be excluded from having to meet that measure. Examples of exclusions include dentists that do not perform immunizations and chiropractors that do not e-prescribe.

EP’s must select 6 Clinical Quality Measures (CQMs) that relate to their scope of practice. They must address at least one CQM from the CMS list of high-priority measures. If they are unable to select a CMS high-priority CQM, they are to address a CQM from a list of State-high-priorities. If there are none applicable, they are to address one high-priority from their practice. It is reasonable to expect that a high-priority CQM would not have a 0/0 numerator denominator data set.

During the attestation process in the MS SLR for Meaningful Use Stage 3, the provider is required to supply the following attestation information to qualify for Meaningful Use incentive payment:

- Select MU.
- Attach external documents supporting Meaningful Use of certified EHR technology. DOM prefers that a signed contract is uploaded demonstrating proof of a fiscal relationship between the vendor and the EP. In instances in which a signed contract is not applicable DOM will accept other documentation, including but not limited to, a vendor invoice, EULA, or other evidence that sufficiently demonstrates MU.
- Certified EHR Technology: Enter ONC certification code. CMS publishes a list of codes identifying all ONC certified EHR technology products. During attestation the provider must enter the code from its EHR vendor to identify the EHR.
- Using certified EHR technology, respond to the Stage 3 Meaningful Use Core measures and CQMs.
- Attach the following supporting documentation (required by the MS Division of Medicaid):
 - Security Risk Analysis –SRA (Meaningful Use Objective 1 – Protect Health Information) Mississippi requires that all participants complete a Security Risk Analysis tool similar or equivalent to the tool downloadable from the healthIT.gov website and upload a copy of the final summary report (generated from the tool). Providers may use a third party vendor to complete their annual Security Risk Analysis. Participants may use the same SRA for an entire group or clinic. New SRAs are required each year.

- Full Meaningful Use Summary Report, All MU and CQM (generated by CEHRT), independently for each participating provider, objectives (to be attached on the CPOE screen)
- Evidence of Level of Active Engagement with a Public Health Agency to submit data taken from their EHR. (Evidences may include, but will not be limited to 1) Immunization Registry – Acknowledge Letters for Registration of Intent to Onboard 2) Evidence of Testing and Validation or 3) Evidence of Production level status
- Attestation Agreement: Sign and attach an Attestation Agreement indicating Meaningful Use. Attestation Agreement must be executed by the Eligible Professional. The EHR Incentive Payment will be made to the designated payee as referenced on the Attestation Agreement. It is the responsibility of the provider to verify accuracy of information contained on the Attestation Agreement, including the designated Payee.

5.4.3 Changes to Exclusions

5.5 Program Years 2018 - 2021 do not included additional measure exclusions as were part of Meaningful Use criteria under Modified Stage 2. MPIP MS SLR Payment Calculation/Verification

At the successful completion of the registration and attestation verification of eligibility process, DOM began to disburse incentive payments. The payment process involves a number of important activities:

- Calculating the payment;
- Verifying with CMS, via the CMS Registration & Attestation System, that the provider should not be denied payment; and
- Tracking the payment and verifying that the right payment was made to the right provider at the right time.

5.5.1 Payment Calculation

Payments are calculated differently for EPs and EHs.

5.5.1.1 EP Payment Calculation

In the MS SLR, EPs will attest that the data they enter is correct and the MS SLR will automatically determine eligibility for the incentive payment. The EP Medicaid EHR incentive payment (a fixed amount), based on the EP's year of participation, is specified in the table below. The table includes payment for A/I/U. The preliminary payment amount is subject to DOM verification. In the event of an audit, the EP must have auditable supporting documentation, such as reports from their practice management system, for each included line

item. Providers will be given the option of uploading or faxing the supporting information with their attestation.

EPs may not receive EHR incentive payments from both the Medicare and Medicaid programs in the same year. In the event an EP qualifies for EHR incentive payments from both the Medicare and Medicaid programs, the EP must elect to receive payments from only one program. After an EP qualifies for an EHR incentive payment under one program before 2015, an EP may switch between the Medicare and Medicaid programs one time. Upon switching programs, the EP will be placed in the payment year the EP would have been in had the EP not switched programs. For example, if an EP decides to switch after attesting to MU of certified EHR technology for a Medicare incentive payment for the second payment year, then the EP would be in the third payment year for purposes of the Medicaid incentive payments.

As EPs reach their sixth or final participation year and it is discovered that previous Medicare and Medicaid (combined) payments exceed the aggregate amount of \$63,750.00, the state will modify the D16 payment authorization amount to reflect the actual payment, guaranteeing that it does not, in fact exceed the specified \$63,750.00. These modified D16s will be submitted (re-submitted) through a manual request process (outside the existing SLR/CMS D16 interface process) coordinated by the state and the SLR.

Table 5-2: Medicaid EP Payment Table

Medicaid EHR Incentive Payment Schedule for Eligible Professionals

	Medicaid EP Qualifies to Receive First Payment in 2011	Medicaid EP Qualifies to Receive First Payment in 2012	Medicaid EP Qualifies to Receive First Payment in 2013	Medicaid EP Qualifies to Receive First Payment in 2014	Medicaid EP Qualifies to Receive First Payment in 2015	Medicaid EP Qualifies to Receive First Payment in 2016
Payment Amount in 2011	\$21,250.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Payment Amount in 2012	\$8,500.00	\$21,250.00	\$0.00	\$0.00	\$0.00	\$0.00
Payment Amount in 2013	\$8,500.00	\$8,500.00	\$21,250.00	\$0.00	\$0.00	\$0.00
Payment Amount in 2014	\$8,500.00	\$8,500.00	\$8,500.00	\$21,250.00	\$0.00	\$0.00
Payment Amount in 2015	\$8,500.00	\$8,500.00	\$8,500.00	\$8,500.00	\$21,250.00	\$0.00
Payment Amount in 2016	\$8,500.00	\$8,500.00	\$8,500.00	\$8,500.00	\$8,500.00	\$21,250.00
Payment Amount in 2017	\$0.00	\$8,500.00	\$8,500.00	\$8,500.00	\$8,500.00	\$8,500.00
Payment Amount in 2018	\$0.00	\$0.00	\$8,500.00	\$8,500.00	\$8,500.00	\$8,500.00
Payment Amount in 2019	\$0.00	\$0.00	\$0.00	\$8,500.00	\$8,500.00	\$8,500.00
Payment Amount in 2020	\$0.00	\$0.00	\$0.00	\$0.00	\$8,500.00	\$8,500.00
Payment Amount in 2021	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,500.00
TOTAL Incentive Payments	\$63,750.00	\$63,750.00	\$63,750.00	\$63,750.00	\$63,750.00	\$63,750.00

Note: The total for pediatricians who meet the 20 percent patient volume but fall short of the 30 percent patient volume is \$14,167 in the first year and \$5,667 in subsequent years. This adds up to a maximum Medicaid EHR incentive payment of \$42,500 over a six-year period.

5.5.1.1.1 Medicaid EHR Incentive Payment Assignment

The following process applies only when an EP is assigning their EHR incentive payment. Such assignment of payments must be entirely voluntary for the EP. When registering for the MPIP, EPs may assign their incentive payments to their Medicaid Group account provided the EP is affiliated with the Group in the MMIS. To verify this, the payee must be a hospital or designated as a Group in the MMIS and the payee's NPI, SSN, TIN, or Medicaid Provider Number must match with the CMS Registration & Attestation System and the PMF file. The payee must register with the CMS Registration & Attestation System using a NPI, SSN, TIN, or Medicaid Provider Number that matches the PMF file. This data cannot be changed at the State level.

As part of the annual attestation process, DOM requires that all EPs who are assigning their payment attest that the assignment is voluntary and is being made to an established Medicaid provider.

Once a payment has been disbursed by DOM to the designated payee, as assigned by the EP, the payee cannot be changed, removed or revoked. DOM expects that once a payment is assigned and an EP submits an attestation for approval, the EP authorizes payment to be made to the payee as indicated.

5.5.1.2 EH Payment Calculation

All Mississippi dually eligible hospitals have completed the full three participation or payment years. The following is included as historical information:

Hospitals need to supply several factors that go into the EH Medicaid EHR incentive payment calculation. All factors for calculating the payment amount are derived directly from the current and prior cost reports. Only CMS pre-approved data sources will be used in calculating the payment amount. These factors are based on the hospital fiscal year that ends during the federal fiscal year prior to the hospital fiscal year that serves as the first payment year, and are listed below:

- Total Medicaid Discharges (most recent four years);
- Medicaid Discharges for the Current Year;
- Medicaid Acute Inpatient Bed Days;
- Medicaid Managed Care Acute Inpatient Bed Days;
- Total Acute Inpatient Bed Days;
- Total Hospital Charges; and
- Total Hospital Uncompensated Care Charges.

DOM will verify the EH's calculation of their overall EHR amount. The overall amount is the sum over four years of (a) the base amount of \$2,000,000 plus (b) the discharge related amount defined as \$200 for the 1,150 through the 23,000 discharge for the first payment year then a

pro-rated amount of 75 percent in year 2, 50 percent in year 3, and 25 percent in year 4. For years 2-4 the rate of growth is assumed to be the previous 3 years' average. Note that if a hospital's average annual rate of growth is negative over the three year period, it will be applied as such. Transition factors are applied to years one through four in the following amounts: Year One – 100 percent; Year Two - 75 percent; Year Three - 50 percent, and Year Four - 25 percent.

Auditable data sources will be used to calculate the Medicaid aggregate EHR hospital incentive amounts, as well as determining Medicaid incentive payments to these EHs. Auditable data sources for the calculation of the Medicaid EHR incentive amounts are the EH's Medicare/Medicaid cost reports.

For the purpose of calculating the Medicaid discharges for determining the annual Medicaid patient volume percentage, DOM will allow EHs to count discharges when Medicaid is the primary or secondary payer, regardless of payment liability on the discharge. This method is in accordance with the instructions from CMS's Facts, Answers, and Questions section published on the CMS Website.

The "Medicaid Share," which is applied against the aggregate EHR incentive amount, is essentially the percentage of an EH's Medicaid inpatient days divided by the total inpatient non-charity care days. This method is in accordance with the instructions from CMS's Facts, Answers, and Questions section published on the CMS Website.

The estimated total charges and charity care charges used in the formula must represent inpatient hospital services only and exclude any professional charges associated with the inpatient stay.

In any given payment year, no annual Medicaid EHR incentive payment to an EH may exceed 50 percent of the EH's aggregate EHR incentive amount. Likewise, over a two-year period, no Medicaid EHR incentive payment to an EH may exceed 90 percent of the aggregate EHR incentive amount. A hospital cannot receive payments after 2016 unless the hospital received a payment for the previous year. Prior to 2016, Medicaid EHR incentive payments to EHs can be made on a non-consecutive annual basis.

Due to the high cost of hospital software and to encourage the early adoption of the EHR technology in hospitals, DOM is choosing to pay the Overall EHR Amount over the minimum three-year period at the maximum allowable percentages in each year that the EH qualifies for payment (Year 1 - 50 percent, Year 2 – 40 percent, Year 3 – 10 percent). The entire EH payment calculation is defined in the worksheet included in Appendix G.

Calculation of the Overall EHR Amount is a one-time calculation based on the following steps:

- Calculate the average annual growth rate over three years using the Medicare/Medicaid Cost Reports prior to the most current Cost Report.
- Calculate the total Medicaid discharges using the Medicaid discharges in the Medicare/Medicaid Cost Reports plus the discharges where Medicaid is the secondary payer. Only discharges between 1149 and 23,000 per CCN will be allowable discharges.

- Calculate each of the next four year's total discharges by multiplying the previous year's discharges times the average computed growth rate.
- Calculate the Medicaid Aggregate EHR Incentive Amount for each year by adding (total discharges times \$200) to the \$2,000,000 base.
- Apply the appropriate transition factor to each year's Aggregate EHR Incentive Amount. (Year One – 100 percent, Year Two – 75 percent, Year Three – 50 percent, Year Four – 25 percent).
- Calculate the total Overall EHR Incentive Amount by adding the total of each year with the transition factor applied.
- Apply the Medicaid Share percentage to the Overall EHR Incentive Amount. (See Medicaid Share calculation below). This is the hospital's Medicaid Aggregate EHR Incentive amount.

Calculation of the Medicaid Share percentage:

- Total Medicaid days includes both the total Medicaid Days and total Medicaid HMO days from the Medicare/Medicaid Cost Report.
- Calculate the non-charity percentage. Divide the (total hospital charges less uncompensated care) by the total hospital charges.
- Calculate the non-charity days by multiplying the non-charity percentage times the total hospital days.

Calculate the Medicaid Share percentage by dividing the Medicaid days by the non-charity days. DOM has created a calculation worksheet for EHs that mirrors the calculation in the MS SLR application. The calculation worksheet is included as Appendix G: EHR Hospital PIP Calculator and will be available on DOM's Websites and made available through its outreach program.

Hospitals must use their filed and accepted cost report data only in the onetime calculation of the EH's incentive payment amount. EHs are required to use the last four (4) consecutive years' cost reports in the calculation of the onetime payment. Any deviation will result in the rejection of the EH's application. All cost reports are subject to audit by Medicare and Medicaid. Any audit adjustments to the cost report used to calculate the onetime payment may result in a payment adjustment or denial of Medicaid payment at the discretion of the DOM. Data sources below are in accordance with CMS FAQ 10771.

For hospitals filing the 2552-96 cost report, the authorized data sources are:

- Total Discharges - Worksheet S-3 Part 1, Column 15, Line 12
- Medicaid Days - Worksheet S-3, Part I, Column 5, Line 1 + Lines 6-10
- Medicaid HMO Days - Worksheet S-3, Part I, Column 5, Line 2
- Total Inpatient Days - Worksheet S-3 Part 1, Column 6, Line 1, 2 + Lines 6 -10

- Total Hospital Charges - Worksheet C Part 1, Column 8, Line 101
- Charity Care Charges - Worksheet S-10, Column 1, Line 30
 - DOM does not expect that any 2552-96 cost reports will be submitted due to the change to 2552-10. However, DOM will accept the PDF version of the 2552-96 cost reports for EHR Incentive Payments or the hospital can use zero for the Charity Care Charges.

For hospitals filing the 2552-10 cost report, the authorized data sources are:

- Total Discharges - Worksheet S-3 Part 1, Column 15, Line 14
- Medicaid Days - Worksheet S-3, Part I, Column 7, Line 1 + Lines 8-12
- Total Inpatient Days - Worksheet S-3 Part 1, Column 8, Line 1, 2 + Lines 8 - 12
- Total Charges - Worksheet C Part 1, Column 8, Line 200
- Charity Care Charges - Worksheet S-10, Column 3, Line 20

For new hospitals or hospitals that have a change of ownership with a new CCN, CMS is allowing states to decide when a new hospital can apply for the EHR incentive program. MS DOM has determined that a hospital must have four years of history (four cost reports) before they can apply. Cost report years containing more or less than 12 months must be excluded from the growth calculation. Only years with 12 months can be used in the calculation. The hospital must use the previous year's cost report. For example, if cost report year 2008 contained 13 months, the hospital would have to use the cost reports for 2010, 2009, 2007, and 2006.

DOM will utilize the applicable statistics and financial data from the hospitals' Medicare/Medicaid Cost Reports for the last four years to validate the initial calculation of the incentive payment amount and to validate that the average length of stay does not exceed the 25-day maximum. This means that the hospital must submit four cost reports on their initial application for the first payment. For subsequent years, the hospital's cost report ending during the previous federal fiscal year will be used, and only the most recent cost report will be required.

5.5.2 CMS Verification

Before payment can be distributed, a final CMS check must be performed to validate that the provider can receive payment. The validation is done via the Medicaid Payment Request Response Interface (D-16) to the CMS Registration & Attestation System. The CMS Registration & Attestation System will return a batch interface transaction via the Medicaid Payment Request Response Interface (D-16) authorizing the payment or denying it with a Denial Reason, such as a duplicate payment or federally excluded reason.

5.6 MPIP Payment Entry/Processing

DOM will use the existing MMIS system to make provider payments. The automated payment interface from the MS SLR to the MMIS system is now operational and facilitates a streamlined payment process for the MPIP. EHR incentive payments will follow the established rules for all provider payments and will use the existing payment rules built into the current and future MMIS systems. The MMIS will notify the MS SLR that a payment was made; allowing the MS SLR to create the batch interface transaction notifying the CMS Registration & Attestation System that payment is complete.

DOM is making EHR incentive payments from the MMIS on a weekly basis. DOM makes the incentive payments to the provider, the employer, or a facility assigned the payments without any reduction or rebate. DOM does not make incentive payments to any entities promoting the adoption of certified EHR technology since none exist in Mississippi.

DOM will use existing MMIS capability to take advantage of existing reconciliation, accounting, tracking, and reporting capability supporting provider reimbursement. Reporting capabilities of the existing MMIS and Decision Support System/Data Warehouse (DSS) will be utilized to facilitate the CMS-37 and CMS-64 report information. Utilization of the MMIS and the DSS will allow the EHR incentive payment information to be available to the current and future audit and analysis tools built into the MMIS and DSS. DOM anticipates that the current MMIS system will be replaced during the life of the EHR incentive program.

5.7 MPIP MS SLR Payment Complete

As stated above, the MS SLR must send a Medicaid Payment Completion Interface transaction (D-18) to the CMS Registration & Attestation System when the payment is distributed to the Provider. The D-18 will be sent five business days after the payment is issued. Mississippi may submit an updated D18 transaction as needed to report future adjustments and possible payment recoupment.

5.8 MPIP MS SLR Inquiry

The MS SLR allows inquiry processes for providers to track the progress of their incentive payments, including if their attestation has been received, sent to CMS, or approved for payment. Inquiry processes may also be used by Conduent Help Desk Support Representatives to answer providers' questions or provide guidance to providers to correct information. In addition to contacting the Conduent Help Desk, providers have the option to call DOM staff to inquire about specific information contained outside of the MS SLR.

5.9 MPIP MS SLR Update and Risks

DOM is participating in a multi-state SaaS solution to allow providers to attest online for their EHR incentive payment. Version 1 of the MS SLR was implemented to allow providers to apply for and submit the required documentation needed for A/I/U approval. Version 1 of MS SLR also enabled verification of most of the pre-payment audit requirements for approval of

payment and captures the required documentation for additional manual review and/or audit of the attestation.

Version 2 of the MS SLR was implemented in the 1st quarter of 2012. Version 2 allows providers to attest to MU online with an immediate response that indicates whether they meet the MU requirements. Supporting documentation may include the patient volume calculators found at www.medicaid.ms.gov, contractual documents, reports from the EHR system and other documents. See the CMS-approved screenshots pertaining to Stage 3 attached hereto as Appendix K.

The MS SLR also includes a Dashboard component that is an internal tool used by DOM for verification, review, internal audits, submission of audits to CMS, and processing payments. The Dashboard allows the DOM payment approver to see the attestation and all supporting documentation. The Dashboard includes expanded tools and reporting to support the additional pre- and post-payment audits, payment tracking and analysis of provider attestation statuses. Conduent is phasing in online post-payment audit tools and tracking of audit, appeals, and recoupment/adjustment. DOM expects that they will fully implement the audit, appeals, and recoupment/adjustment functionality available in the MS SLR once all phases are made available by Conduent.

DOM is making a best effort to apply MITA principles to all future development and deployments of the MS SLR. One challenge for DOM is using a SaaS model with multiple states, with each state having different workflows and needs. This multi-stakeholder approach has created many challenges, including configuration and customization of the application for Mississippi DOM-specific needs. For example, DOM has chosen to forgo implementing the post-payment auditing function within the MS SLR until it is more robust. Although many states are satisfied with the current functionalities available within the Conduent solution, DOM continues to perform audit, recoupment and adjustment, and appeals processes manually outside of the MS SLR due to the limited functionality.

Conduent has updated the system to incorporate Stage 1 2013 and 2014 changes related to the Final Rule. Xerox has developed and implemented changes required by the Stage 2 Final Rule from 2012. These were implemented in the State for EPs on June 25, 2014. 2014 implementation for EHs will be available on October 1, 2014.

One potential risk specific to the MS SLR relates to CMS's changes to the definition of a Medicaid encounter from 2013. DOM foresees many challenges in verifying encounters that do not have an associated claim searchable within the MMIS. This change requires more robust post-payment audit requirements and increases the need for resources and potentially creates a larger burden upon providers to demonstrate proof through auditable data sources.

SLR Release 5.1 included functionality approved by CMS through the Addendum for Program Years 2017 and 2018 allowing providers to select the desired level of attestation – Modified

Stage 2 (with Program Year 2017 updates) or Stage 3. Clinical Quality Measure selection and reporting was changed to allow providers to select six CQMs that best reflected their scope of practice and removed Quality Standard domain restrictions. This was done to better align CQM reporting requirements for participants in the Quality Payment Program (QPP) and the Medicaid EHR Incentive Program. Release 5.1 was moved into production in the summer of 2017.

SLR Release 5.2 is scheduled for May 2017. Release 5.2 is only cosmetic changes and holds no impact on operation or cost of the SLR.

SLR Release 5.3 is anticipated to implement in January 2019, which is the start of Program Year 2018. SLR Release 6.0 has been tested and was deployed for production in June, 2019. Mississippi will open the State Level Registry for Program Year 2019 on January 6, 2020. This release includes CMS mandated updates regarding CQM selection.

5.9.1 SMA Hosted Website

DOM has launched a public-facing website that includes links to the MS State Level Registry as well as program resources for providers. This can be accessed by the public at <https://MSEHRPIP.wordpress.com>.

5.10 Program Oversight

5.10.1 MPIP MS SLR Prepayment Verification

DOM is conducting a robust and comprehensive prepayment oversight program. The prepayment oversight activities are led by the Office of Information Technology Management (iTECH). The levels of prepayment oversight and monitoring include the review, tracking and verification of provider attestations, including all of the information and documents necessary for a Medicaid provider to receive an incentive payment for each program year. This process ensures each provider meets provider registration, attestation, and eligibility criteria prior to receiving their incentive payment. Prepayment verifications are primarily performed by the MS SLR through configurable items within the application; however, iTECH staff members also perform some manual verification prior to releasing providers for payment.

5.10.1.1 Automated Prepayment Verification Process

As a part of the prepayment verification process, the automated MS SLR functions and the CMS Registration and Attestation System are leveraged to assure that no duplicate Medicaid EHR incentive payments are paid by more than one state or between the Medicaid and Medicare programs. The MS SLR automated processes and manual stops will also ensure that the

incentive payments are made accurately, without reduction or rebate and will be made directly to a provider or to an eligible third - party entity to which the provider has assigned payments.

DOM has created a PMF that consists of all EPs and EHs to compare to B-6 Interface information during MS SLR Registration. The PMF excludes all providers whose licenses have expired, as well as all OIG excluded providers and State of Mississippi exclusions. The PMF also includes those EPs who qualify as “non-hospital” based and excludes all EPs listed on the State death registry. The PMF is automatically generated weekly from the MMIS provider master and claims data files. The PMF file will be the control file used by the MS SLR for approval of all EP and EH attestations. The CMS and OIG sanctions are updated monthly; the State of Mississippi sanctions are updated daily.

In addition to verification against the PMF, the MS SLR has been configured to automate several prepayment verifications on information entered by the provider during attestation. The MS SLR incorporates hard stops to verify that all information entered by providers aligns with program rules and that required documents are attached.

The MS SLR will automatically verify the following items during the attestation process:

- Eligibility reporting period using dates entered by the provider;
- (EHs only) – Average Length of Stay is less than 25 days;
- Medicaid patient volume (or Needy Individual Patient Volume) using numerator and denominator;
- ONC EHR certification number by matching the provider certification number with the ONC Certified HIT Product List;
- A/I/U criteria or MU criteria, depending upon the attestation type; and
- Provider NPI and SSN/TIN and payee NPI and SSN/TIN with the PMF.

Providers will be required to upload documentation in support of many of these items prior to proceeding in the MS SLR as well. If any one item cannot be verified, then the attestation will stop and the provider will not be able to proceed until corrected.

In the final step of attestation in the MS SLR, providers are required to submit an attestation agreement document. DOM currently uses a comprehensive attestation document that ensures DOM and CMS that the provider meets the requirements for eligibility and incentive payment. The attestation agreement will be automatically generated from the information entered into the MS SLR by the provider and will vary based on provider type. The attestation agreement includes the following statements that the provider:

- Is voluntarily participating in the Mississippi Medicaid EHR Incentive Payment Program;
- Has met all of the eligibility requirements for the program for the payment year;

- Has created a binding legal or financial obligation to acquire, implement or upgrade to the CMS Certified EHR software identified by the CMS EHR Certification identification;
- Agrees that any assignment of the EHR Incentive Payment is made voluntarily;
- Understands that their application is subject to review and/or audit by the State of Mississippi and that all supporting data must be maintained for a minimum of seven years;
- Understands that any falsification or concealment of material information may result in the provider being declared ineligible to participate in this program or any other Mississippi Medicaid program;
- Understands that any incentive payments found to have been made based on fraudulent information or attestation may be recouped by DOM, including all collection costs and penalties that may be assessed by the State of Mississippi;
- Understands that the EHR incentive payments are treated like all other income and are subject to federal and state laws regarding income tax, wage garnishments, and debt recoupment;
- Certifies that information contained in the MS SLR and attestation agreement is true, accurate, and complete; and
- Understands that Medicaid EHR incentive payments submitted under this provider number will be from federal funds and that any falsification or concealment of a material fact may be prosecuted under federal and state laws.

Moreover, given that this is a legally binding document, DOM requires the following:

- The above statement will appear directly above the provider's signature or, if they are printed on the reverse of the form, a reference to the statements must appear immediately preceding the provider's signature;
- The provider's signature;
- The provider and provider's name, NPI, SSN, and TIN appears on the attestation agreement;
- The provider is responsible for verifying both the provider and provider's payee information is correct on the attestation agreement; and
- The provider attestation must be resubmitted upon any change in the provider's attestation and/or representative.

As a final step in the prepayment verification process, the MS SLR will work to prevent multiple payments to providers by:

- Indexing files using the CCN, NPI, and TIN as the key for EHRs;

- Indexing files using NPI and SSN for all other providers; and
- Requiring an NPPES Web account through the CMS Registration and Attestation System before an attestation can be complete.
 - EPs – the Web account is only issued using the Provider’s SSN. The individual Provider is only issued one account per SSN.
 - EHs – the Web account is only issued using the hospital’s CCN. The hospital is only issued one account per CCN.

5.10.1.2 iTECH Staff Prepayment Verifications

DOM iTECH staff members are responsible for conducting manual prepayment verifications and provider outreach. To ensure that staff levels are appropriate for the MPIP program, quarterly reports are reviewed to assess attestation-to-payment time and provider outreach efficiency. Over time, staff levels have been increased to support paying incentives in a timely manner.

Conduent offers a HelpDesk call center for all providers covered by this application. However, in Mississippi we encourage all EPs and EHs to contract our program staff directly with questions or concerns. This information is posted on our website (<https://MSEHRPIP.wordpress.com/Contract-Us>)

5.10.1.2.1 Manual Prepayment Verification Process

iTECH staff review every attestation prior to releasing for payment. Given that the MS SLR cannot automatically verify all information, the iTECH manual verification process for all providers includes:

- Ensuring that all documentation attached is correct and accurate as described by the MS SLR;
- Verifying that CEHRT standards are met by the submission of currently required certification numbers from the ONC (i.e. 2014 and beyond);
- Verifying that the certified EHR technology contract is valid within the last 12 months;
- Ensuring that the attestation agreement is signed and valid according to DOM regulations; and
- (For MU only) verifying required documents are attached and appropriate for chosen MU measures.

All attestations found without proper documentation attached will be pended and a notice identifying the missing or incorrect information will be sent to the provider’s e-mail address with instructions on how to correct.

In addition to verifying documentation, iTECH performs several other manual verifications on EPs prior to payment. These verifications include:

- Verifying that the EP is affiliated with the assigned payee in the MMIS and that the EP payee has a group indicator, if applicable; and
- Verifying that the SLR payment report matches the SLR request for approval to pay file.

Any exceptions are noted and researched for the reason for non-approval. The following is a “checklist” of items that will be used by iTECH staff to verify attestations prior to payment.

Table 5-3: Checklist of Items for Pre-Payment Verification

Requirement	Automated State Level Registry System / Manual Process
Collect and verify basic information to assure Provider enrollment eligibility upon enrollment or re-enrollment to the Medicaid EHR payment incentive program.	Automated – MS SLR
Collect and verify basic information to assure patient volume in the numerator. Both the Medicaid and total patient volumes will be verified.	Automated - MS SLR Manual – Provider management reports and Review of Provider supporting documentation
Collect and verify basic information to assure that PA EPs are practicing predominantly in a FQHC or RHC and are so led by the PA.	Automated – MS SLR
Assure that Medicaid providers who wish to participate in the EHR incentive payment program have or will have a NPI and will choose only one program from which to receive the incentive payment using the NPI, a TIN, and CMS' national provider election database.	Automated – CMS Registration & Attestation System and MS SLR Manual – Review NPI, TIN and active license for validity
Based on provider type, assure that the provider meets all requirements to be eligible to participate in the EHR Payment Incentive Program as a Medicaid Provider. “All requirements” means all requirements that can be verified using external data sources available to DOM.	Automated – MS SLR Manual - Review of provider supporting documentation
To eliminate long-term care hospitals, ensure that a hospital eligible for incentive payments has demonstrated an average length of stay of 25 days or less.	Automated – MS SLR will calculate the average length of stay for all hospitals. The calculation will be the total number of inpatient days divided by the total number of discharges. The application has a hard stop and will not allow the application to proceed if the average length of stay is greater than 25 days.

Requirement	Automated State Level Registry System / Manual Process
<p>Ensure all eligibility information is verified at least on an annual basis.</p> <p>Provider eligibility information is only going to be verified when the Provider requests a payment via the MS SLR.</p>	<p>Automated – MS SLR</p> <p>Manual - Review of Provider supporting documentation</p>
<p>Verify the Provider has met the certified EHR requirements, through use of the ONC - certified EHR code and attached vendor contracts, purchase order, EULA or license agreement.</p>	<p>Automated - MS SLR</p> <p>Manual verification is required to ensure the document attached is the type to which attestation is made.</p>
<p>Based on Provider type, assure the MU Core requirements have been attested to and are accurate.</p>	<p>Automated - MS SLR</p> <p>Manual – review specific objectives, including CPOE, problem list and DOM security risk analysis questionnaire</p> <p>*The DOM security risk analysis questionnaire can be found at www.medicaid.ms.gov</p>
<p>Based on Provider type, assure the proper number of MU Menu Item requirements have been attested to and are accurate.</p>	<p>Automated - MS SLR</p>
<p>Capture and verify clinical quality measures from each Provider.</p>	<p>Automated –MS SLR</p>
<p>Based on Provider type, assure the first year payment is accurately calculated.</p>	<p>Automated - MS SLR</p>
<p>Based on Provider type, assure the payment for years two through six are accurately calculated.</p>	<p>Automated - MS SLR</p>
<p>Assure a Provider does not receive incentive payments for more than six years.</p>	<p>Automated – CMS Registration & Attestation System and MS SLR</p>

Requirement	Automated State Level Registry System / Manual Process
Assure a Provider does not receive duplicate payments for any given year.	Automated – CMS Registration & Attestation System and MS SLR
Ensure that each Provider that collects an EHR incentive payment has collected an incentive payment from only one state, even if the Provider is licensed to practice in multiple states.	Automated – CMS Registration & Attestation System and MS SLR
Assure payments are not made for any year starting after the year of 2015 unless the Provider has been provided payment for a previous year within the active program period.	Automated – MS SLR
Assure that Medicaid EHR incentive payments are made without reduction or rebate have been paid directly to a Provider or to an employer, a facility, or an eligible third-party entity to which the Medicaid Provider has assigned payments.	Automated – MS SLR
Ensure that any existing fiscal relationships with providers to disburse the incentive payments through Medicaid managed care plans does not result in payments that exceed 105 percent of the capitation rate, in order to comply with the Medicaid managed care incentive payment rules at §438.6(v)(5)(iii).	Does not apply to MS providers. Incentive payments are made directly to the provider.

Requirement	Automated State Level Registry System / Manual Process
<p>Ensure that only appropriate funding sources are used to make Medicaid EHR incentives.</p> <p>DOM apportions money from the proper account, via existing DOM accounting processes, before the money is disbursed.</p>	<p>Manual - MMIS and State accounting processes.</p>

5.10.1.3 MMIS Automated Audits

The MMIS conducts automated audits before payment is generated in the MMIS. MMIS audits include:

- Verifying that the provider is affiliated with the payee in the MMIS Provider File to make a payment to the payee listed in the MS SLR. If this affiliation is not present, the provider will be notified of the error and will be given instructions on how to correct the problem;
- Verifying that the provider’s Mississippi Medicaid ID is active; and
- (For EPs only) – Verifying that the EP’s license is active and valid.

5.10.2 Financial Reporting

The Office of Finance and Performance Review (OFPR) conducts audits, handling all compliance audits. OFPR reports through Finance to the Executive Director. Program Integrity handles all provider billing audits and fraud identified by the OFPR. Program Integrity reports through Health Services to the Executive Director.

MPIP Financial Reporting is conducted through iTECH and OFPR by leveraging functions available in the MS SLR. The MS SLR incorporates reporting capabilities for the incentive payment program, including pre-payment verification activities, post-payment auditing activities, and incentive payment amounts by provider type. iTECH and the OFPR utilize these reporting capabilities, in addition to guidance from the Final Rule, to report to CMS on oversight activities and financial activities.

DOM claims federal reimbursement in accordance with all applicable federal laws, regulations, and policy guidance. More specifically, the OFPR has a process in place to ensure that its expenditures for administration of the MPIP will not be claimed at amounts higher than 90 percent of the cost of such administration. A separate reporting category, 039 SLR Incentive Payments, has been established to identify all direct costs related to the Medicaid EHR incentive payment program. This category of service is tracked throughout the following reports produced from the MMIS:

- RX045 – Final Payment Summary
- RX047 – Financial Transaction Summary
- RX048 – Medicaid Register by Provider Type
- RX051 – Preliminary Payment Summary
- RX053 – Remittance Activity Control Totals
- RX054 – Remittance Advice (RA)
- RX100 – Final Payment Estimation by Billing Provider
- RX124 – Weekly Category of Service Summary
- RX134 – New Financial Transactions Report
- RX141 – Financials by Category of Service
- RX241 – Monthly Financials by Category of Service
- RX245 – Monthly Final Payment Summary
- RX341 – Quarterly Financials by Category of Service
- RX345 – Quarterly Final Payment Summary

Administrative costs are determined based on our agency accounting records. Expenses related to HIT are designated with distinct reporting codes within the accounting system. Monthly and quarterly account reconciliations and preparation of the quarterly CMS-64 reports identify all administrative expenditures related to the Medicaid EHR incentive payment program, including any expenditure erroneously claimed at an amount higher than 90 percent. The Office of Finance and Performance Review would take corrective action immediately if erroneous expenditures are identified.

The Office of Finance and Performance Review also has a process in place to ensure that it does not claim amounts higher than 100 percent of the cost of such payments to providers. This control process will be supported by reports based on data extracted from MMIS and the MPIP MS SLR solution, which will be compared to estimated expenditures from the CMS-37.

Additional financial oversight reports include:

Table 5-4: Additional Financial Oversight Reports

Report	Frequency
Reports showing payments pending by Provider.	Weekly and Monthly
Reports showing payments made by Provider.	Weekly and Monthly
Payment reconciliation reports to track payment by NPI/Provider ID from MS SLR to MMIS to MS SLR to the CMS Registration & Attestation System.	Weekly and Monthly. Dollars in the payment calculation of MS SLR by Provider. Dollars input in to the MMIS system by Provider. Payments made by MMIS to Provider. Payments reported to the MS SLR by Provider. Payments reported to the CMS Registration & Attestation System by Provider.
Reports tracking the status of all applications in the redetermination or appeals processes.	Weekly and Monthly
CMS Report with number of providers by type and location using A/I/U.	Year One Report - Quarterly and Annually
Aggregated Tables for A/I/U.	Year One Report - Quarterly and Annually
CMS Report with number of providers by type and location using MU.	Year Two & beyond - Quarterly and Annually
Aggregated Tables for MU.	Year Two & beyond - Quarterly and Annually
Quantitative data on how the incentive payment program addressed individuals with unique needs, such as children.	Quarterly and Annually

DOM will create additional reports as necessary to administer, manage, and monitor MPIP.

5.11 Audit Strategy

DOM began making payments to providers in May 2011. Since that time, DOM has conducted an ongoing evaluation of its verifications and Audit Strategy. As a result of this ongoing evaluation, DOM has determined that it will conduct pre-payment verifications of 100 percent of all provider attestations and will follow a rigorous pre-payment verification process. As noted above, certain pre-payment verifications are automated through the MS SLR, while other pre-payment verifications are manually completed by iTECH staff. The verification workflow begins after the provider completes registration and attestation. DOM has up to 60 days to verify the provider’s eligibility and an additional 45 days to distribute payment. This 45-day period starts after payment authorization is confirmed through the Medicaid Payment Request Response Interface (D-16).

DOM Office of Finance and Performance Review (OFPR) staff members are responsible for conducting post-payment audits on behalf of DOM. OFPR staff members will leverage all

existing data sources for post-payment verifications, including MMIS claims data for comparison to a provider's self-reported data.

Post-payment audits of providers that have attested to and been paid for A/I/U have already commenced. OFPR will begin conducting post-payment audits of providers that have attested to and been paid for MU in 2013. The post-payment MU audit strategy is included in Appendix J. Appendix J is marked as confidential and will not be released as part of the public document.

5.11.1 Pre-Payment Audits

DOM conducts pre-payment audits for A/I/U and MU on 100 percent of provider attestations using the process previously explained in Section 5.10.1.

5.11.2 Post- Payment Audits

DOM conducts post-payment audits for A/I/U and MU as outlined in Appendix J. Appendix J is a confidential document and will not be posted on public Websites.

DOM acknowledges that the Audit Strategy, including pre and post-payment verifications, for A/I/U and MU as outlined above and in Appendix J will need to be evaluated on a regular basis. In subsequent SMHP updates, DOM will include necessary revisions to the Audit Strategy, as a part of the Appendices, to reflect the level of risk encountered in attestation reviews and based on lessons learned as the MPIP proceeds.

5.11.3 Fraud and Abuse

Abuse is defined as provider practices that are inconsistent with sound fiscal, business or medical practices and result in unnecessary costs to DOM. Fraud is when the provider has the intent to deceive or misrepresent with knowledge that this deception could result in an unauthorized benefit. Fraud detection focuses on providers with intent to commit either a civil or criminal action for personal gain. Fraud and abuse prevention includes the previously described pre and post-payment verification and audit activities with additional investigation that starts at the conclusion of the initial pre and post-payment audit processes. When DOM determines that there is an issue related to payment that is more than a provider's mistake or error or negligence then the provider is referred to the Attorney General's Medicaid Fraud Control Unit (MFCU) for investigation. The MFCU has specific authority to investigate and prosecute Medicaid fraud and abuse using search warrants and administrative document request. The MFCU may determine settlements, obtain judgments and convictions and recover criminal and civil restitution, fines, penalties and costs.

5.11.3.1 Recoupment

Conduent has completed and implemented all development work surrounding Audit, Appeals, Recoupment and Adjustment in the MS SLR. This functionality (*ability to capture recoupment and adjustment information, including tracking recoupments/adjustments and flagging providers that have been paid improperly in previous program years*) is currently available in the MS SLR. This was deployed into a Production environment in late November, 2013

Recoupments and adjustments of Medicaid EHR incentive payments will be handled in the same fashion as all other Medicaid claims. DOM will use its current recovery process (MS Code 43-13-121) to take corrective action regarding any improper payments to providers through the MPIP. DOM recognizes the need to repay CMS all FFP received by providers in the event of an improper payment, regardless of whether or not DOM has actually received the recoupment.

DOM plans to use the current MMIS functionality to track overpayments and will utilize MMIS negative payment files to facilitate the recoupment or adjustment of incentive payments. To date, DOM has not completed a recoupment or adjustment for any incentive payments that have been distributed.

5.12 Administrative Redetermination and Appeal Plan

This section of the SMHP describes the DOM appeals process regarding the MPIP appeal rights, the valid reasons for an appeal, and types of provider eligible for an appeal. The redetermination and appeal processes will proceed in accordance with the Mississippi state law and the Division of Medicaid State of Mississippi's Administrative Code Title 23, Part 300 – Appeals.

Specifically, Medicaid Providers can appeal if they believe that they have been incorrectly denied an incentive payment, or have received an incorrect payment amount because of an incorrect determination of eligibility, including but not limited to the following DOM decisions:

- Measuring patient volume;
- Demonstrating MU; and
- Efforts to adopt, implement, or upgrade to certified EHR technology.

The first step in the appeals process is for the provider to request an informal reconsideration prior to invoking a formal appeal. This can be achieved by contacting iTech or OFPR staff. iTech or OFPR staff may grant the provider the opportunity to make changes to their MS SLR information after the informal reconsideration process and discussion. If the reconsideration process results in a denial decision, MS DOM will provide a written notification of the denial action to the provider. The provider may then proceed in the appeals process by submitting a formal appeal to DOM at that time.

The provider may formally appeal the decision by filing a written notice for appeal with the Office of Administrative Appeals within 30 days of the written receipt of the adverse decision. State of Mississippi law requires that providers file a formal appeal in writing, detailing the reason for the appeal. DOM uses an internal system to track all appeals and all supporting documentation is stored on a secure server within DOM. The notice of appeal is considered filed when it is date stamped by the Office of Administrative Appeals. The notice must identify the issues being appealed, explain the reasons why the provider disagrees with the adverse decision, and include all supporting documentation.

DOM manually updates the status of all formal appeals in the National Level Repository (NLR). This process allows DOM to maximize the benefits of using the existing system for all appeals

and minimizes administrative costs of the program. Redetermination is an informal process and documented within an internal system.

Appeals, audits, fraud and abuse administration and work will be supported by processes external to MS SLR and may take place at any point described above (Registration, Attestation, etc.). “Historical log” information will be stored in the MS SLR that documents the initiation, progress, and results of each appeal, audit, and recoupment or adjustment case. Mississippi has a substantial investment in staff training and systems designed to facilitate and track appeals, audits, fraud and abuse. Mississippi will leverage this investment to reduce the administrative cost of the EHR incentive payment program. Documentation generated during the process will be secure and readily available to DOM staff to assist in answering provider questions.

DOM has an existing relationship with the Mississippi Attorney General’s Office Medicaid Fraud Control Unit and has incorporated this process as part of the MPIP oversight responsibilities.

The provider will receive a fair hearing in accordance with the Division of Medicaid State of Mississippi’s Administrative Code Title 23, Part 300 – Appeals. DOM has not updated its appeals process since program inception, but may reserve the right to do so in subsequent SMHP updates based upon lessons learned and the number and type of appeals being filed and processed on an annual basis.

5.12.1 Miscellaneous Provider Issues and Complaints

DOM has established an e-mail address for provider issues and complaints. The e-mail account is monitored daily and distributed to the appropriate person to resolve the issue. Mississippi DOM assists providers in addressing all issues as quickly as possible. DOM will track the issue to its final resolution and will maintain a log of ongoing and resolved issues. DOM will summarize and categorize all provider issues received.

5.13 MPIP MS SLR Post Payment Processing

Whenever a provider’s incentive payment is adjusted due to an audit finding, the state will notify CMS via a CMS Registration & Attestation System Medicaid Payment Adjustment Interface (D18 – payment adjustment/recoupment) transaction.

5.14 Quarterly Reporting to CMS

CMS implemented a standard report format for quarterly reporting on EHR Incentive Payment program measures of progress. DOM submits these quarterly reports directly to CMS on or before the required deadlines on the required CMS template. The template includes the following items:

- State System - Dates
 - Registration Implementation
 - AIU Attestation Implementation
 - Payments Implementation
 - Audits Implementation

- MU Attestation
 - IAPD Expiration
- Provider Outreach – Number and Dates
 - Outreach Events
 - Phone Calls
 - Emails
- Auditing – Planned and Actual Dates
 - EP AIU Audits
 - EP MU Audits
 - EH Audits
- State-Specific SMHP Tasks – Planned and Actual Dates
 - Conduct Year One post payment audits and analysis
 - Finalize audit plan for Year Two MU and other program requirements
 - Receive CMS APD approval for eligibility determination remediation
 - Develop requirements/release RFP for interface to the State HIE and Sequoia Project (eHealth Exchange)
 - Create RFPs for Sequoia Project (eHealth Exchange) platform consulting, IV&V, and implementation vendors
 - Release MMIS system replacement RFP
 - Develop audit plan for MU and other program requirements
 - Start development of required changes to the MS SLR
 - Share limited Medicaid data with local HIEs as agreed and requested (e.g., MSCHIE)
 - Finalize audit plan for MU and other program requirements
- Staffing Levels and Changes – Planned and Actual
 - Operational Staff
 - IT Staff
 - Auditing Staff
 - New Staff This Quarter
- EP/EH Counts and Amounts Paid (Total since start of program)
 - EP AIU Count
 - EP AIU Paid Amount
 - EP MU Count
 - EP MU Paid Amount
 - EH AIU Count
 - EH AIU Paid Amount
 - EH MU Count
 - EH MU Paid Amount
- Other Information
 - Additional tasks

6 HIT Roadmap

6.1 Major Activities and Milestones Moving from “As-Is” to “To-Be”

The following table shows the major activities and milestones to move DOM from the “As-Is” to the “To-Be” status. There are several recurring activities shown within the table that should be pointed out. These activities show only one quarter, but continue throughout the Milestone Schedule on a quarterly basis. The recurring activities include:

- *Implementation of MU for EH and EP* – Starting in the third quarter of FFY 2012, the MS SLR began accepting MU attestations. Although this is shown as a milestone that ended in Q3 of FFY2012, the MU functionality remains active in the MS SLR;
- *Post Payment Audit Implementation* – In the fourth quarter of FFY2012, the post payment audit program was initiated. As noted in Section 5 – Provider Incentive Program Blueprint, post payment audits have commenced for A/I/U attestations, as well as MU attestations. Post payment audits will continue on a regular basis throughout the program; and
- *SMHP and IAPD Annual Updates* – Beginning in the second quarter of FFY2012, DOM has submitted annual updates of the SMHP and IAPD to CMS for approval. Annual SMHP updates include changes to the “As-Is” and “To-Be” landscape, policy changes to the MPIP, and a new HIT Roadmap. Annual IAPD updates outline the requested funds for implementing HIT initiatives outlined in the SMHP.

Table 6-1: Master Milestones/Schedule

MILESTONE	START DATE	END DATE	STATUS
<i>State Level Registry (SLR) Upgrades</i>			
Meaningful Use UAT	Q2 FFY12	Q2 FFY12	Completed
Implementation of Meaningful Use for EH and EP (On-going)	Q3 FFY12	Q3 FFY12	Completed
First EP Payments for Meaningful Use	Q3 FFY12	Q3 FFY12	Completed
Provider Training on Meaningful Use	Q4 FFY12	Q4 FFY12	Completed
Post Payment Audit Implementation (On-going)	Q4 FFY12	Q4 FFY12	Completed
MMIS / SLR Payment Electronic Interface Implementation	Q4 FFY12	Q4 FFY12	Completed
SMHP Update for Stage 2 Final Rule Changes	Q1 FFY13	Q1 FFY13	Completed
SLR Release 2.4 - Stage 1 Changes for 2013 Implementation	Q1 FFY13	Q1 FFY13	Completed
SLR Release 2.5	Q2 FFY13	Q2 FFY13	Completed
SLR Release 2.6	Q3 FFY13	Q3 FFY13	Completed
SLR Functionality for Audit, Recoupment & Adjustment, and Appeals	Q3 FFY13	Q3 FFY13	Completed
SLR Release 2.7	Q4 FFY13	Q4 FFY13	Completed

MILESTONE	START DATE	END DATE	STATUS
SLR Release 3.0 - Stage 2 Meaningful Use Implementation for EH	Q1 FFY14	Q1 FFY14	Completed
SLR Release 3.1 - Stage 2 Meaningful Use Implementation for EP	Q2 FFY14	Q2 FFY14	Completed
SLR Release 3.2 – Stage 2 Meaningful Use Implementation for EH (additional e-CQM reporting interface from CMS)	Q4 FFY14	Q1 FFY 15	Completed
SLR Release 3.3 - Response to CMS NPRM (effective October 1, 2014) Additional development needed to allow providers to take advantage of Flexibility Rule for CEHRT 2011, 2014 or combination 2011/14	Q4 FFY14	Q1 FFY 15	Completed
SLR Release 4.0 – SLR Dashboard and Internal Reporting Enhancements	Q1 FFY15	Q3 FFY 15	Completed
SLR Release 4.1 – Modifications to Program Year 2015 for Modified Stage 2 for EPs and EHS	Q3 FFY15	Q3 FFY16	Completed
SLR Release 4.1.2 – Modifications to Program Year 2016 for Modified Stage 2 for EPs and EHS	Q3 FFY16	Q2FFY17	Completed
SLR Release 5.0 and Release 5.1 - Modifications to Program Year 2017 for Modified Stage 2 and Stage 3 for EPs and EHS (implementing the requirements as outlined in the recent IPPS ruling – published August 2, 2017)	Q3 FFY17	Q3FFY18	Completed
SLR Release 5.2 - Cosmetic clean-up of SLR solution only	Q2FFY18	Q3FFY18	Completed
SLR Release 5.3 – Regulatory updates based upon pending CMS new ruling		Q1FFY19	Completed
SLR Open for Program Year 2018 January 7 – May 10, 2019	Q2FFY19	Q3FFY19	Completed
SLR Release 6.0 Testing and deploy to production May 21, 2019	Q3FFY19	Q3FFY19	Completed
SLR Open for Program Year 2019 Attestation January 6 – March 31, 2020	Q3FFY20	Q3FFY20	Pending
SLR Open for Program Year 2020 Attestation January 2 – February 28, 2021	Q3FFY21	Q3FFY21	Pending
SLR Open for Program Year 2021 Attestation June 1 – August 31 2022	Q3FFY21	Q4FFY21	Pending
Expected last incentive payments issued through SLR/MMIS payment interface by September 30 2021	Q4FFY21	Q4FFY21	Pending
SLR Decommissioning December 31, 2021	Q1FFY22	Q1FFY21	Pending
Environmental Scan			
Planning	Q1 FFY16	Q1 FFY17	Completed
Survey Development	Q1 FFY17	Q2 FFY17	Completed
Visits and Surveys	Q1 FFY17	Q2 FFY17	Completed
Collection of Data / Analysis of Information	Q1 FFY17	Q3 FFY17	Completed
Report / SMHP Update	Q2 FFY17	Q3 FFY17	Completed
Outreach to providers in the EHR Incentive Program			
Work on getting providers that previously attested to return to the program	Q3 FFY 18	Q3 FFY 20	Ongoing
Targeted Outreach to prepare providers for Stage 3 Meaningful Use Attestation	Q3 FFY 19	Q1 FFY 20	Ongoing
Targeted Outreach to help providers better understand the importance and workflow of Active Care Team Coordination; Submitting to Public Health Specialized Registries; Sharing electronic health records using the existing functionality of the EHR (moving away from the fax machine)	Q3 FFY 19	Q1 FFY 20	Ongoing
SMHP and IAPD Annual Update			
	Q3 FFY18	Q34FFY18	In Progress
DOM Interoperability Platform Acquisition and Implementation			

MILESTONE	START DATE	END DATE	STATUS
Vendor analysis and review of offerings, including presentations, HIMSS meetings	Q2FFY14	Q2FFY13	Completed
Procure Interoperability Staff	Q2FFY14	Q4FFY14	Completed
Write RFP for Interoperability Platform	Q1FFY15	Q4FFY15	Completed
Open bids for vendors	Q2FFY16	Q2FFY16	Completed
Evaluate bids for vendors	Q2FFY16	Q2FFY16	Completed
Negotiate contract with vendor	Q2FFY16	Q2FFY16	Completed
Implement Interoperability Platform	Q3FFY16	Q2FFY17	Completed
Implement EHR Integrations to allow for C-CDA query and exchange	Q3FFY16	Q4FFY21	Ongoing
Interface with DOM Managed Care Vendors to provide additional clinical data to DOM	Q4FFY17	Q4FFY20	Completed
Complete HIT – MRP MITA crosswalk and alignment to support migration of the CDIP to the MRP	Q2FFY19	Q3FFY20	In Progress
Integrate CDIP with MRP for future clinical data exchange for MITA	Q1FFY20	Q4FFY20	In Progress

6.2 Governing Law

The following is a summary of federal and state law and state administrative rules applicable to the SMHP. DOM is in compliance with all relevant law and rules.

- o 45 C.F.R. Part 170, entitled *Health Information Technology Standards, Implementation Specifications, and Certification Criteria and Certification Programs for Health Information Technology.*

These regulations implement parts of the Public Health Service Act regarding Health Information Technology. The standards, implementation specifications, and certification criteria adopted in these regulations apply to Complete EHRs and EHR Modules and the testing and certification of such Complete EHRs and EHR Modules. These requirements regarding certified EHRs include the requirement known as “meaningful use” which requires that the EHR possess among other things, “capabilities that are necessary to meet the objectives and associated measures [required of eligible professionals, eligible hospitals, and critical access hospitals] and successfully report the clinical quality measures selected by CMS in the form and manner specified by CMS (or the States, as applicable) for the stage of meaningful use that an eligible professional, eligible hospital, or critical access hospital seeks to achieve.” The Mississippi Division of Medicaid (DOM) electronic health record systems fell under this requirement between the dates of July 1, 2013 to June 30, 2014. These regulations do not apply to the Provider Portal.

During the applicable period of July 1, 2013 to June 30, 2014, DOM was in compliance with 45 C.F.R. Part 170 while offering a Certified EHR to Medicaid providers. Because DOM is no longer offering an EHR, these regulations no longer apply.

- 45 C.F.R. Parts 160 and 164, Subparts A and E, known as the *Privacy Rule*, and Subparts A and C, known as the *Security Rule*, implemented under the *Health Insurance Portability and Accountability Act ("HIPAA") of 1996* (as amended by the *Genetic Information Nondiscrimination Act ("GINA") of 2008* and the *Health Information Technology for Economic and Clinical Health Act ("HITECH Act")*, Title XIII of Division A, and Title IV of Division B of the *American Recovery and Reinvestment Act ("ARRA") of 2009*).

HIPAA applies to covered entities, which include health plans, health care clearinghouses, and health care providers who transmit any health information in electronic form in connection with a transaction covered by HIPAA, as well as business associates of covered entities. It requires (1) certain security standards for the protection of electronic protected health information, (2) certain notification requirements if there is a breach of unsecured protected health information, and (3) certain privacy standards regarding individually identifiable information.

During the applicable period of July 1, 2013 to June 30, 2014, DOM was in compliance with HIPAA while offering a Certified EHR to Medicaid providers. For the follow-on product, DOM's Provider Portal was compliant July 1, 2014 to current and will continue to be.

- 42 CFR Part 2, entitled *Confidentiality of Alcohol and Drug Abuse Patient Records*.

These regulations impose restrictions upon the disclosure and use of alcohol and drug abuse patient records which are maintained in connection with the performance of any federally assisted alcohol and drug abuse program.

Where applicable, DOM is compliant with 42 C.F.R. Part 2 through implementation of its sensitive data policy, which prohibited the display/disclosure of alcohol and drug abuse data in the former EHR and continues to prohibit the display/disclosure of such data in the Provider Portal.

- Miss. Code Ann. § 41-21-97, entitled *Confidentiality of Hospital Records and Information; Exceptions*, in regards to persons in need of or receiving mental treatment.

This statute provides that hospital records of and information pertaining to patients in need of mental treatment at treatment facilities or patients being treated by physicians, certain psychologists, licensed master social workers, or licensed professional counselors be confidential, with certain exceptions.

Where applicable, DOM is compliant with Miss. Code Ann. § 41-21-97 through implementation of its sensitive data policy, which prohibited the display/disclosure of data related to mental treatment in the former EHR and continues to prohibit the display/disclosure of such data in the Provider Portal.

- Miss. Code Ann. §§ 41-30-1, *et seq.*, entitled *Alcoholism and Alcohol Abuse Prevention, Control and Treatment*, and implemented under the *Comprehensive Alcoholism and Alcohol Abuse Prevention, Control and Treatment Act of 1974*.

These statutes provide for confidentiality requirements regarding registration and other records of services by approved treatment facilities that provide treatment or rehabilitation services for alcoholics, whether in-patient, intermediate or out-patient.

Where applicable, DOM is compliant with Miss. Code Ann. §§ 41-30-1, *et seq.*, through implementation of its sensitive data policy, which prohibited the display/disclosure of alcohol abuse data in the former EHR and continues to prohibit the display/disclosure of such data in the Provider Portal.

- Miss. Admin. Code 24-3:9.9, entitled *DMH Principles of Ethical and Professional Conduct*.

This rule provides standards of confidentiality and disclosure regarding information of mental health patients.

Where applicable, DOM is compliant with Miss. Admin. Code 24-3:9.9 through implementation of its sensitive data policy, which prohibited the display/disclosure of data related to mental treatment in the former EHR and continues to prohibit the display/disclosure of such data in the Provider Portal.

- Miss. Admin. Code 23-100:3.5 (*Confidentiality of Information*), 3.6 (*Protected Information*), 3.7 (*Release of Information Without Client Consent*), 3.9 (*Safeguarding Confidential Information*), and 23-200:1.1 (*Disclosure of Confidential Information*), regarding the confidentiality of Medicaid beneficiary information.

DOM is in compliance with the above rules.

6.3 Assumptions and Dependencies

The following assumptions and dependencies may affect the SMHP as described in this document:

- Assumptions - this plan assumes that:
 - The DOM Interoperability Platform Acquisition and Implementation will be available for integration and testing per the schedule listed in the table “Master Milestones/Schedule” above;
 - Certification and implementation of EHR systems will be timely in keeping with the MPIP schedule; and
- Dependencies – this plan depends upon:
 - The SLR Upgrades activities listed in the table “Master Milestones/Schedule” above are dependent on Conduent’s ability to meet the timeline dictated by the proposed release schedule.

6.4 Participation in the State Health Information Exchange (MS-HIN)

MS-HIN was neither re-authorized nor funded by the State Legislature in early 2019, and as such shut down most operations on April 15, 2019. Final shutdown of MS-HIN will occur no later than June 30th, 2019.

6.5 Participation in the Sequoia Project (eHealth Exchange)

6.5.1 Alignment with MITA Mission, Goals, and Objectives

CMS expects that the SMHP will be fully aligned with MITA's mission, goals, and objectives that support the Medicaid mission and goals. MITA and Medicaid's mission and goals include:

- Adopt industry standards for data exchange;
- Develop seamless, integrated systems;
- Promote flexible, reusable, and adaptable environment;
- Support interoperability, integration, and an open architecture;
- Provide data that is timely, accurate, useable, and easily accessible;
- Support integration of clinical and administrative data;
- Provide performance measurement;
- Promote an enterprise view and efficient/effective data sharing;
- Coordinate with Public Health and other trading partners; and
- Promote secure data exchange.

MITA and Medicaid's mission and goals are also aligned with federal standards including the FHA and the Sequoia Project (eHealth Exchange) initiative. Furthermore, CMS expects that states will bring their business/technical capabilities in line with MITA 3.0 standards and will advance within the maturity model, at which time states will agree on common data standards, jointly developed business services, and adopt Sequoia Project (eHealth Exchange) standards for interoperability and data.

- MITA Maturity Level 3 [Clinical Data]: Data standards are adopted nationally. Shared repositories of data improve efficiency of access and accuracy of data used, resulting in better business process results.
- MITA Maturity Level 4 [Clinical Data]: Access to standardized Medicaid clinical data through regional data exchange enhances the decision-making process. With clinical evidence, decisions can be immediate, consistent, and decisive.

- MITA Maturity Level 5 [National Interoperability /Sequoia Project (eHealth Exchange)]: Data exchange on a national scale optimizes the decision-making capabilities of the state agency.

DOM has targeted achievement of MITA Maturity Levels 3, 4, and 5 by adopting and aligning with federal standards, including Sequoia Project (eHealth Exchange)

6.5.2 Sequoia Project (eHealth Exchange)

The Sequoia Project (eHealth Exchange) comprises the conventions, standards, and shared infrastructure necessary to facilitate the secure and interoperable exchange of electronic health information between organizations over the Internet. Much has already been accomplished to enable the exchange of clinical data, such as summaries between providers. Considerable infrastructure has already been defined at the national level to provide robust security, patient discovery, authentication and authorization, and auditing support. The Sequoia Project (eHealth Exchange) is a critical part of the national health IT agenda to improve population health by making it possible for health information to follow the consumer, be available for clinical decision making, and support appropriate use of health care information beyond direct patient care.

Technical and policy activities over the course of the next several years will expand the value of Sequoia Project (eHealth Exchange) standards, services, and trust fabric and extend the ability to securely exchange health information to a larger audience. This expansion will support providers wishing to achieve MU of CEHRT and qualify for incentives under the HITECH Act.

The ONC, along with federal agencies, state agencies, and HIEs, is facilitating the growth and connectivity to the Sequoia Project (eHealth Exchange). As such, compliance with the Sequoia Project (eHealth Exchange) is an important element of the HIT Roadmap for the State of Mississippi.

The Sequoia Project (eHealth Exchange) can facilitate the exchange of both clinical and administrative data between providers, payers, patients, and other health care professionals. Agencies involved in the Sequoia Project (eHealth Exchange) include CMS, CDC, SSA, DoD, and VA. The Sequoia Project (eHealth Exchange) supports a wide range of use cases for a wide range of users. A list of common use-cases is provided below:

- Provider to Provider: Providing the ability to locate providers, send referrals, exchange patient medical history, and send messages for the administrative coordination of care.
- Provider to Patient: Providing the ability to send patient reminders, send patient medical history to a Personal Health Record (PHR), and to provide patient medical summaries to patients.
- Laboratory to Provider: Providing the ability to send lab results to providers and submit reportable lab results to public health.
- Provider to Federal Agencies: Providing the ability to send quality reports, surveillance reports, and more to federal agencies.

- Provider to Pharmacy: Providing the ability to send electronic prescriptions for medications and implement drug-drug, drug-allergy, and drug-formulary checks.
- Provider to Payer: Providing the ability to check eligibility, submit claims, receive prior authorization, and submit patient information.

Standards-based connectivity initiatives include Sequoia Project (eHealth Exchange) and the Direct Project. The Sequoia Project (eHealth Exchange) and the Direct Project are separate sets of standards and protocols used for information exchange, while eHealth Exchange is a set of software designed to facilitate information exchange. The Sequoia Project (eHealth Exchange) is meant to facilitate inter-HIE data exchange, while the Direct Project is meant to facilitate Intra-HIE data exchange. The Sequoia Project (eHealth Exchange) is used for states or large Provider organizations to connect with the federal government and to communicate among HIEs.

The Direct Project is used for Provider-to-Provider messaging and communication among smaller health care organizations. eHealth Exchange is a federally funded, Open Source software solution that allows for the secure and private exchange of health information. The eHealth Exchange software, referred to as a eHealth Exchange Gateway, is the “on ramp” to the Sequoia Project (eHealth Exchange) network.

6.5.3 Sequoia Project (eHealth Exchange) Gateways

In order to connect to the Sequoia Project (eHealth Exchange) organizations can utilize a Sequoia Project (eHealth Exchange) certified Gateway.

DOM has implemented the DOM Interoperability Platform, supporting a Sequoia Project (eHealth Exchange) into the DOM ecosystem, **with FHIR**. This Interoperability Platform, with full support of standards such as the Sequoia Project (eHealth Exchange), as well as support for other standards and protocols, will ensure coordination with the federal initiatives and connectivity among the providers, stakeholders, HIEs, other State Medicaid agencies, and other entities associated with DOM and the State of Mississippi.

6.5.4 Connectivity

DOM included requirements for implementing The Sequoia Project (eHealth Exchange) Gateway(s) in the DOM Interoperability Platform, in order to encourage connectivity between DOM, neighboring HIEs and state agencies/departments, and federal agencies.

The DOM Interoperability Platform, and integrated Sequoia Project (eHealth Exchange) Gateway, can support connectivity and interoperability with Provider organizations, including the Provider locations receiving EHR Incentive Payments from DOM. DOM has identified several use cases that this connectivity model can support, including:

- Interoperability with the MSDH MIIX System for Medicaid clinical data;
- Medicaid Clinical data exchange with Medicaid Providers.

The benefits of employing an Interoperability Platform with an integrated Sequoia Project (eHealth Exchange) Gateway(s) Module for DOM are:

- The ability to interact with the aforementioned trading partners (states, federal agencies, HIEs);
- The ability to leverage a standards-based, modular platform with a compliant Gateway for communication and interoperability;
- The ability to utilize the Sequoia Project (eHealth Exchange) for both clinical and future administrative transactions with multiple trading partners; and
- A decrease in dependence on other entities to provide connectivity and interoperability with health care partners.

Integrating the Healthcare Enterprise Statement and Standards Integration to Drive MITA Compliance

IHE was formed by the Healthcare Information and Management Systems Society (HIMSS) and the Radiological Society of North America (RSNA). IHE is an initiative by health care professionals to improve the way health care information is shared between systems and organizations around the world for the purpose of improving the overall quality of health care to patients. The mission of IHE is to achieve interoperability of systems through the precise definition of health care tasks, the specification of standards-based communication between systems required to support those tasks, and the testing of systems to determine that they conform to the specifications. IHE promotes the coordinated use of established standards such as DICOM and HL7 to address specific clinical need in support of optimal patient care.

IHE has developed a set of profiles (Integration Profiles) specifying a clear implementation path, including, but not limited to: IT infrastructure, Cardiology, Anatomic Pathology, Eye Care, Laboratory, Patient Care Coordination, Radiology, and Patient Care Devices. Integration Profiles describe how a workflow crossing multiple systems can be achieved using established standards. The Sequoia Project (eHealth Exchange) core services are developed based on IHE profiles, especially IT Infrastructure.

IHE, in general, is a standard way to share EHRs between providers and major HIT or EHR systems that already are IHE compliant. IHE provides a proven solution to resolve health IT interoperability challenges. The following are some core IHE Integration Profiles enabling data sharing among disparate health information systems:

- PIX/PDQ (Patient Identifier Cross-Referencing and Patient Demographic Query): Allows systems to query a central master patient index for patient demographics and visit information;
- XDS (Cross-Enterprise Document Sharing): Queries/retrieves a list of clinical documents located within a health care community such as RHIO;
- XDR (Cross-Enterprise Document Reliable Interchange): Provides document interchange using a reliable messaging system. This permits document interchange between EHRs, PHRs, and other healthcare IT systems in the

absence of a document sharing infrastructure such as XDS Registry and Repositories;

- XCPD (Cross-Community Patient Discovery): Locates communities for patients and correlates patient identifiers (PID);
- XCA (Cross-Community Access): Queries and retrieves data from partner communities;
- XUA (Cross-Enterprise User Authentication): Provides a means to communicate claims about the identity of an authenticated principal (user, application, and system) in transactions that cross enterprise boundaries;
- ATNA (Audit Trail and Node Authentication): Secures access control via secure nodes and request and retrieve audit logs from external communities;
- CT (Consistent Time): Ensures that system clocks and time stamps of computers in a network are well synchronized; and
- BPPC (Basic Patient Privacy Content): Supports a mechanism to record the patient privacy consent.

EHR systems supporting IHE profiles generally work together better, are easier to implement, and help providers utilize information more efficiently. According to IHE.net, an IHE profile is a technical definition or standard that provides “a common language for purchasers and vendors to discuss the integration needs of healthcare sites and the integration capabilities of healthcare IT products.” To ensure that EHR systems comply with IHE profiles, the IHE hosts “connectathons” to permit vendors to showcase their systems and technology as an IHE compliant vendor.

Many EHR vendors and HIE vendors and suppliers worldwide, including foreign nations, are participating in the IHE workgroups and adopting IHE standards. As participation and adoption of IHE standards and profiles grow, so does the ability for disparate systems and infrastructures to interface, integrate, and communicate data freely.

The State of Mississippi has providers with multiple, diverse EHR systems; therefore, it is critical for DOM to adopt standards, profiles, and an overall interoperable infrastructure to support clinical and administrative data exchange between DOM and stakeholders and other trading partners. By implementing and integrating standards, profiles, and interoperable infrastructure/technologies (including HL7/IHE/HITSP/Sequoia Project (eHealth Exchange) standards, profiles, and technologies), DOM will drive towards and migrate upwards to the higher levels of MITA and MITA compliance.

6.6 Sunset of Medicaid EHR Incentive Program

We plan to continue serving our existing provider population that remain in the EHR Incentive Program by addressing their concerns and questions as they submit their yearly EHR Attestations for Meaningful Use. At this point in time, Mississippi does not plan to increase current staffing requirements. However, as we begin to implement the following goals and objectives, we may find that staffing requirements may need to be adjusted.

6.6.1 Educational Goals / Objectives

Mississippi hosts weekly webinars throughout the year. Each webinar focuses on specific topics relevant to achieving Meaningful Use. Some of our more popular webinars include: Patient Portal Integration, Secure Messaging, and Coordination of Care, which we repeat regularly. Our goal is to host one webinar each week or at least 50 sessions each year (taking into account holidays and slower periods). We find our highest number of attendees join us as Attestation season draws near. During those months, we will often host two webinars per week.

Another strategy we currently use is to publish by-monthly newsletters which emphasize program highlights and regulation updates. Our focus over the past few years has been on Modified Stage 2 requirements with a slight shift toward Stage 3 reporting. At this time we are offering more content that pertains to Stage 3. We plan to use information gained from our Advisory Panels as part of our monthly communications.

6.6.2 Provider Retention Goals and Objectives

The Mississippi Medicaid EHR Incentive Program will reach out to providers across the state and will establish a Provider Advisory Panel by September 30, 2018. This Panel will meet monthly (and more as needed). The purpose of this Advisory Panel is to gain insight and perception as to the needs of our state's provider community. Our goal is to offer assistance to providers that are participating in both the Medicaid EHR Incentive Program and the Quality Payment Program (QPP). We will use this panel to discover best practices and to identify areas where additional support is needed.

In order to re-engage providers that have dropped out of the program, Mississippi plans to review all payment records. Surveys, much like those used in our recent Environmental Scan, will be sent out and focused email and webinar campaigns will be conducted. We also plan to use information garnered from our Provider Advisory Panel as part of our strategy. Our objective is to make contact with every EP that previously participated but dropped out for various reasons. We want to provide educational resources, best practices, support and encourage re-participation.

Our goals are 1) to re-engage providers that dropped out of our program and, 2) to help providers better utilize their existing technology and/or new technology. The targeted benchmarks are accumulative going forward:

- 25% by end of FFY 2018
- 40% by end of FFY 2019
- 60% by end of FFY 2020

6.6.3 Clinical Quality Measures (CQMs) Goals and Objectives

DOM has begun planning for an Electronic Clinical Quality (eCQM) Pilot Program with multiple phases. Phase I of this eCQM Pilot will focus around aggregation of the QRDA clinical quality file from the largest provider in the State's EHR system, the University of Mississippi Medical Center (UMMC). DOM would also have to deploy, as a pilot, an ONC-certified electronic Clinical

Quality Measures (eCQM) tool, which will be capable of utilizing the QRDA data file that is output from UMMC. DOM is in ongoing discussions with UMMC to have UMMC submit QRDA files on a regular basis. DOM would work with the DOM clinical staff and UMMC to select several of the approximately 260 eCQMs that are in the ONC certified eCQM tool. DOM could also work with the tool to build out custom reports on the selected eCQM measures, to allow for reporting of quality to DOM, the State, UMMC providers, and CMS.

Depending on the outcomes of Phase I, the eCQM Pilot could be expanded for additional measures and providers and additional custom reports to analyze and evaluate the quality of care and care improvement with Mississippi Medicaid providers. Both Phases of the pilot could allow DOM to evaluate use-cases such as the analysis of at-risk populations, costs, quality among providers and quality of care, and other eCQM-related use-cases. Currently, DOM is not analyzing eCQM data submitted with yearly EHR Attestations, and DOM is only capturing the data that is reported. Mississippi simply reports this data aggregately to CMS through our Annual Report.

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Appendix A: Acronyms

Acronym	Stands For:
A/I/U	Adopt, Implement or Upgrade
ACO	Accountable Care Organization
ADT	Admission, Discharge, Transfer
ARRA	American Recovery and Reinvestment Act
ATNA	Audit Trail and Node Authentication
BPPC	Basic Patient Privacy Content
BIP	Broadband Initiatives Program
BTOP	Broadband Technology Opportunities Program
CAH	Critical Access Hospital
CCD/C-CDA	Continuity of Care Document; Consolidated-Clinical Document Architecture
CCHIT	Certification Commission for Health Information Technology
CDC	Centers for Disease Control and Prevention
CEHRT	Certified Electronic Health Record Technology
CDI	Clinical Data Infrastructure
CFHC	Coastal Family Health Center
CMS	Centers for Medicare and Medicaid Services
COTS	Commercial Off the Shelf
CPOE	Computerized Physician Order Entry
CQM	Clinical Quality Measures
CT	Consistent Time
DMH	Mississippi Department of Mental Health
DOC	Department of Commerce
DoD	Department of Defense

Acronym	Stands For:
DOM	State of Mississippi Division of Medicaid
e-BEAT	Extension Broadband Education and Adoption Team
EFT	Electronic Funds Transfer
EH	Eligible Hospital
EHR	Electronic Health Record
eMPI	Enterprise Master Patient Index
EMR	Electronic Medical Record
EP	Eligible Professional
ESB	Enterprise Service Bus
EULA	End User License Agreement
FCC	Federal Communications Commission
FFP	Federal Financial Participation
FFY	Federal Fiscal Year
FHA	Federal Health Architecture
FQHC	Federal Qualified Health Center
HDS	Health Data System
HHS	Department of Health and Human Services
HIE	Health Information Exchange
HIPAA	Health Insurance Portability and Accountability Act
HIT	Health Information Technology
HITECH	Health Information Technology for Economic and Clinical Health
HIX	Health Insurance Exchange
HL7	Health Level Seven
IAPD	Implementation Advanced Planning Document
ICD-10	International Classification of Diseases

Acronym	Stands For:
IHE	Integrating the Healthcare Enterprise
IT	information technology
ITECH	Office of Information Technology Management
ITS	Information Technology Services
LTE	Long Term Evolution
MBCC	Mississippi Broadband Connect Coalition
MDES	Mississippi Department of Employment Security
MDHS	Mississippi Department of Human Services
MDM	Master Data Management
MDOC	Mississippi Department of Corrections
MDRS	Mississippi Department of Rehabilitative Services
MRP	Mississippi Medicaid Enterprise System/MMIS Replacement System
MHA	Mississippi Hospital Association
MID	Mississippi Insurance Department
MIIX	Mississippi Immunization Information Exchange System
MITA	Medicaid Information Technology Architecture
MMIS	Medicaid Management Information System
MPIP	Mississippi Provider Incentive Program
MS SLR	Mississippi State Level Registry
MSCHIE	Mississippi Coastal Health Information Exchange
MSDH	Mississippi Department of Health
MS-HIN	Mississippi Statewide Health Information Network (now defunct)
MTOM	WS Message Transmission Optimization Mechanism
MU	Meaningful Use

Acronym	Stands For:
NCPDP	National Council for Prescription Drug Programs
NLR	National Level Repository
NPI	National Provider Identifier
NTIA	National Telecommunications and Information Administration
OAT	Office for Advancement of Telehealth
OFPA	Office of Financial and Performance Audit
ONC	Office of the National Coordinator for Healthcare Information Technology
PHR	Personal Health Record
PIX	Patient Identifier Cross-Referencing
PDQ	Patient Demographic Query
REST	Representational State Transfer
RFP	Request for Proposals
RHC	Rural Health Clinic
RHIO	Regional Health Information Organization
SaaS	Software as a Service
SLR	State Level Registry
SMHP	State Medicaid Health Information Technology Plan
SOP	Strategic and Operational Plan
SRA	Security Risk Analysis
UDDI	Universal Description, Discovery and Integration
UMMC	University of Mississippi Medical Center
VA	Veterans Administration
VLER	Virtual Lifetime Electronic Record
WS-I	Web Services Interoperability

Acronym	Stands For:
XCA	Cross-Community Access
XCPD	Cross-Community Patient Discovery
XDR	Cross-Enterprise Document Reliable Interchange
XDS	Cross-Enterprise Document Sharing
XSLT	Extensible Stylesheet Language Transformation
XUA	Cross-Enterprise User Authentication

Appendix B: Glossary

Term	Definition
4010 Format	The current version of the HIPAA electronic transaction standards.
5010 Format	The new version of the 4010 Format, and required to be in use by January 1, 2012. http://www.ama-assn.org/ama/pub/physician-resources/solutions-managing-your-practice/coding-billing-insurance/hipaahealth-insurance-portability-accountability-act/transaction-code-set-standards/version-5010-electronic.page?
501(c)(3)	Tax-exempt charitable organizations and non-profits - http://www.irs.gov/charities/charitable/article/0,,id=96099,00.html .
Adopt, Implement, or Upgrade (A/I/U)	Defined in CMS regulations at 42 CFR 495.302 as (1) Acquire, purchase, or secure access to certified EHR technology; (2) Install or commence utilization of certified EHR technology capable of meeting meaningful use requirements; or (3) Expand the available functionality of certified EHR technology capable of meeting meaningful use requirements at the practice site, including staffing, maintenance, and training, or upgrade from existing EHR technology to certified EHR technology per the ONC EHR certification criteria.
Allscripts	Vendor providing ePrescribing via the eScript solution with support for drug interactions and contraindications
American Recovery and Reinvestment Act (ARRA)	An economic stimulus package enacted by the 111 th Congress in February 2009, commonly referred to as the Stimulus or The Recovery Act.
Authentication	Authentication is a method or methods employed to prove that the person or entity accessing information has the proper authorization. Generally used to protect confidential information and network or application access.
Authorization	Authorization is a system established to grant access to information. Authorization also establishes the level of access an individual or entity has to a data set and includes a management component—an individual or individuals must be designated to authorize access and manage access once access is approved.
Broadband	A medium that can carry multiple signals, or channels of information, at the same time without interference. Broadband Internet connections enable high-resolution videoconferencing and other applications that require rapid, synchronous exchange of data.
Centers for Disease Control and Prevention (CDC)	Centers for Disease Control and Prevention - http://www.cdc.gov/
Centers for Medicare and Medicaid Services (CMS)	Centers for Medicare and Medicaid Services - http://www.cms.gov/
Certification Commission for Health Information Technology (CCHIT)	A private not-for-profit organization functioning as an ONC-Authorized Testing and Certification Body of electronic health records.
Children's Health Insurance Program (CHIP)	http://www.cms.gov/home/chip.asp

Term	Definition
Comprehensive Health Insurance Risk Pool Association	Comprehensive Health Insurance Risk Pool Association - http://www.mississippihealthpool.org/
Computerized Physician Order Entry (CPOE)	Computer-based systems that automate and standardize the clinical ordering process in order to eliminate illegible, incomplete, and confusing orders. CPOE systems typically require physicians to enter information into predefined fields by typing or making selections from on-screen menus. CPOE systems often incorporate, or integrate with, decision support systems.
Conduent	Vendor providing the Medicaid Management Information System and services (MMIS) to provide core administrative capabilities for DOM. Conduent also provides the MS SLR for tracking provider attestations to the MPIP. Previously known as Xerox.
Continuity of Care Document (CCD); Consolidated-Clinical Document Architecture (C-CDA)	An electronic document exchange standard for sharing patient summary information, including the most commonly needed pertinent information about current and past health status in a form that can be shared by all computer applications, such as Web browsers and EMR/EHR software systems.
CORE Phase II Certified	Certification for HIPAA EDI Transaction Types - http://www.cagh.org/CORE_phase2.php .
Critical Access Hospital (CAH)	A hospital that is certified to receive cost-based reimbursement from Medicare. The reimbursement that CAHs receive is intended to improve their financial performance and thereby reduce hospital closures.
Data Warehouse (DW)	A large database that stores information like a data repository but goes a step further, allowing users to access data to perform research-oriented analysis.
Decision Support System (DSS)	A computer-based information system that supports business or organizational decision-making activities intended to help decision makers compile useful information from a combination of raw data, documents, personal knowledge, or business models to identify and solve problems and make decisions.
De-identified health information	De-identified health information consists of individual health records with data redacted or edited to prevent it from being associated with a specific individual. See the HIPAA Privacy Rule for de-identification guidelines. The term is defined at 45 C.F.R. § 160.103.
Department of Defense (DoD)	Department of Defense - http://www.defense.gov/
Department of Health and Human Services (HHS)	United States Department of Health and Human Services - http://www.hhs.gov/
Direct Project	Provides point-to-point messaging between providers and other healthcare related organizations – http://directproject.org
EA Server	Server enabling existing applications to leverage SOA architectures, J2EE, and CORBA.
EDIFECs Certified	EDIFECs Certified - http://www.edifecs.com/

Term	Definition
Electronic Data Interchange (EDI)	Electronic Data Interchange – The electronic transmission of structured data between organizations.
EHNAC Accredited	Electronic Healthcare Network Accreditation Commission - http://www.ehnac.org/
Enterprise Master Patient Index (eMPI)	Master Patient Indices link smaller organizational level MPIs together to identify, match, merge, de-duplicate, and clean patient records to create a clear view of a patient’s medical record.
Electronic Health Record (EHR)	An electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards that can be created, managed, and consulted by authorized clinicians and staff across more than one health care organization.
Electronic Medical Record (EMR)	An electronic record of health-related information for an individual that can be created, gathered, managed, and consulted by authorized clinicians and staff within one health care organization.
Envision	Mississippi’s HIPAA compliant Medicaid Management Information System (MMIS) developed by Affiliated Computer Systems (ACS).
e-prescribing	Practice in which drug prescriptions are entered into an automated data entry system (handheld, PC, or other), rather than handwriting them on paper. The prescriptions can then be printed for the patient or sent to a pharmacy via the Internet or other electronic means. https://www.cms.gov/eprescribing/
Federal Health Architecture (FHA)	A collaborative body composed of several federal departments and agencies, including the Department of Health and Human Services (HHS), the Department of Homeland Security (DHS), the Department of Veterans Affairs (VA), the Environmental Protection Agency (EPA), the United States Department of Agriculture (USDA), the Department of Defense (DOD), and the Department of Energy (DOE). FHA provides a framework for linking health business processes to technology solutions and standards, and for demonstrating how these solutions achieve improved health performance outcomes.
Federally Qualified Health Center (FQHC)	A health center that receives cost-based reimbursement for Medicare and Medicaid patients as a mechanism to increase primary care services to high risk populations in underserved areas.
Formulary	A list of medications (both generic and brand names) that are covered by a specific health insurance plan or pharmacy benefit manager (PBM), used to encourage utilization of more cost-effective drugs. Hospitals sometimes use formularies of their own, for the same reason.
Geocoded Interoperable Population Summary Exchange (GIPSE)	GIPSE is a data format created by the U.S. Centers for Disease Control and Prevention (CDC) to allow the electronic exchange of health condition/syndrome summary data that has been stratified by a number of variables, including geography. GIPSE data will be utilized by public health agencies in the U.S. to conduct situational awareness, including early event detection and monitoring, for potential public health events.
GrabIt	A tool provided by ACS that is able to search, read and download binary files

Term	Definition
Health Information Technology (HIT)	The application of information processing involving both computer hardware and software that deals with the storage, retrieval, sharing, and use of health care information, data, and knowledge for communication and decision-making.
Health Information Technology for Economic and Clinical Health Act (HITECH)	Legislation enacted under Title XIII of the American Recovery and Reinvestment Act (ARRA) of 2009. The purpose of HITECH was to promote spending to expand adoption rates of HIT.
Health Information Exchange (HIE)	The electronic movement of health-related information among organizations according to nationally recognized standards. Health Information Exchange is a term commonly used to describe a Regional Health Information Organization (RHIO). The notion of HIE is the precursor to RHIO and is used interchangeably when discussing RHIO.
Health Insurance Exchange (HIX)	As part of the Affordable Care Act (ACA), states are to establish, implement and operate a Health Insurance Exchange by January 1, 2014 that acts as a marketplace for individuals seeking affordable insurance options. http://www.healthcare.gov/news/blog/health_insurance_exchanges.html
Health Insurance Portability and Accountability Act of 1996 (HIPAA)	A federal law intended to improve the portability of health insurance and simplify health care administration. HIPAA sets standards for electronic transmission of claims-related information and for ensuring the security and privacy of all individually identifiable health information. http://www.hhs.gov/ocr/privacy/
Health Level 7 (HL7)	HL7 is one of several American National Standards Institute (ANSI)-accredited standards-developing organizations operating in the health care arena. Health Level 7's domain is clinical and administrative data.
Healthcare Information Technology Standards Panel (HITSP)	Sponsored by ANSI under a contract from ONC, HITSP is a public/private partnership dedicated to facilitating the harmonization of consensus-based standards necessary to enable the widespread interoperability of health care information in the United States.
Indian Health Service (IHS)	Indian Health Service - http://www.ihs.gov/
Integrating the Healthcare Enterprise (IHE)	An initiative by healthcare professionals and industry to improve the way computer systems in healthcare share information. IHE promotes the coordinated use of established standards such as DICOM and HL7 to address specific clinical needs in support of optimal patient care.
Interoperability	HIMSS' definition of interoperability is "ability of health information systems to work together within and across organizational boundaries in order to advance the effective delivery of healthcare for individuals and communities." For further information, visit HIMSS Interoperability Definition and Background (PDF).
Java Surveillance Utilization Review System (J-SURS)	A suite of claims-based, data mining software applications designed to identify potentially fraudulent or abusive practices by both those who provide and receive healthcare service.
Meaningful Use (MU)	Meaningful Use - https://www.cms.gov/EHRIncentivePrograms/30_Meaningful_Use.asp

Term	Definition
Medicaid Information Technology Architecture (MITA)	A federal, business-driven initiative that affects the Medicaid enterprise in all states by improving Medicaid program administration, via the establishment of national guidelines for processes and technologies. MITA is a common business and technology vision for state Medicaid organizations that supports the unique needs of each state. https://www.cms.gov/MedicaidInfoTechArch/
Mississippi Coastal Health Information Exchange (MSCHIE)	The predecessor HIE to MS-HIN.
Mississippi Coordinated Access Network (MississippiCAN)	A Coordinated Care Program for Mississippi Medicaid beneficiaries to improve access to needed medical services, improve quality care, and improve efficiencies and cost effectiveness.
Mississippi Department of Employment Security (MDES)	Mississippi Department of Employment Security - http://www.mdes.ms.gov/
Mississippi Department of Human Services (MDHS)	Mississippi Department of Human Service - http://www.MDHS.state.ms.us/
Mississippi Department of Mental Health (DMH)	Mississippi Department of Mental Health - http://www.dmh.state.ms.us/
Mississippi Department of Rehabilitation Services (MDRS)	Mississippi Department of Rehabilitation Services - http://www.mdrs.state.ms.us/
Mississippi Division of Medicaid	Mississippi Division of Medicaid - http://www.medicaid.ms.gov/
Mississippi EHR Provider Incentive Program	MS EHR PIP - https://msehrpip.wordpress.com
Mississippi Health Information Network (MS-HIN)	The Mississippi Health Information Exchange (now defunct).
Mississippi Information Technology Services (ITS)	Mississippi Information Technology Services - http://www.its.ms.gov/
Mississippi Insurance Department (MID)	Mississippi Insurance Department - http://www.mid.state.ms.us/
Mississippi State Department of Health (MSDH)	Mississippi State Department of Health - http://www.msdh.state.ms.us/
National Coordinator for Health Information Technology (ONC)	Previously referred to as ONCHIT, ONC provides leadership for the development and nationwide implementation of an interoperable health information technology infrastructure to improve the quality and efficiency of health care and the ability of consumers to manage their care and safety. http://healthit.hhs.gov/portal/server.pt/community/healthit_hhs_gov_home/1204
Personal Health Record (PHR)	An electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards and that can be drawn from multiple sources while being managed, shared, and controlled by the individual.

Term	Definition
Pharmacy Benefit Management (PBM)	A third party administrator of prescription drug programs primarily responsible for processing and paying prescription drug claims. They also are responsible for developing and maintaining the formulary, contracting with pharmacies, and negotiating discounts and rebates with drug manufacturers.
Physician Quality Reporting Initiative (PQRI)	A voluntary program that provides a financial incentive to physicians and other eligible professionals who successfully report quality data related to services provided under the Medicare Physician Fee Schedule (MPFS).
Portal	A Web site that offers a range of resources, such as e-mail, chat boards, search engines, and content.
Prospective Payment System	A payment mechanism for reimbursing hospitals for inpatient health care services in which a predetermined rate is set for treatment of specific illnesses. The system was originally developed by the U.S. federal government for use in treatment of Medicare recipients.
Provider	A provider is an individual or group of individuals who directly (primary care physicians, psychiatrists, nurses, surgeons, etc) or indirectly (laboratories, radiology clinics, etc) provide health care to patients. In the case of this SMHP and the MPIP, provider refers to both Eligible Professionals (EPs) and Eligible Hospitals (EHs).
Public Health	Public health is the art and science of safeguarding and improving community health through organized community effort involving prevention of disease, control of communicable disease, application of sanitary measures, health education, and monitoring of environmental hazards.
Quality Reporting Document Architecture (QRDA)	The emerging quality reporting architecture, based upon the HL7 CDA document.
Real-Time Innovations (RTI)	A company that develops a middleware solution.
Regional Extension Center (REC)	An organization that has received funding under the Health Information Technology for Economic and Clinical Health Act to assist health care providers with the selection and implementation of electronic health record technology.
Regional Health Information Organization (RHIO)	A health information organization that brings together health care stakeholders within a defined geographic area and governs health information exchange among them for the purpose of improving health and care in that community.
Rural Health Clinic (RHC)	A clinic certified to receive special Medicare and Medicaid reimbursement, intended to increase primary care services for Medicaid and Medicare patients in rural communities.
Secure Sockets Layer (SSL)	A cryptographic protocol that enables secure communication over the internet.
Software as a Service (SaaS)	A business model for software delivery in which software is hosted in the cloud and accessed by users through a client.

Term	Definition
Stakeholder	A stakeholder is any organization or individual that has a stake in the exchange of health information, including health care providers, health plans, health care clearinghouses, regulatory agencies, associations, consumers, and technology vendors.
Telehealth	The use of telecommunications and information technology to deliver health services and transmit health information over distance. Sometimes called telemedicine.
Telemedicine	The use of telecommunications and information technology to deliver health services and transmit health information over distance. Sometimes called telehealth.
Transaction Types (EDI)	<p><u>270/271</u> – EDI Healthcare Eligibility/Benefit Inquiry (270) and EDI Healthcare Eligibility/Benefits Response (271)</p> <p><u>276/277/277U</u> – EDI Healthcare Claim Status Request (276) and EDI Healthcare Claim Status Notification (277)</p> <p><u>278</u> – EDI Healthcare Service Review Information (278)</p> <p><u>820</u> – EDI Payroll Deducted and other group Premium Payment for Insurance Products (820)</p> <p><u>834</u> – EDI Benefit Enrollment and Maintenance Set (834)</p> <p><u>835</u> – EDI Healthcare Claim Payment/Advice Transaction Set</p> <p><u>837P/D/I</u> – EDI Healthcare Claim Transaction Set (837), Professional (P), Dental (D), and Institutional (I)</p>
Transmission Control Protocol and Internet Protocol (TCP/IP)	Commonly known together as the Internet Protocol Suite.
Vendors	Vendors are organizations that provide services and supplies to other organizations. In the context of health information exchange, the term usually refers to technology vendors who provide hardware or software, such as electronic health records, e-prescribing technology, or security software.
Veteran’s Affairs	Veteran’s Affairs - http://www.va.gov/
Virtual Private Network	Provides secure and remote access to a private Local Area Network via the Internet or other networks.
Xerox	See Conduit

Appendix C: HIE Readiness Assessment Focus Group Results

The HIE Readiness Assessment was conducted in June 2010 for the Mississippi Department of Information Technology Services (ITS) for its Strategic and Operational Planning (SOP) effort. The assessment included interviews with representatives of 27 facilities across Mississippi that were conducted with a cross section of urban and rural facilities, including both clinics and hospitals. This assessment was aimed primarily at gathering information from hospitals but included certain other entities, such as hospital clinics, FQHCs, and the Indian Tribe.

Two provider focus group meetings were conducted in Mississippi on August 18th and 19th, 2010. The 18th meeting was held in Jackson and had 20 participants representing 12 different providers. The 19th meeting was conducted in Hattiesburg and had 21 participants representing 9 different providers.

Each group was asked the same basic question set. Based on the responses to the basic questions, additional follow up questions were asked for clarification and additional information. The results of each focus group were similar. Therefore, these results are combined and shown as a collective response.

Question 1 – How many participants are using an Electronic Health Record application?

- 11 out of 20 in Jackson.
- 12 out of 21 in Hattiesburg.

Question 2 – What EHR application are you using?

- Allscripts
- Relay Health
- Greenway
- Epic associated with tertiary hospital
- Practice Works

Question 3 – How long have you been using the EHR application?

Most were relatively recent acquisitions with two (2) years being the longest for three (3) providers.

Question 4 – Describe your experience with EHR technology to date.

- On All Scripts (3 different responders).
 - Older physicians not as happy as younger physicians as their work flow is altered
 - Of 25 total physicians, 9 are fully using it while the rest are adjusting to the new system
 - One group was dissatisfied and looking to convert to tertiary hospital system
- Greenway user is having a positive experience and sees definite cost savings. No lost charts.
- Billing has become easier.
- Recent move to EPIC, 240+ physicians in locations over southern part of state are using the EHR and the organization could not function without it.
 - Does not know how they would ever go back to paper record, but does not know how to show meaningful use
- Some are using Voice recognition for clinical notes.
- Some physicians are using a point and click system with customized templates
- Customization of templates by each physicians is important

Question 5 – Why did you or why are you considering making the change to an electronic health records system?

- Driven by the fear of lost reimbursement not the incentive dollars
- Doctors concerned about loss of volume which is pay criteria when convert to EMR
- Change for the doctor must be coordinated with hospital EMR so change is not done twice.
- Incentive is nice, not primary driver
- Most would do EMR adoption without incentive because:
 - Improved quality of care
 - Difficult to manage volume of data with paper, they are running out of storage space
 - Federal requirement
 - Access information anywhere
 - Patient safety, easier to read notes and comments, prescription built in, automatic data feeds to different applications
 - Ease of use
 - Needed to recruit new doctors

Question 6 – For those participants without an EHR application, what are your plans?

- Have been looking for a year and hope to make a decision later this year
- Tried one system but it did not integrate with existing practice management system so they are continuing to look
- Five participants indicated they were unfamiliar with EHR applications in general and were looking for assistance (They were introduced to the Regional Extension Center staff at the end of the focus group meeting)

Question 7 – What features are you seeking in an electronic health record application?

- Ease of use
- Product suited to specialty
- Customization to fit the needs of individual doctor or specialty
- Integration with key services like labs
- Legibility leading for improved patient safety
- Customized templates to allow for additional detail information
- Assistance meeting quality metrics
- Improved access to data
- Improved coding features for better billing and collection

Question 8 – What are the primary resistance points for adoption of an EHR application?

- Takes time to learn a new process
- Physicians don't like information they are getting. It seems template driven with a lot of irrelevant data to wade through to get to the data physicians really need
- Don't like the templates, no time to customize
- Don't like the workflow structure
- Medicine by check box, don't like the built in intelligence
- Change
- Spending too much time looking at a computer and not enough face to face time with the patient

Question 9 – Are you aware of the Medicaid provider incentive program?

Most participants had heard of the incentive program but less than half had any real knowledge of how it worked and what they needed to do to apply. Of those familiar with the program (about 30 percent), they indicated they would apply for Medicaid because it paid more than the Medicare program.

Question 10 – Does the incentive influence affect your decision making about acquiring an EHR application?

Most of the respondents were moving forward without the incentives and a majority was skeptical the incentive program would actually pay them as promised.

Question 11 – When do you think you will apply for stimulus funds?

About half indicated they would apply in 2011. The remainder were unsure when they might apply because they did not know when they would convert to an EHR.

Question 12 – If you apply for Medicaid stimulus finds, Medicaid will be required to verify your eligibility. What would make verification easiest on your practice?

- Know the requirements and expectations from the beginning
- Keep it simple with minimal impact on administrative staff which adds expense
- Educate people on the process and how to meet meaningful use
 - PQRI example of what not to do, took too much time to get results and understand if submission was successful
 - Target audience to include public health
- Use random sampling for checking compliance and audits
- Do not want to do have to complete special data extractions. Follow the normal work flow practices that can be done as part of everyday business
- It should be as electronic as possible

Question 13 – Are you aware of Meaningful Use and what it may require?

- Most participants reported a limited understanding of Meaningful Use
- Most participants reported they were aware Meaningful Use was coming
- Most participants were aware there were quality measures in their future but lacked specifics on them

Question 14 – What is the value of an improved electronic claims submission process?

- Ability to bill every day with shorter turnaround times on reimbursement
- Will improve the throughput success
- Get money faster from Medicaid
- Medicare not impacted due to having set schedule and cutoffs
- Easier to address billing audits
- Billing success based on type of service performed, primary OK, specialty may cause issues
- Coding level is enhanced and good EHR's can suggest code based on various components
- Documentation is there to help patients
- Helps with correct diagnosis coding
- From HIPPA standpoint, it helps track who is looking at records so there is better privacy and security

Question 15 – What is your experience with Medicaid in Mississippi?

- Do not like time it takes to approve claims. Denial two months after the treatment causes financial problems for clinics
- Process OK, reimbursement rate is too low
- Provider enrollment takes too long, some clinics not aware they can back bill new enrollments
- Deal with CHIPS and Medicaid, you do not ever know what to expect out of them. They are unpredictable
- Call center at Medicaid does not have the intelligence to deal with issues on phone. Frustrates the clinic
- Must ask for extended visits for kids and prior authorizations. Creates a lot of extra work for physicians

Question 16 – How many have heard about the Share Point EHR being offered by the Division of Medicaid in Mississippi

- 2 of 21 in Hattiesburg
- 5 of 20 in Jackson

Participant questions for the Moderator

Participants were provided an opportunity to ask questions of the moderator. The questions included:

- What is the Medicaid six year span for incentive payments and what is the relationship to relation to Meaningful Use?
- How do submit claims in the future without being ICD10 compliant? Does it require providers to have a certified EMR?
- Can you explain the Medicaid and Medicare incentive and disincentive programs?
- Are private payers incenting EMR adoption as well as Medicaid?
- Incentives not helpful if providers do not have the money to invest in EHR up front. How can Medicaid help financially strapped doctors get the money to get the technology
- Need to provide doctors a system to help doctors understand process and options
- States could tack on additional requirements for meaningful use. Is Mississippi planning on doing that?
- How would I find out what program I should choose and how do I apply for the incentives?

Appendix D: Mississippi Hospital Association – IT Survey

Hospital Name:	Health Information System (HIS)	Electronic Health Record	Computerized Physician Order Entry	Lab Information System	Radiology Information System	Picture Archiving and Comm. System	Emergency Department	Pharmacy	Document Imaging
Baptist Memorial Hospital Booneville									
Baptist Memorial Hospital Golden Triangle									
Baptist Memorial Hospital Union County	yes	yes		yes	yes	yes			yes
Calhoun Health Services									
Central Mississippi Medical Center									
Delta Regional Medical Center	yes			yes	yes	yes	yes	yes	
Field Memorial Community Hospital	yes	yes		yes	yes	yes	yes	yes	yes
Franklin County Memorial Hospital	yes								
George Regional Hospital	yes	yes	yes	yes	yes	yes	yes	yes	yes
Greenwood Leflore Hospital	yes			yes	yes	yes		yes	
Hancock Medical Center	yes			yes	yes	yes		yes	
Hardy Wilson Memorial Hospital					yes	yes			
Highland Community Hospital									
Jasper General									
Jefferson Davis Community Hospital	yes				yes	yes		yes	
King's Daughters Hospital Yazoo City	yes	yes			yes	yes		yes	
King's Daughters Medical Center	yes	yes		yes	yes	yes	yes	yes	yes

Hospital Name:	Health Information System (HIS)	Electronic Health Record	Computerized Physician Order Entry	Lab Information System	Radiology Information System	Picture Archiving and Comm. System	Emergency Department	Pharmacy	Document Imaging
Leake Memorial Hospital					yes	yes			yes
LTAC of Greenwood	yes								
Magee General Hospital	yes			yes		yes			
Magnolia Regional Health Center	yes	yes	yes	yes	yes	yes	yes	yes	yes
Methodist Rehabilitation Center	yes					yes		yes	
Mississippi Baptist Medical Center	yes	yes	yes	yes	yes	yes		yes	yes
Natchez Regional Medical Center	yes			yes	yes	yes		yes	yes
Neshoba Hospital									
Neshoba County General Hospital - Nursing Home	yes			yes		yes	yes	yes	
North Mississippi Medical Center-luka									
North Mississippi State Hospital	yes							yes	
North Oak Regional Medical Center	yes				yes	yes		yes	
Noxubee General CAH	yes		yes	yes	yes			yes	
Patients' Choice - Humphreys County									
Patients Choice Medical Center of Claiborne County						yes			
Perry County General Hospital	yes			yes	yes	yes		yes	yes
Quitman County Hospital, LLC				yes				yes	yes
Select Specialty									

Hospital Name:	Health Information System (HIS)	Electronic Health Record	Computerized Physician Order Entry	Lab Information System	Radiology Information System	Picture Archiving and Comm. System	Emergency Department	Pharmacy	Document Imaging
Hospital - Gulf Coast, Inc.									
Singing River Health System	yes	yes	yes	yes	yes	yes		yes	
South Central Regional Medical Center									
South Pike Hospital Association	yes	yes	yes	yes	yes	yes		yes	yes
St. Dominic - Jackson Memorial Hospital	yes	yes	yes	yes	yes	yes	yes	yes	yes
Tallahatchie General Hospital									
TYLER HOLMES MEMORIAL HOSPITAL									
UMMC									
University Hospitals and Health System									
University of Mississippi Health Center	yes			yes	yes	yes			yes
Walthall County General Hospital	yes			yes		yes		yes	
Wesley Medical Center	yes	yes		yes	yes	yes	yes	yes	yes
Winston Medical Center									
Yalobusha General Hospital	yes					yes			
Total Responding Yes	28	11	7	21	22	27	8	23	14

Appendix E: DOM Medicaid Provider Survey Results

Mississippi Division of Medicaid Provider Survey Results

The Medicaid Eligible Provider survey was launched in July of 2010 and consisted of a multi-part questionnaire that was made available online through the Division of Medicaid website and the MMIS website through September 2010. The questionnaire consisted of 22 questions, both in multiple choice and text entry format, concerning the present and planned use of health information technology among Eligible Professionals in the State. Following are the results of the survey:

1. In which county is your primary practice located? (Select County from drop-down list)								
Adams	Alcorn	Amite	Attala	Benton	Bolivar	Calhoun	Carroll	Chickasaw
5	0	0	1	0	0	2	0	1
Choctaw	Claiborne	Clarke	Clay	Coahoma	Copiah	Covington	Desoto	Forrest
0	0	1	1	0	0	0	4	2
Franklin	George	Greene	Grenada	Hancock	Harrison	Hinds	Holmes	Humphreys
0	0	0	1	0	5	11	0	0
Issaquena	Itawamba	Jackson	Jasper	Jefferson	Jefferson Davis	Jones	Kemper	Lafayette
0	2	3	0	0	0	0	0	7
Lamar	Lauderdale	Lawrence	Leake	Lee	Leflore	Lincoln	Lowndes	Madison
0	9	0	1	2	0	2	3	3
Marion	Marshall	Monroe	Montgomery	Neshoba	Newton	Noxubee	Oktibbeha	Panola
0	1	3	0	1	1	0	1	0
Pearl River	Perry	Pike	Pontotoc	Prentiss	Quitman	Rankin	Scott	Sharkey
3	0	1	1	0	0	4	0	1
Simpson	Smith	Stone	Sunflower	Tallahatchie	Tate	Tippah	Tishomingo	Tunica
0	1	0	1	0	2	0	1	1
Union	Walthall	Warren	Washington	Wayne	Webster	Wilkinson	Winston	Yalobusha
2	1	0	1	0	0	0	0	0
Yazoo	Out of State	Response Count						
0	1	94						

2. Please enter your contact information or that of your designee.

Answer Options	Response Percent	Response Count
Name:	100.0%	94
Company:	100.0%	94
Address:	100.0%	94
Address 2:	33.0%	31

City/Town:	100.0%	94
State:	100.0%	94
ZIP:	100.0%	94
Country:	96.8%	91
Email Address:	100.0%	94
Phone Number:	100.0%	94
<i>answered question</i>		94
<i>skipped question</i>		8

3. What is your total number of locations and overall staffing level for each of the positions listed below? (Estimates are acceptable) (Select number from drop-down list)

Answer Options	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	over 20
Locations	0	63	13	3	2	4	1	1	0	0	3	0	0	0	0	0	2	0	0	0	0	2
Physicians	15	29	16	10	5	2	2	2	2	0	0	2	2	1	1	0	1	0	0	0	0	4
Dentists	69	14	6	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Physician Assistants	84	4	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nurse Practitioner	45	21	12	6	3	2	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	1
Nurse Midwives	84	5	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Staff	0	6	5	8	6	9	2	3	6	6	5	2	3	2	0	2	1	2	0	0	1	25

4. Which of the following software products or services are you currently using?

Answer Options	Yes	No	Response Count
Practice Management	79	11	90
Billing Services Management	58	27	85
Electronic Prescribing	37	44	81
Electronic Medical Records	41	41	82
Electronic Health Records	32	47	79
Clinical Quality Measures	18	54	72
Clinical Decision Support	15	57	72
<i>answered question</i>			94
<i>skipped question</i>			8

5. Which of your current software products or services are certified?

Answer Options	CCHIT Certification	Other Certification	No Certification	Not Used	Not Sure	Response Count
Practice Management	26	0	8	10	47	91
Billing Services Management	18	3	6	17	37	81
Electronic Prescribing	21	2	7	30	23	83
Electronic Medical Records	23	2	5	29	23	82

Electronic Health Records	16	2	5	38	21	82
Clinical Quality Measures	11	1	6	34	21	73
Clinical Decision Support	8	1	6	34	24	73
<i>answered question</i>						94
<i>skipped question</i>						8

6. Which of the following software products or services do you plan to add or upgrade to meet the EHR certification requirements?

Answer Options	Yes	No	Response Count
Practice Management	46	27	73
Billing Services Management	32	33	65
Electronic Prescribing	55	26	81
Electronic Medical Records	55	22	77
Electronic Health Records	52	27	79
Clinical Quality Measures	48	27	75
Clinical Decision Support	44	29	73
<i>answered question</i>			94
<i>skipped question</i>			8

7. Your software or services are provided by:

Answer Options	Yes	No	Response Count
In house Commercial software	48	26	74
On line Commercial Service	23	39	62
Custom developed software	18	44	62
Outsourced Service Bureau - In state	1	53	54
Outsourced Service Bureau - Out of state	8	49	57
None	3	44	47
Clearing House	38	24	62
<i>answered question</i>			94
<i>skipped question</i>			8

8. Please provide your software vendor/product information: (If outsourced, please include service bureau name)

Answer Options	Response Percent	Response Count
Software Vendor Name	98.8%	83
Software Product	86.9%	73
Software Version	65.5%	55
Service Bureau Name	26.2%	22
<i>answered question</i>		84

skipped question

18

9. What is the cost range for your planned software upgrades? (Select amounts from drop-down list)

Minimum

Answer Options	\$0	\$10,000	\$20,000	\$30,000	\$40,000	\$50,000	\$60,000	Over \$60,000	Response Count
Estimated Range	26	23	10	5	2	3	2	10	81

Maximum

Answer Options	\$0	\$10,000	\$20,000	\$30,000	\$40,000	\$50,000	\$60,000	Over \$60,000	Response Count
Estimated Range	6	17	12	4	7	10	5	14	75

Question Totals

answered question **81**

skipped question **21**

10. Does your practice exchange or plan to exchange health information with the following?

Answer Options	Yes-Currently	Yes-Planned	Not Planned	Response Count
Hospitals	25	30	36	91
Pharmacies	32	36	25	93
Lab/X-ray	27	28	36	91
Other Physicians	15	42	34	91
Governing Agencies	14	30	41	85
Other	1	4	46	51
Other (please specify)				4

answered question **94**

skipped question **8**

11. Does your practice use or plan to use Telemedicine?

Answer Options	Yes	No	Response Count
Providing Care	17	69	86
Consultation with other physicians or hospitals	25	60	85

View patient information at home	23	59	82
Other	3	48	51
Other (please specify)			2
<i>answered question</i>			87
<i>skipped question</i>			15

12. Does your practice use computers in the exam room?		
Answer Options	Response Percent	Response Count
Yes	50.0%	47
No	50.0%	47
If yes, what are the uses?		43
<i>answered question</i>		94
<i>skipped question</i>		8

13. What are your practice specialties?	
Answer Options	Response Count
	90
<i>answered question</i>	
90	
<i>skipped question</i>	
12	

14. Please estimate the percentage of services by payer type: (Total should equal 100%) (Select percentage from drop-down list)															
Answer Options	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
Commercial Carriers	3	0	0	0	2	0	0	1	0	7	1	0	0	0	4
Medicare	3	0	0	0	3	0	0	1	0	6	0	1	3	1	3
Medicaid	2	1	1	1	9	0	1	2	0	7	1	1	0	0	3
Private/Uninsured	3	3	4	3	15	2	0	1	0	17	0	0	1	0	7
Answer Options	16%	17%	18%	19%	20%	21%	22%	23%	24%	25%	26%	27%	28%	29%	30%
Commercial Carriers	0	0	0	0	11	2	1	1	1	7	0	0	0	1	10
Medicare	0	1	1	1	3	0	0	0	0	8	1	1	0	1	9
Medicaid	0	2	1	2	8	0	1	1	0	12	0	1	1	0	5
Private/Uninsured	0	0	0	0	7	0	0	0	0	4	3	0	1	0	4
Answer Options	31%	32%	33%	34%	35%	36%	37%	38%	39%	40%	41%	42%	43%	44%	45%
Commercial Carriers	1	0	0	1	3	2	0	0	0	6	1	2	0	0	3
Medicare	0	0	1	0	4	0	0	0	0	3	0	0	0	1	2
Medicaid	1	1	1	0	1	0	0	0	0	7	0	0	0	0	2
Private/Uninsured	0	0	0	0	2	0	0	1	0	2	0	0	2	0	1
Answer Options	46%	47%	48%	49%	50%	51%	52%	53%	54%	55%	56%	57%	58%	59%	60%
Commercial Carriers	0	1	0	0	8	1	0	0	0	0	0	1	0	0	3
Medicare	0	1	2	1	2	0	0	0	0	2	0	0	0	0	5
Medicaid	0	0	0	0	3	0	0	0	0	2	0	0	0	0	1
Private/Uninsured	1	0	0	1	2	0	1	0	0	0	0	0	0	0	1
Answer Options	61%	62%	63%	64%	65%	66%	67%	68%	69%	70%	71%	72%	73%	74%	75%
Commercial Carriers	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Medicare	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0
Medicaid	0	0	0	0	1	0	0	0	0	2	0	0	0	0	2
Private/Uninsured	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Answer Options	76%	77%	78%	79%	80%	81%	82%	83%	84%	85%	86%	87%	88%	89%	90%
Commercial Carriers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Medicare	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
Medicaid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Private/Uninsured	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Answer Options	91%	92%	93%	94%	95%	96%	97%	98%	99%	100%	<i>answered question</i>				93
Commercial Carriers	0	0	0	0	0	0	0	0	0	0	<i>skipped question</i>				9
Medicare	0	0	0	0	0	0	0	0	0	0					
Medicaid	0	0	0	0	0	0	0	1	1	3					
Private/Uninsured	0	0	0	0	0	0	0	0	0	0					

15. What is your level of interest in the following:

Answer Options	High	Medium	Low	Response Count
Receiving updates on EHR information	53	20	17	90
Training on EHR Implementation	45	21	25	91
Available incentive payments	78	7	8	93
Open Forum Discussions	37	29	25	91
<i>answered question</i>				94
<i>skipped question</i>				8

16. Do you plan to apply for the Medicaid Provider Incentive Payments for implementing EHR technology?

Answer Options	Response Percent	Response Count
Yes	83.0%	78
No	17.0%	16
If yes, in what year do you plan to apply (2011 - 2016)		78
<i>answered question</i>		94
<i>skipped question</i>		8

17. If you plan to apply for the Medicaid Provider Incentive Payments, in which state do you plan to apply? (Select state from drop-down list)

State	MS	AL	AR	LA	TN	Other	Response Count
Apply in	82	0	0	0	0	1	83
<i>answered question</i>							83
<i>skipped question</i>							19

18. Do you plan to apply for the Medicare Provider Incentive Payments for implementing EHR technology?		
Answer Options	Response Percent	Response Count
Yes	73.4%	69
No	26.6%	25
If yes, in what year do you plan to apply (2011 - 2014)		68
<i>answered question</i>		94
<i>skipped question</i>		8

19. If this practice is part of a group practice, how are your locations interconnected? (Bandwidths are ranges with the maximum bandwidth shown) (Check all that apply - multiple choices per row are allowed)										
Answer Options	None	56 KB	768 KB	1.5 MB	6.0 MB	25 MB	50 MB	Over 50 MB	Not Sure	Response Count
Cable	9	2	1	1	3	0	0	1	12	29
Dedicated	13	1	0	1	1	0	0	2	11	29
DSL	10	4	1	5	1	0	0	3	13	36
Ethernet	9	0	0	4	0	1	0	5	8	27
Satellite	14	0	1	0	0	0	0	0	7	21
Dial up	17	0	0	0	0	0	0	0	8	24
Other	13	0	1	1	0	0	0	0	9	23
Other (please specify)										7
<i>answered question</i>										50
<i>skipped question</i>										52

20. If your practice electronically exchanges information with a hospital, what type of connection does your practice use? (Bandwidths are ranges with the maximum bandwidth shown) (Check all that apply - multiple choices per row are allowed)										
Answer Options	None	56 KB	768 KB	1.5 MB	6.0 MB	25 MB	50 MB	Over 50 MB	Not Sure	Response Count
Cable	15	1	0	0	1	2	0	1	7	27
Dedicated	15	1	0	1	4	1	0	1	8	31
DSL	16	2	0	1	1	0	0	2	12	34
Ethernet	10	0	0	3	0	0	1	6	9	29
Satellite	19	0	0	0	0	0	0	0	7	25
Dial up	19	0	0	0	0	0	0	0	6	24
Other	15	0	0	0	0	0	0	0	7	22
Please identify the hospital(s)										13
<i>answered question</i>										46
<i>skipped question</i>										56

21. What types of Internet services and bandwidths does your practice currently use? (Bandwidths are ranges with the maximum bandwidth shown) (Check all that apply - multiple choices per row are allowed)										
Answer Options	None	56 KB	768 KB	1.5 MB	6.0 MB	25 MB	50 MB	Over 50 MB	Not Sure	Response Count
Cable	9	0	1	2	4	1	0	1	22	40
Dedicated	12	1	0	2	1	2	1	2	16	37
DSL	10	7	0	12	9	0	0	4	31	73
Ethernet	8	1	0	5	1	0	0	7	20	42
Satellite	18	0	0	1	0	0	0	0	12	30
Dial up	18	4	0	0	0	0	0	0	13	34
Other	11	0	2	1	0	0	0	0	13	26
Other (please specify)										4
<i>answered question</i>										94
<i>skipped question</i>										8

22. What types of Internet services and maximum bandwidths are available to your practice location? (One choice per row for all rows)										
Answer Options	None	56 KB	768 KB	1.5 MB	6.0 MB	25 MB	50 MB	Over 50 MB	Not Sure	Response Count
Cable	5	2	2	2	5	0	2	1	37	56
Dedicated	7	2	0	4	4	1	2	2	34	56
DSL	7	6	1	5	10	0	1	3	43	76
Ethernet	4	1	0	7	1	0	1	6	31	51
Satellite	8	1	0	0	1	1	0	0	31	42
Dial up	8	8	0	0	1	0	0	0	33	50
Other	10	0	0	0	1	0	0	0	26	37
Other (please specify)										4
<i>answered question</i>										94
<i>skipped question</i>										8

Appendix F: Health Information Technology Act

Miss. Code Ann. § 41-119-1

This chapter shall be known and may be cited as the "Health Information Technology Act."

Miss. Code Ann. § 41-119-3

The Mississippi Health Information Network is a public-private partnership for the benefit of all of the citizens of this state.

Miss. Code Ann. § 41-119-5

(1) The Mississippi Health Information Network is established, and is referred to in this chapter as the "MS-HIN."

(2) The MS-HIN shall be governed by a board of directors (MS-HIN board) consisting of eleven (11) members. The membership of the MS-HIN board shall reasonably reflect the public-private and diverse nature of the MS-HIN.

(3) The membership of the MS-HIN board of directors shall consist of the following:

(a) The Governor shall appoint one (1) member of the MS-HIN board of directors, who shall be a representative of a health insurance carrier in Mississippi with knowledge of information technology, to serve an initial term of three (3) years;

(b) The State Board of Health shall appoint one (1) member of the MS-HIN board of directors, who shall be a representative of a Mississippi hospital with knowledge of information technology, to serve an initial term of three (3) years;

(c) The Mississippi State Medical Association shall appoint a member of the MS-HIN board of directors, who shall be a licensed physician, to serve an initial term of three (3) years;

(d) The Primary Health Care Association shall appoint a member of the MS-HIN board of directors to serve an initial term of one (1) year;

(e) The Delta Health Alliance shall appoint a member of the MS-HIN board of directors to serve an initial term of four (4) years;

(f) The Information and Quality Health Care-Mississippi Coastal Health Information Exchange (MCHIE) shall appoint a member of the MS-HIN board of directors to serve an initial term of one (1) year;

(g) The State Board of Health shall appoint a member of the MS-HIN board of directors who shall be an employee of the State Department of Health to serve an initial term of one (1) year;

(h) The Mississippi Board of Information Technology Services shall appoint a member of the MS-HIN board of directors to serve an initial term of two (2) years;

(i) The Mississippi Board of Mental Health shall appoint a member of the MS-HIN board of directors who shall be an employee of the Department of Mental Health to serve an initial term of four (4) years;

(j) The University of Mississippi Medical Center shall appoint a member of the MS-HIN board of directors to serve an initial term of two (2) years; and

(k) The Division of Medicaid shall appoint a member of the MS-HIN board of directors who shall be an employee of the Division of Medicaid to serve an initial term of two (2) years.

Initial terms shall expire on June 30 of the appropriate year, and subsequent appointments shall be made by the appointing entity for terms of four (4) years. Members may be reappointed.

(4) No state officer or employee appointed to the MS-HIN board or serving in any other capacity for the MS-

HIN board will be construed to have resigned from public office or employment by reason of that appointment or service.

(5) The chairperson of the MS-HIN board shall be elected by a majority of the members appointed to the MS-HIN board.

(6) The MS-HIN board is authorized to conduct its business by a majority of a quorum. A quorum is six (6) members of the MS-HIN board.

(7) The MS-HIN board may adopt bylaws for its operations, including, but not limited to, the election of other officers, the terms of officers, and the creation of standing and ad hoc committees.

Miss. Code Ann. § 41-119-7

(1) In furtherance of the purposes of this chapter, the MS-HIN shall have the following duties:

(a) Initiate a statewide health information network to:

(i) Facilitate communication of patient clinical and financial information;

(ii) Promote more efficient and effective communication among multiple health care providers and payers, including, but not limited to, hospitals, physicians, nonphysician providers, third-party payers, self-insured employers, pharmacies, laboratories and other health care entities;

(iii) Create efficiencies by eliminating redundancy in data capture and storage and reducing administrative, billing and data collection costs;

(iv) Create the ability to monitor community health status;

(v) Provide reliable information to health care consumers and purchasers regarding the quality and cost-effectiveness of health care, health plans and health care providers; and

(vi) Promote the use of certified electronic health records technology in a manner that improves quality, safety, and efficiency of health care delivery, reduces health care disparities, engages patients and families, improves health care coordination, improves population and public health, and ensures adequate privacy and security protections for personal health information;

(b) Develop or design other initiatives in furtherance of its purpose; and

(c) Perform any and all other activities in furtherance of its purpose.

(2) The MS-HIN board is granted all incidental powers to carry out its purposes and duties, including the following:

(a) To appoint an executive director, who will serve at the will and pleasure of the MS-HIN board. The qualifications and employment terms for the executive director shall be determined by the MS-HIN board;

(b) To adopt, modify, repeal, promulgate, and enforce rules and regulations to carry out the purposes of the MS-HIN;

(c) To establish a process for hearing and determining case decisions to resolve disputes under this chapter or the rules and regulations promulgated under this chapter among participants, subscribers or the public;

(d) To enter into, and to authorize the executive director to execute contracts or other agreements with any federal or state agency, any public or private institution, or any individual in carrying out the provisions of this chapter; and

(e) To discharge other duties, responsibilities, and powers as are necessary to implement the provisions of this chapter.

(3) The executive director shall have the following powers and duties:

(a) To employ qualified professional personnel as required for the operation of the MS-HIN and as authorized by the MS-HIN board;

(b) To administer the policies of the MS-HIN board; and

(c) To supervise and direct all administrative and technical activities of the MS-HIN.

(4) The MS-HIN shall have the power and authority to accept appropriations, grants and donations from public or private entities and to charge reasonable fees for its services. The revenue derived from grants, donations, fees and other sources of income shall be deposited into a special fund that is created in the State Treasury and earmarked for use by the MS-HIN in carrying out its duties under this chapter.

Miss. Code Ann. § 41-119-9

(1) All members of the MS-HIN board shall not be subject to and are immune from claim, suit, liability, damages or any other recourse, civil or criminal, arising from any act or proceeding, decision or determination undertaken, performed or reached in good faith and without malice by any such member or members acting individually or jointly in carrying out the responsibilities, authority, duties, powers and privileges of the offices conferred by law upon them under this chapter, or any other state law, or duly adopted rules and regulations of the aforementioned committees, good faith being presumed until proven otherwise, with malice required to be shown by a complainant. All employees and staff of the MS-HIN, whether temporary or permanent, shall enjoy the same rights and privileges concerning immunity from suit otherwise enjoyed by state employees under the Mississippi Constitution of 1890 and Section 11-46-1 et seq.

(2) The MS-HIN is not a health care provider and is not subject to claims under Sections 11-1-58 through 11-1-62. No person who participates in or subscribes to the services or information provided by the MS-HIN shall be liable in any action for damages or costs of any nature, in law or equity, that result solely from that person's use or failure to use MS-HIN information or data that were imputed or retrieved in accordance with the rules or regulations of the MS-HIN. In addition, no person will be subject to antitrust or unfair competition liability based on membership or participation in the MS-HIN, which provides an essential governmental function for the public health and safety.

Miss. Code Ann. § 41-119-11

(1) All persons providing information and data to the MS-HIN shall retain a property right in that information or data, but grant to the other participants or subscribers a nonexclusive license to retrieve and use that information or data in accordance with the rules or regulations promulgated by the MS-HIN board and in compliance with the provisions of the Health Insurance Portability and Accountability Act of 1996, Public Law 104-191.

(2) Patients desiring to obtain a copy of their personal medical record or information are to request the copy from the health care provider who is the primary source of the information, and the MS-HIN shall not be required to provide this information directly to the patient.

(3) All processes or software developed, designed or purchased by the MS-HIN shall remain its property subject to use by participants or subscribers in accordance with the rules and regulations promulgated by the MS-HIN board.

Miss. Code Ann. § 41-119-13

(1) The MS-HIN board shall by rule or regulation ensure that patient specific health information be disclosed only in accordance with the provisions of the Health Insurance Portability and Accountability Act of 1996, Public Law 104-191, which governs the electronic transmission of that information.

(2) Patient specific health information and data of the MS-HIN shall not be subject to the Federal Freedom of Information Act, Mississippi Open Records Act (Section 25-61-1 et seq.) nor to subpoena by any court. That information may only be disclosed by consent of the patient or in accordance with the MS-HIN board's rules, regulations or orders.

(3) Notwithstanding any conflicting statute, court rule or other law, the data in the network shall be

confidential and shall not be subject to discovery or introduction into evidence in any civil action. However, information and data otherwise discoverable or admissible from original sources are not to be construed as immune from discovery or use in any civil action merely because they were provided to the MS-HIN.

(4) Submission of information to and use of information by the State Department of Health shall be considered a permitted disclosure for uses and disclosures required by law and for public health activities under the Health Insurance Portability and Accountability Act and the privacy rules promulgated under that act.

(5) Any violation of the rules or regulations regarding access or misuse of the MS-HIN health information or data shall be reported to the Office of the Attorney General, and shall be subject to prosecution and penalties under state or federal law.

Miss. Code Ann. § 41-119-15

For the purposes of this chapter, the following terms shall be defined as provided in this section:

(a) "Electronic health records" or "EHR" means electronically maintained clinical and demographic information, used by a meaningful EHR user.

(b) "Health information technology" or "HIT" means the equipment, software and networks to be used by a meaningful EHR user.

(c) "Acquisition" of HIT systems or other computer or telecommunications equipment or services means the purchase, lease, rental or acquisition in any other manner of HIT systems or any other computer or telecommunications equipment or services used exclusively for HIT.

(d) "Meaningful EHR user" means an eligible professional or eligible hospital that, during the specified reporting period, demonstrates meaningful use of certified EHR technology in a form and manner consistent with certain objectives and measures presented in applicable federal regulations as amended or adopted. These objectives and measures shall include the use of certified EHR.

(e) "Entity" means and includes all the various state agencies, officers, departments, boards, commissions, offices and institutions of the state, but does not include any agency financed entirely by federal funds.

Miss. Code Ann. § 41-119-17

(1) Before the acquisition of any HIT system, an entity shall provide MS-HIN, at a minimum, description, purpose and intent of the proposed service or system, including a description and specifications of the ability to connect to MS-HIN.

(2) Where existing entities can be used to provide the proposed HIT system, in whole or in part, the submission shall include letters of commitment, memoranda of agreements, or other supporting documentation.

(3) The MS-HIN shall review proposals for acquisition of HIT systems for the purposes contained in Section 41-119-7, and provide guidance to entities including collaborative opportunities with MS-HIN members.

(4) Any acquisition of an HIT system that was approved by the Mississippi Department of Technology Services before April 28, 2010, is exempt from the requirements of Section 41-119-15 and this section.

Miss. Code Ann. § 41-119-19

The Legislative Audit Committee (PEER) shall develop and make a report to the Chairmen of the Senate and House Public Health and Welfare/Medicaid Committees regarding the following electronic health records (EHR) system items:

(a) Evaluate the Request for Proposals (RFP) for the implementation and operations services for the Division of Medicaid and the University Medical Center electronic health records system and e-prescribing system for providers;

(b) Evaluate the proposed expenditures of the Mississippi Division of Medicaid (DOM) and the University Medical Center (UMC) regarding electronic health information;

(c) Evaluate the use of American Recovery and Reinvestment Act (ARRA) funds for electronic health records system implementation in the State of Mississippi; and

(d) Evaluate the progress in implementing the electronic health records system in the State of Mississippi.

The PEER Committee shall make its report on or before December 1, 2014, including any recommendations for legislation.

Miss. Code Ann. § 41-119-21

Sections 41-119-1 through 41-119-21 shall stand repealed on July 1, 2019.

Appendix G: Calculators

G1. Hospital EHR Patient Volume Calculator (Revised 2013) – Form 2552-96

Mississippi Division of Medicaid Mississippi Provider Incentive Payment Program			
<i>White Areas are for data input</i>			
Hospital:		NPI:	
<i>Grey Areas are calculated results</i>			
Average Length of Stay - 2552-96 Cost Report			
Measure	Cost Report Data Source	Total	
Total Hospital Days	w/s S-3 part I, col. 6, lines 1,2,6,7,8,9,10	0	
Total Hospital Discharges	w/s S-3 part I, col. 15, lines 1,2,6,7,8,9,10	0	
Average Length of Stay - 2552-96 Cost Report			0.0
Patient Volume Calculation			
Inpatients - POS Code 21 - Discharges			
Medicaid Primary Payer			
	Data Source - 2552-96 Cost Report	Medicaid	Total
Discharges	w/s S-3 part I, col. 15, lines 1,2,6,7,8,9,10		0
Medicaid Primary Payer	w/s S-3 part I, col. 14, lines 1,2,6,7,8,9,10	0	
Medicaid Secondary Payer			

Primary Payer - Discharges		Data Source	Medicaid	Total
Medicare			0	0
Third Party			0	0
Total POS 21 Discharges			0	0
Emergency Room - POS Code 23 - Discharges				
Medicaid Primary Payer				
All Patients		Data Source	Medicaid	Total
All Payers				0
Medicaid Primary Payer			0	
Medicaid Secondary Payer				
Primary Payer		Data Source	Medicaid	Total
Medicare			0	0
Third Party			0	0
Total POS 23 Discharges			0	0
Total Discharges and Encounters for SLR Application			0	0
Medicaid Percentage			0.0%	

Notes:

Hospital Patient Encounters are based on discharge data from both the Inpatient (POS Code 21) and Emergency Room (POS Code 23).

Hospital must have a minimum of 10 percent Medicaid Patient Volume to qualify for the Medicaid Incentive Payment.

Hospital Patient Volumes are from the prior federal fiscal year.

- 1 Medicaid Primary Payer Encounters for both the inpatient and emergency room are required. Medicaid primary payers include Medicaid and Mississippi CAN.

Medicaid Secondary Payer Encounters are optional (if Medicaid Secondary Payer encounters are included, then both inpatient and emergency room discharges must be used). Medicaid Secondary Payer Encounters include Medicare and third party payers when Medicaid is responsible for the copayment.

- 2 Supporting Documentation: (Must be attached to the application)
 - a. Inpatient (POS 21) Discharges - Cost Reports from identified data locations.
 - b. Emergency Room (POS 23) Discharges - Billing management reports
- 3 Inclusions in Medicaid Encounter (Discharges) Counts:
 - a. Encounters include a Medicaid Eligible patient (regardless of payment Liability) **New in 2013**
 - b. Encounters paid through the Mississippi CAN program
- 4 Exclusions from Medicaid Encounter (Discharges) Counts:
 - a. Encounters not resulting in a payment by Medicaid
 - b. All CHIP Encounters
 - c. Emergency Room encounters that result in admission to the hospital
- 5 Each Emergency room visit will count as one encounter. (See 4.c. - Patients discharges into the hospital can't be included in the patient discharges.)

G2. Hospital EHR Patient Volume Calculator (Revised 2013) – Form 2552-10

Mississippi Division of Medicaid			
Mississippi Provider Incentive Payment Program			
<i>White Areas are for data input</i>			
Hospital:		NPI:	
<i>Grey Areas are calculated results</i>			
Average Length of Stay Calculation - 2552-10 Cost Report			



Measure	Cost Report Data Source	Total
Total Hospital Days	w/s S-3 part I, col. 8, lines 1,2,8,9,10,11,12	0
Total Hospital Discharges	w/s S-3 part I, col. 15, lines 1,2,8,9,10,11,12	0
Average Length of Stay - 2010 Cost Report Year		0.0
Patient Volume Calculation		
Inpatients - POS Code 21 - Discharges		
Medicaid Primary Payer (Required)(1)		
	Data Source - 2552-10 Cost Report	Medicaid Total Column 15
	w/s S-3 part I, col. 15, lines 1,2,8,9,10,11,12	Column 8
Discharges		0
Medicaid Primary Payer	w/s S-3 part I, col. 14, lines 1,2,8,9,10,11,12	0
Medicaid Secondary Payer - (Optional)(1)		
Primary Payer - Discharges	Data Source	Medicaid Total
Medicare		0 0
Third Party		0 0
Total POS 21 Discharges		0 0
Emergency Room - POS Code 23 - Discharges		
Medicaid Primary Payer - (Required)(1)		
All Patients	Data Source	Medicaid Total
Discharges		0 0
Medicaid Primary Payer		0

Medicaid Secondary Payer - (Optional)(1)		Medicaid	Total
Primary Payer	Data Source		
Medicare		0	0
Third Party		0	0
Total POS 23 Discharges		0	0
Total Encounters - SLR Application		0	0
Medicaid Percentage		0.0%	

Notes:

Hospital Patient Encounters are based on discharge data from both the Inpatient (POS Code 21) and Emergency Room (POS Code 23).

Hospital must have a minimum of 10 percent Medicaid Patient Volume to qualify for the Medicaid Incentive Payment.

Hospital Patient Volumes are from the prior federal fiscal year.

1 Medicaid Primary Payer Encounters for both the inpatient and emergency room are required. Medicaid primary payers include Medicaid and Mississippi CAN.

Medicaid Secondary Payer Encounters are optional (if Medicaid Secondary Payer encounters are included, then both inpatient and emergency room discharges must be used) Medicaid Secondary Payer Encounters include Medicare and third party payers when Medicaid is responsible for the copayment.

2 Supporting Documentation: (Must be attached to the application)

a. Inpatient (POS 21) Discharges - Cost Reports from identified data locations

b. Emergency Room (POS 23) Discharges - Billing management reports

3 Inclusions in Medicaid Encounter (Discharges) Counts:

a.

Encounters include a Medicaid Eligible patient (regardless of payment Liability) **New in 2013**

b. Encounters paid through the Mississippi CAN program

4 Exclusions from Medicaid Encounter (Discharges) Counts:

a. Encounters not resulting in a payment by Medicaid

- 5 b. All CHIP Encounters
- c. Emergency Room encounters that result in admission to the hospital
- Each Emergency room visit will count as one encounter. (See 4.c. - Patients discharges into the hospital can't be included in the patient discharges.)

G3. Professional EHR Patient Volume Calculator (Revised 2015)

Eligible Professional - Medicaid Percentage Calculation		
<i>White Areas require provider input</i>		
<i>Provider Name:</i>	Dr Ben Dover	<i>NPI:</i> 1234567890
<i>Payee Group Name</i>		<i>NPI:</i>
Medicaid Qualifying Period		
Period Start Date (3)	7/1/2014	Must begin on the first day of a month
Period End Date (3)	8/31/2014	90-day period from previous calendar year (cy 2014)
Name of Patient Management System	Patient Appointment and billing management	
Encounters -		
Medicaid Encounters / All Payers	Medicaid	Total
All Payer Encounters		475
Medicaid Encounters <i>(Medicaid FFS, MS CAN, Magnolia, Medicare Part B, United Health Care (non-commercial))</i>	178	
Total Encounters used in Application	178	475
Medicaid Percentage	37.5%	

G4. EHR Hospital PIP Calculator (Revised Jan 2013) – Form 2552-96

Hospital One Time Payment Calculation

Calculation of Medicaid Electronic Health Records (EHR) Incentive Payment using 2552-96 Cost Report
This Payment Calculation was approved by CMS on 06/13/2011

White Areas are for data input from your Cost Reports

Hospital:

NPI:

Grey Areas are calculated by the MS SLR application - Do not change

The overall "EHR" amount is the sum over 4 years of (a) the base amount of \$2,000,000 plus (b) the discharge related amount defined as \$200 for the 1,150 through the 23,000 discharge for the first payment year then a pro-rated amount of 75% in yr 2, 50% in yr 3, and 25% in yr 4

For years 2-4 the rate of growth is assumed to be the previous 3 years' average.

Step 1: Compute the average annual growth rate over 3 years using previous Medicare cost reports.

Per the Medicare cost report, worksheet S-3, part I, line 12, column 15 - Total discharges

Cost Report years used for one time calculations	PY	CY	Increase	Growth
Fiscal Year	<input type="text"/>			
Fiscal Year	0	<input type="text"/>	0	0.00%
Fiscal Year	0	<input type="text"/>	0	0.00%
Fiscal Year	0	<input type="text"/>	0	0.00%
Enter most current Cost Report year used for Steps 2 - 6.	Total Percent - Increase/(Decrease)			0.0%
	Divided by 3 years			3
The average annual growth rate over 3 years				0.00%

Step 2: Compute total discharge related amount using proper transition factors

> discharges are capped at 23,000 each year

INPUT FY total Discharges from worksheet S-3, part I, line 12, column 15	0	0
	Discharges	
	Total	Allowable
Year 1 (allowed dischg - 1,149) x \$200	0	0
Year 2 ((allowed dischg - 1,149) x \$200)	0	0
Year 3 ((allowed dischg - 1,149) x \$200)	0	0
Year 4 ((allowed dischg - 1,149) x \$200)	0	0
Total 4 year discharge related amount	\$0	

Step 3: Compute the initial amount for 4 years

	Year 1	Year 2	Year 3	Year 4
Years 1 - 4 base amount of \$2,000,000 per year	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Years 1-4 discharge related amount (step 2)	\$0	\$0	\$0	\$0
Aggregate EHR amount for 4 years	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000

Step 4: Apply Transition Factor

	\$2,000,000	\$1,500,000	\$1,000,000	\$500,000
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Step 5: Compute the overall EHR amount for 4 years

	\$5,000,000
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Step 6: Computation of Medicaid Share from the Medicare cost report (2552-96 Cost Report)

(estimated Medicaid inpatient-bed-days + estimated Medicaid HMO inpatient-bed-days) /
(est. Medicaid IP-bed-days x ((est. total charges - est. charity care charges) / est. total charges))

w/s S-3 part I, col. 5, lines 1,6,7,8,9,10	Total Medicaid Days	0	
w/s S-3 part I, col. 5, line 2	Total Medicaid HMO days	0	
	Total Medicaid and HMO Medicaid days		0
w/s C part I, col. 8, line 101	Total Hospital Charges	\$0	
w/s S-10, line 30	Uncompensated care charges (negative amount)	\$0	
	Total Hospital Charges - charity chgs	\$0	
	divided by Total Hospital Charges	\$0	
	Non-charity percentage	0.00%	
w/s S-3 part I, col. 6, line 1,2,6,7,8,9,10	Total Hospital Days	0	
	Non-charity total Hospital Days		0
(Total Medicaid and HMO Medicaid days) divide non-charity hospital days			0.00%

Step 7: Computation of Medicaid aggregate EHR incentive amount

Aggregate EHR amount for 4 years	\$5,000,000
(Total Medicaid and HMO Medicaid days) divide non-charity hospital days	0.00%

Medicaid Aggregate EHR Incentive Amount	\$0.00
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Step 8: Computation of Medicaid annual EHR incentive payout

	Annual	
	Percentage	Payment
Year 1 payment	50.0%	\$0
Year 2 payment	40.0%	\$0
Year 3 payment	10.0%	\$0

CMS Reference - Authorized Data Sources for One Time Payment Calculation

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If the State chooses to use the cost report in the Medicaid EHR incentive hospital payment calculation, what data elements should be used in the Medicare cost report, Form CMS 2552-96 and the Form CMS 2552-10?

Based on the Medicare cost report guidance, Form CMS 2552-96 will be used until the implementation of the new Medicare cost report, Form CMS 2552-10. Although the State may choose to use the following data elements, it is the States' and hospitals' responsibility to ensure the integrity and regulatory compliance of the data.

The CMS 2552-96 data elements are as follows:

- Total Discharges - Worksheet S-3 Part 1, Column 15, Line 12
- Medicaid Days - Worksheet S-3, Part I, Column 5, Line 1 + Lines 6-10
- Medicaid HMO Days - Worksheet S-3, Part I, Column 5, Line 2
- Total Inpatient Days - Worksheet S-3 Part 1, Column 6, Line 1, 2 + Lines 6 -10
- Total Hospital Charges - Worksheet C Part 1, Column 8, Line 101
- Charity Care Charges - Worksheet S-10, Column 1, Line 30

The CMS 2552-10 data elements are as follows:

- Total Discharges - Worksheet S-3 Part 1, Column 15, Line 14
- Medicaid Days - Worksheet S-3, Part I, Column 7, Line 1 + Lines 8-12
- Medicaid HMO Days - Worksheet S-3, Part I, Column 7, Line 2
- Total Inpatient Days - Worksheet S-3 Part 1, Column 8, Line 1, 2 + Lines 8 - 12
- Total Hospital Charges - Worksheet C Part 1, Column 8, Line 200
- Charity Care Charges - Worksheet S-10, Column 3, Line 20

For information about the cost report data elements that are used in the Medicare hospital incentive calculation, please see FAQ #10717.

G5. EHR Hospital PIP Calculator (Revised Jan 2013) – Form 2552-10

Hospital One Time Payment Calculation			
Calculation of Medicaid Electronic Health Records (EHR) Incentive Payment using 2552-10 Cost Report			
This Payment Calculation was approved by CMS on 06/13/2011			
<i>White Areas require provider input</i>			
<i>Hospital:</i>		<i>NPI:</i>	
<i>Grey Areas are calculated by the MS SLR application - Do not change</i>			
<p>The overall "EHR" amount is the sum over 4 years of (a) the base amount of \$2,000,000 plus (b) the discharge related amount defined as \$200 for the 1,150 through the 23,000 discharge for the first payment year then a pro-rated amount of 75% in yr 2, 50% in yr 3, and 25% in yr 4</p> <p>For years 2-4 the rate of growth is assumed to be the previous 3 years' average.</p>			

Step 1:		Compute the average annual growth rate over 3 years using previous Medicare cost reports.			
Per the Medicare cost report 2552-10, worksheet S-3, part I, line 14, column 15 - Total discharges					
		PY	CY	Increase	Growth
Fiscal Yr	2009	2552-96	0		
Fiscal Yr	2010	2552-96	0	0	0.00%
Fiscal Yr	2011	2552-10	0	0	0.00%
Fiscal Yr	2012	2552-10	0	0	0.00%
Total Percent - Increase/(Decrease)					0.0%
Divided by 3 years					3
The average annual growth rate over 3 years					0.00%
Step 2: Compute total discharge related amount using proper transition factors					
> discharges are capped at 23,000 each year					
INPUT FY 2010 total Discharges from worksheet S-3, part I, line 14, column 15					0
		Discharges			
		Total	Allowable	Amount	
Year 1	(allowed dischg - 1,149) x \$200	0	0	\$0	
Year 2	((allowed dischg - 1,149) x \$200)	0	0	\$0	
Year 3	((allowed dischg - 1,149) x \$200)	0	0	\$0	
Year 4	((allowed dischg - 1,149) x \$200)	0	0	\$0	
Total 4 year discharge related amount					\$0
Step 3: Compute the initial amount for 4 years					
		Year 1	Year 2	Year 3	Year 4
Years 1 - 4 base amount of \$2,000,000 per year		\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Years 1-4 discharge related amount (step 2)		\$0	\$0	\$0	\$0
Aggregate EHR amount for 4 years		\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Step 4: Apply Transition Factor					
		\$2,000,000	\$1,500,000	\$1,000,000	\$500,000
Step 5: Compute the overall EHR amount for 4 years					
					\$5,000,000

Step 6: Computation of Medicaid Share from the Medicare cost report (Revised 2552-10 Cost Report)

(estimated Medicaid inpatient-bed-days + estimated Medicaid HMO inpatient-bed-days) /
(est. Medicaid IP-bed-days x ((est. total charges - est. charity care charges) / est. total charges))

w/s S-3 part I, col. 7, lines 1,8,9,10,11,12	Total Medicaid Days	0	
w/s S-3 part I, col. 7, line 2	Total Medicaid HMO days	0	
	Total Medicaid and HMO Medicaid days		0
w/s C part I, col. 8, line 200	Total Hospital Charges	\$0	
w/s S-10, line 20	Uncompensated care charges (negative amount)	\$0	
	Total Hospital Charges - charity chgs	\$0	
	divided by Total Hospital Charges	\$0	
	Non-charity percentage	0.00%	
w/s S-3 part I, col. 8, lines 1,2,8,9,10,11,12	Total Hospital Days	0	
	Non-charity total Hospital Days		0

(Total Medicaid and HMO Medicaid days) divide non-charity hospital days	0.00%
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Step 7: Computation of Medicaid aggregate EHR incentive amount

Aggregate EHR amount for 4 years	\$5,000,000
(Total Medicaid and HMO Medicaid days) divide non-charity hospital days	0.00%

Medicaid Aggregate EHR Incentive Amount	\$0.00
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Step 8: Computation of Medicaid annual EHR incentive payout

	Annual	
	Percentage	Payment
Year 1 payment	50.0%	\$0
Year 2 payment	40.0%	\$0
Year 3 payment	10.0%	\$0

CMS Reference - Authorized Data Sources for One Time Payment Calculation

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Based on the Medicare cost report guidance, Form CMS 2552-96 will be used until the implementation of the new Medicare cost report, Form CMS 2552-10. Although the State may choose to use the following data elements, it is the States' and Hospitals' responsibility to ensure the integrity and regulatory compliance of the data.

The CMS 2552-96 data elements are as follows:

- Total Discharges - Worksheet S-3 Part 1, Column 15, Line 12
- Medicaid Days - Worksheet S-3, Part I, Column 5, Line 1 + Lines 6-10
- Medicaid HMO Days - Worksheet S-3, Part I, Column 5, Line 2
- Total Inpatient Days - Worksheet S-3 Part 1, Column 6, Line 1, 2 + Lines 6 -10
- Total Hospital Charges - Worksheet C Part 1, Column 8, Line 101
- Charity Care Charges - Worksheet S-10, Column 1, Line 30

The CMS 2552-10 data elements are as follows:

- Total Discharges - Worksheet S-3 Part 1, Column 15, Line 14
- Medicaid Days - Worksheet S-3, Part I, Column 7, Line 1 + Lines 8-12
- Medicaid HMO Days - Worksheet S-3, Part I, Column 7, Line 2
- Total Inpatient Days - Worksheet S-3 Part 1, Column 8, Line 1, 2 + Lines 8 - 12
- Total Hospital Charges - Worksheet C Part 1, Column 8, Line 200
- Charity Care Charges - Worksheet S-10, Column 3, Line 20

For information about the cost report data elements that are used in the Medicare hospital incentive calculation, please see FAQ #10717.

Appendix H: Impact of Incentive Payments

Importance of Incentive Payment by Provider planning to upgrade				
Provider Type	Importance of Cost by Provider Type			
	High	Medium	Low	Total
Dentist	4			4
FOHC	1			1
Hospital	1		1	2
Optometry	8	1		9
Pediatrics	4			4
Physician	24	1	1	26
Grand Total	42	2	2	46
Percentages				
Overall Percentage	91%	4%	4%	100%
Non Physician Percentage	90%	5%	5%	100%
Physician Percentage	92.3%	3.8%	3.8%	100%

Importance of Incentive Payment by Location planning to upgrade				
Location	Importance of Cost by Location			
	High	Medium	Low	Total
Coast Metro	5			5
Columbus Metro	2			2
JXN Metro	10		2	12
McComb	1			1
Memphis Metro	5			5
Meridian Metro	5			5
Picayune	1			1
Tupelo Metro	2	1		3
Under 50,000	11	1		12
Grand Total	42	2	2	46
Percentages				
Overall Percentage	91%	4%	4%	100%
Metro Area Percentage	91%	3%	6%	100%
Rural Area Percentage	91.7%	8.3%	0.0%	100%

Based on the results of the survey, at least 90% of the Providers who planned to attest to A/I/U indicated that incentive payments were a major factor in their decision. These results were consistent regardless of location or Provider type.

Appendix I: MU Requirements (Updated 2017)

The Medicare and Medicaid EHR Incentive Programs provide financial incentives for the meaningful use of certified EHR technology to improve patient care. To receive an EHR incentive payment, providers have to show that they are meaningfully using their EHRs by meeting thresholds for a number of objectives. The EHR Incentive Programs are phased in three stages with increasing requirement complexity.

Eligible professionals participate in the program on the calendar year, while eligible hospitals and CAHs participate according to the federal fiscal year.

Providers must attest to demonstrating meaningful use **every year** to receive an incentive and avoid a Medicare payment adjustment.

Requirements for 2014 Definition Stage 1

In May 2014, CMS released an NPRM that would grant flexibility to providers who are experiencing difficulties fully implementing 2014 Edition certified EHR technology (CEHRT) to attest this year.

Providers scheduled to demonstrate Stage 1 in 2014 who have successfully implemented 2014 CEHRT would use 2014 Definition Stage 1 core and menu objectives.

Providers who are still using 2011 Edition CEHRT or a combination of 2011 and 2014 Editions and choose to report 2013 Definition Stage 1 core and menu objectives should visit the 2013 Definition Stage 1 of Meaningful Use webpage.

Criteria for providers demonstrating the 2014 Definition of Stage 1 is listed below.

Eligible professionals must meet:

- 13 required core objectives
- 5 menu objectives from a list of 9
- Total of 18 objectives

Eligible hospitals and CAHs must meet:

- 11 required core objectives
- 5 menu objectives from a list of 10
- Total of 16 objectives

Requirements for Stage 2 of MU

The CMS Stage 2 Final Rule from 2012 specifies the criteria that eligible professionals, eligible hospitals, and critical access hospitals (CAHs) must meet in order to participate in Stage 2 of the Medicare and Medicaid EHR Incentive Programs. All providers must demonstrate Stage 1 of meaningful use before Stage 2.

To help providers better understand Stage 2 meaningful use requirements, CMS developed specification sheets for eligible professionals and eligible hospitals that provide detailed information on each objective, including:

- Numerator and denominator thresholds
- Exclusion criteria
- Definitions of important terms
- Requirements for achieving the objectives
- Certification information that corresponds with each objective

Stage 2 Timeline

The earliest providers will demonstrate Stage 2 of meaningful use is 2014. Eligible hospitals and CAHs participate on the fiscal year and eligible professionals participate on the calendar year.

Providers who began participation in the EHR Incentive Programs in 2011 will meet three consecutive years of meaningful use under the Stage 1 criteria before advancing to the Stage 2 criteria in 2014. All other providers would meet two years of meaningful use under the Stage 1 criteria before advancing to the Stage 2 criteria in their third year.

For 2014 Only

2014 CEHRT Flexibility

In May 2014, CMS released an NPRM that would grant flexibility to providers who are experiencing difficulties fully implementing 2014 Edition CEHRT to attest this year.

Providers scheduled to demonstrate Stage 2 of meaningful use in 2014 can:

- Demonstrate 2013 Definition of Stage 1 of meaningful use with 2011 Edition CEHRT or a combination of 2011 and 2014 Edition CEHRT
- Demonstrate 2014 Definition of Stage 1 of meaningful use with 2014 Edition CEHRT
- Demonstrate Stage 2 of meaningful use with 2014 Edition CEHRT

2014 Reporting Periods

All providers, regardless of their stage, are only required to demonstrate meaningful use for a 3-month EHR reporting period. For Medicare providers, this 3-month reporting period is fixed to the quarter of either the fiscal (for eligible hospitals and CAHs) or calendar (for eligible professionals). The 3-month reporting period is not fixed for Medicaid eligible professionals and hospitals that are only eligible to receive Medicaid EHR incentives.

Stage 2 Core and Menu Objectives

Stage 2 uses a core and menu structure for objectives that providers must achieve in order to demonstrate meaningful use. Core objectives are objectives that all providers must meet. There are also a predetermined number of menu objectives that providers must select from a list and meet in order to demonstrate meaningful use.

To demonstrate meaningful use under Stage 2 criteria—

Eligible professionals must meet:

- 17 core objectives
- 3 menu objectives that they select from a total list of 6
- Total of 20 objectives

Eligible hospitals and CAHs must meet:

- 16 core objectives
- 3 menu objectives that they select from a total list of 6
- Total of 19 objectives

Definition of Modified Stage 2

Eligible Professionals (EPs) Requirements

CMS published a final rule on October 16, 2015 that specifies criteria that eligible professionals (EPs), eligible hospitals, and critical access hospitals (CAHs) must meet in order to participate in the Medicare and Medicaid Electronic Health Record (EHR) Incentive Programs. The final rule's provisions encompass the definition of meaningful use for 2015 through 2017.

Here's what you need to know about meeting the requirements of the EHR Incentive Programs in 2016.

Objectives and Measures

All providers are required to attest to a single set of objectives and measures. This replaces the core and menu objectives structure of previous stages.

For EPs, there are **10** objectives.

In 2016, all providers must attest to objectives and measures using EHR technology certified to the 2014 Edition or the 2015 Edition, or a combination of the two.

Alternate Exclusions and Specifications

Many of the alternate exclusions that were available in 2015 are not applicable in 2016.

The Definition of Modified Stage 2 Meaningful Use Objectives for Eligible Professionals EPs

Modified Stage 2 Meaningful Use Objectives for 2015-2017	Modified Stage 2 Meaningful Use Measures for EPs in 2016
Objective 1: Protect Patient Health Information	Measure: Conduct or review a security risk analysis in accordance with the requirements in 45 CFR 164.308(a)(1), including addressing the security (to include encryption) of ePHI created or maintained in CEHRT in accordance with requirements under 45 CFR 164.312(a)(2)(iv) and 45 CFR 164.306(d)(3), and implement security updates as necessary and correct identified security deficiencies as part of the EP's risk management process.
Objective 2: Clinical Decision Support	In order for EPs to meet the objective they must satisfy both of the following measures: Measure 1: Implement five clinical decision support interventions related to four or more clinical quality measures at a relevant point in patient care for the entire EHR reporting period. Absent four clinical quality measures related to an EP's scope of practice or patient population, the clinical decision support

	<p>interventions must be related to high priority health conditions.</p> <p>Measure 2: The EP has enabled and implemented the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period.</p> <p>Exclusion: For the second measure, any EP who writes fewer than 100 medication orders during the EHR reporting period.</p>
<p>Objective 3: Computerized Provider Order Entry</p>	<p>An EP, through a combination of meeting the thresholds and exclusions (or both), must satisfy all three measures for this objective.</p> <p>Measure 1: More than 60 percent of medication orders created by the EP during the EHR reporting period are recorded using computerized provider order entry.</p> <p>Exclusion for Measure 1: Any EP who writes fewer than 100 medication orders during the EHR reporting period.</p> <p>Measure 2: More than 30 percent of laboratory orders created by the EP during the EHR reporting period are recorded using computerized provider order entry.</p> <p>Exclusion for Measure 2: Any EP who writes fewer than 100 laboratory orders during the EHR reporting period.</p> <p>Alternate Exclusion for Measure 2: Providers scheduled to be in Stage 1 in 2016 may claim an exclusion for measure 2 (laboratory orders) of the Stage 2 CPOE objective for an EHR reporting period in 2016.</p> <p>Measure 3: More than 30 percent of radiology orders created by the EP during the EHR reporting period are recorded using computerized provider order entry.</p> <p>Exclusion for Measure 3: Any EP who writes fewer than 100 radiology orders during the EHR reporting period.</p> <p>Alternate Exclusion for Measure 3: Providers scheduled to be in Stage 1 in 2016 may claim an exclusion for measure 3 (radiology orders) of the Stage 2 CPOE objective for an EHR reporting period in 2016.</p>
<p>Objective 4: Electronic Prescribing</p>	<p>EP Measure: More than 50 percent of permissible prescriptions written by the EP are queried for a drug formulary and transmitted electronically using CEHRT.</p> <p>Exclusions: Any EP who (1)Writes fewer than 100 permissible prescriptions during the EHR reporting period; or (2) Does not have a pharmacy within his or her organization and there are no pharmacies</p>

	that accept electronic prescriptions within 10 miles of the EP's practice location at the start of his or her EHR reporting period.
Objective 5: Health Information Exchange	<p>Measure: The EP that transitions or refers their patient to another setting of care or provider of care must (1) use CEHRT to create a summary of care record; and (2) electronically transmit such summary to a receiving provider for more than 10 percent of transitions of care and referrals.</p> <p>Exclusion: Any EP who transfers a patient to another setting or refers a patient to another provider less than 100 times during the EHR reporting period.</p>
Objective 6: Patient Specific Education	<p>EP Measure: Patient specific education resources identified by CEHRT are provided to patients for more than 10 percent of all unique patients with office visits seen by the EP during the EHR reporting period.</p> <p>Exclusion: Any EP who has no office visits during the EHR reporting period.</p>
Objective 7: Medication Reconciliation	<p>Measure: The EP performs medication reconciliation for more than 50 percent of transitions of care in which the patient is transitioned into the care of the EP.</p> <p>Exclusion: Any EP who was not the recipient of any transitions of care during the EHR reporting period.</p>
Objective 8: Patient Electronic Access (VDT)	<p>EP Measure 1: More than 50 percent of all unique patients seen by the EP during the EHR reporting period are provided timely access to view online, download, and transmit to a third party their health information subject to the EP's discretion to withhold certain information.</p> <p>Exclusion for Measure 1: Any EP who neither orders nor creates any of the information listed for inclusion as part of the measures except for "Patient Name" and "Provider's name and office contact information."</p> <p>EP Measure 2: For an EHR reporting period in 2016, at least one patient seen by the EP during the EHR reporting period (or patient-authorized representative) views, downloads or transmits his or her health information to a third party during the EHR reporting period.</p> <p>Exclusion for Measure 2: Any EP who (1) Neither orders nor creates any of the information listed for inclusion as part of the measures except for "Patient Name" and "Provider's name and office contact information"; or (2) Conducts 50 percent or more of his or her patient encounters in a county that does not have 50 percent or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR</p>

	reporting period.
<p>Objective 9: Secure Messaging</p>	<p>Measure: For an EHR reporting period in 2016, for at least 1 patient seen by the EP during the EHR reporting period, a secure message was sent using the electronic messaging function of CEHRT to the patient (or the patient-authorized representative), or in response to a secure message sent by the patient (or the patient-authorized representative) during the EHR reporting period.</p> <p>Exclusion: Any EP who has no office visits during the EHR reporting period, or any EP who conducts 50 percent or more of his or her patient encounters in a county that does not have 50 percent or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period.</p>
<p>Objective 10: Public Health Reporting</p>	<p>EPs in 2016 must meet 2 of the 3 measures.</p> <p>Measure Option 1 – Immunization Registry Reporting: The EP is in active engagement with a public health agency to submit immunization data.</p> <p>Exclusions for Measure 1: Any EP meeting one or more of the following criteria may be excluded from the immunization registry reporting measure if the EP:</p> <ul style="list-style-type: none"> Does not administer any immunizations to any of the populations for which data is collected by its jurisdiction's immunization registry or immunization information system during the EHR reporting period; Operates in a jurisdiction for which no immunization registry or immunization information system is capable of accepting the specific standards required to meet the CEHRT definition at the start of the EHR reporting period; or Operates in a jurisdiction where no immunization registry or immunization information system has declared readiness to receive immunization data from the EP at the start of the EHR reporting period. <p>Measure Option 2 – Syndromic Surveillance Reporting: The EP is in active engagement with a public health agency to submit syndromic surveillance data.</p> <p>Exclusions for Measure 2: Any EP meeting one or more of the following criteria may be excluded from the syndromic surveillance reporting measure if the EP:</p> <ul style="list-style-type: none"> Is not in a category of providers from which ambulatory syndromic surveillance data is collected by their jurisdiction's syndromic

	<p>surveillance system;</p> <p>Operates in a jurisdiction for which no public health agency is capable of receiving electronic syndromic surveillance data from EPs in the specific standards required to meet the CEHRT definition at the start of the EHR reporting period; or</p> <p>Operates in a jurisdiction where no public health agency has declared readiness to receive syndromic surveillance data from EPs at the start of the EHR reporting period.</p> <p>Measure Option 3 – Specialized Registry Reporting: The EP is in active engagement to submit data to a specialized registry.</p> <p>Exclusions for Measure 3: Any EP meeting at least one of the following criteria may be excluded from the specialized registry reporting measure if the EP:</p> <p>Does not diagnose or treat any disease or condition associated with, or collect relevant data that is collected by, a specialized registry in their jurisdiction during the EHR reporting period;</p> <p>Operates in a jurisdiction for which no specialized registry is capable of accepting electronic registry transactions in the specific standards required to meet the CEHRT definition at the start of the EHR reporting period; or</p> <p>Operates in a jurisdiction where no specialized registry for which the EP is eligible has declared readiness to receive electronic registry transactions at the beginning of the EHR reporting period.</p> <p>Alternate Exclusions for 2016:</p> <p>EPs scheduled to be in Stage 1 and Stage 2 in 2016: Must attest to at least 2 measures from the Public Health Reporting Objective Measures 1-3.</p> <p>May claim an Alternate Exclusion for Measure 2 and Measure 3 (Syndromic Surveillance and Specialized Registry Reporting).</p> <p>An Alternate Exclusion may only be claimed for up to two measures, then the provider must either attest to or meet the exclusion requirements for the remaining measure described in 495.22 (e)(10)(i)(C).</p>
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Eligible Hospitals and CAHs Requirements

CMS published a final rule on October 16, 2015 that specifies criteria that eligible professionals (EPs), eligible hospitals, and critical access hospitals (CAHs) must meet in order to participate in the Medicare and Medicaid Electronic Health Record (EHR) Incentive Programs. The final rule’s provisions encompass the definition of meaningful use for 2015 through 2017.

Here’s what you need to know about meeting the requirements of the EHR Incentive Programs in 2016.

Objectives and Measures

All providers are required to attest to a single set of objectives and measures. This replaces the core and menu objectives structure of previous stages.

There are 9 objectives for eligible hospitals and CAHs.

In 2016, all providers must attest to objectives and measures using EHR technology certified to the 2014 Edition or the 2015 Edition, or a combination of the two.

Alternate Exclusions and Specifications

Many of the alternate exclusions that were available in 2015 are not available in 2016.

The Definition of Modified Stage 2 Meaningful Use Objectives for Eligible Hospitals and CAHs

Modified Stage 2 Meaningful Use Objectives for 2015-2017	Modified Stage 2 Meaningful Use Measures for EHs in 2016
Objective 1: Protect Patient Health Information	Measure: Conduct or review a security risk analysis in accordance with the requirements in 45 CFR 164.308(a)(1), including addressing the security (to include encryption) of ePHI created or maintained in CEHRT in accordance with requirements under 45 CFR 164.312(a)(2)(iv) and 45 CFR 164.306(d)(3), and implement security updates as necessary and correct identified security deficiencies as part of the eligible hospital or CAH's risk management process.
Objective 2: Clinical Decision Support	Measure 1: Implement five clinical decision support interventions related to four or more clinical quality measures at a relevant point in patient care for the entire EHR reporting period. Absent four clinical quality measures related to an eligible hospital or CAH's scope of practice or patient population, the clinical decision support interventions must be related to high-priority health conditions.

	<p>Measure 2: The eligible hospital or CAH has enabled and implemented the functionality for drug-drug and drug allergy interaction checks for the entire EHR reporting period.</p>
<p>Objective 3: Computerized Provider Order Entry</p>	<p><i>Eligible hospitals and CAHs must meet the thresholds of all three measures.</i></p> <p>Measure 1: More than 60 percent of medication orders created by authorized providers of the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using computerized provider order entry.</p> <p>Measure 2: More than 30 percent of laboratory orders created by authorized providers of the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using computerized provider order entry.</p> <p style="padding-left: 40px;">Alternate Exclusion for Measure 2: Providers scheduled to be in Stage 1 in 2016 may claim an exclusion for measure 2 (laboratory orders) of the Stage 2 CPOE objective for an EHR reporting period in 2016.</p> <p>Measure 3: More than 30 percent of radiology orders created by authorized providers of the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using computerized provider order entry.</p> <p style="padding-left: 40px;">Alternative Exclusion for Measure 3: Providers scheduled to be in Stage 1 in 2016 may claim an exclusion for measure 3 (radiology orders) of the Stage 2 CPOE objective for an EHR reporting period in 2016.</p>
<p>Objective 4: Electronic Prescribing</p>	<p>Eligible Hospital/CAH Measure: More than 10 percent of hospital discharge medication orders for permissible prescriptions (for new and changed prescriptions) are queried for a drug formulary and transmitted electronically using CEHRT.</p> <p style="padding-left: 40px;">Exclusion: Any eligible hospital or CAH that does not have an internal pharmacy that can accept electronic prescriptions and is not located within 10 miles of any pharmacy that accepts electronic prescriptions at the start of their EHR reporting period.</p> <p style="padding-left: 40px;">Alternate Exclusion: An eligible hospital or CAH may claim an exclusion for the eRx objective and measure for an EHR reporting period in 2016 if they were either scheduled to demonstrate Stage 1 in 2016, or if they are scheduled to demonstrate Stage 2 but did not intend to select the Stage 2 eRx objective for an EHR reporting period in 2016.</p>

<p>Objective 5: Health Information Exchange</p>	<p>Measure: The eligible hospital or CAH that transitions or refers their patient to another Information setting of care or provider of care must (1) use CEHRT to create a summary of care record; Exchange and (2) electronically transmit such summary to a receiving provider for more than 10 percent of transitions of care and referrals.</p>
<p>Objective 6: Patient Specific Education</p>	<p>Eligible Hospital/CAH Measure: More than 10 percent of all unique patients admitted to the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) are provided patient specific education resources identified by CEHRT.</p>
<p>Objective 7: Medication Reconciliation</p>	<p>Measure: The eligible hospital or CAH performs medication reconciliation for more than 50 percent of transitions of care in which the patient is admitted to the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23).</p>
<p>Objective 8: Patient Electronic Access (VDT)</p>	<p>Measure 1: More than 50 percent of all unique patients who are discharged from the inpatient or emergency department (POS 21 or 23) of an eligible hospital or CAH are provided timely access to view online, download and transmit to a third party their health information.</p> <p>Measure 2: For an EHR reporting period in 2016, at least 1 patient who is discharged from the inpatient or emergency department (POS 21 or 23) of an eligible hospital or CAH (or patient-authorized representative) views, downloads or transmits his or her health information to a third party during the EHR reporting period.</p> <p>Exclusion for Measure 2: Any eligible hospital or CAH that is located in a county that does not have 50 percent or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period.</p>
<p>Objective 9: Public Health Reporting</p>	<p><i>In 2016, all eligible hospitals and CAHs must meet three measures.</i></p> <p>Measure Option 1 – Immunization Registry Reporting: The eligible hospital or CAH is in active engagement with a public health agency to submit immunization data.</p> <p>Exclusions for Measure 1: Any eligible hospital or CAH meeting one or more of the following criteria may be excluded from the immunization registry reporting measure if the eligible hospital or CAH:</p> <ul style="list-style-type: none"> • Does not administer any immunizations to any of the populations for which data is collected by its jurisdiction's immunization registry or immunization information system

during the EHR reporting period;

- Operates in a jurisdiction for which no immunization registry or immunization information system is capable of accepting the specific standards required to meet the CEHRT definition at the start of the EHR reporting period; or
- Operates in a jurisdiction where no immunization registry or immunization information system has declared readiness to receive immunization data from the eligible hospital or CAHs at the start of the EHR reporting period.

Measure Option 2 – Syndromic Surveillance Reporting: The eligible hospital or CAH is in active engagement with a public health agency to submit syndromic surveillance data.

Exclusions for Measure 2: Any eligible hospital or CAH meeting one or more of the following criteria may be excluded from the syndromic surveillance reporting measure if the eligible hospital or CAH:

- Does not have an emergency or urgent care department;
- Operates in a jurisdiction for which no public health agency is capable of receiving electronic syndromic surveillance data from eligible hospitals or CAHs in the specific standards required to meet the CEHRT definition at the start of the EHR reporting period; or
- Operates in a jurisdiction where no public health agency has declared readiness to receive syndromic surveillance data from eligible hospitals or CAHs at the start of the EHR reporting period.

Measure Option 3 – Specialized Registry Reporting: The eligible hospital or CAH is in active engagement to submit data to a specialized registry.

Exclusions for Measure 3: Any eligible hospital or CAH meeting at least one of the following criteria may be excluded from the specialized registry reporting measure if the EP, eligible hospital, or CAH:

- Does not diagnose or treat any disease or condition associated with, or collect relevant data that is collected by, a specialized registry in their jurisdiction during the EHR reporting period;
- Operates in a jurisdiction for which no specialized registry is capable of accepting electronic registry transactions in the specific standards required to meet the CEHRT definition at the start of the EHR reporting period; or
- Operates in a jurisdiction where no specialized registry for which the eligible hospital or CAH is eligible has declared readiness to receive electronic registry transactions at the beginning of the EHR reporting period.

Measure Option 4– Electronic Reportable Laboratory Result Reporting: The eligible hospital or CAH is in active engagement with a public health agency to submit electronic reportable laboratory (ELR) results.

Exclusions for Measure 4: Any eligible hospital or CAH meeting one or more of the following criteria may be excluded from the electronic reportable laboratory result reporting measure if the eligible hospital or CAH:

- Does not perform or order laboratory tests that are reportable in their jurisdiction during the EHR reporting period;
- Operates in a jurisdiction for which no public health agency is capable of accepting the specific ELR standards required to meet the CEHRT definition at the start of the EHR reporting period; or
- Operates in a jurisdiction where no public health agency has declared readiness to receive electronic reportable laboratory results from eligible hospitals or CAHs at the start of the EHR reporting period.

Alternate Exclusion for 2016

Eligible hospitals/CAHs scheduled to be in Stage 1 and Stage 2 in 2016:

Must attest to at least 3 measures from the Public Health Reporting Objective Measures 1-4.

- May claim an Alternate Exclusion for Measure 3 (Specialized Registry Reporting).
- If an Alternate Exclusion is claimed, then the provider must either attest to or meet the exclusion requirements for the remaining measures described in 495.22 (e)(10)(ii)(C).

Immunization Registry will periodically send DOM a list of providers that are no longer compliant, meaning no response when invited to participate in testing interfaces.

Definition of Stage 3 Meaningful Use:

Stage 3 Program Requirements for Providers Attesting to their State's Medicaid EHR Incentive Program

In October 2015, CMS released a final rule that modified the requirements for participation in the Electronic Health Record (EHR) Incentive Programs for years 2015 through 2017 as well as in 2018 and beyond. This page provides information on requirements for Stage 3.

In 2019, all providers will be required to participate in Stage 3 regardless of their prior participation. Moving all participants to a single stage of meaningful use aims to reduce the program's complexity and simplify reporting requirements.

Medicaid providers who are only eligible to participate in the Medicaid EHR Incentive Program are not subject to the Medicare payment adjustments.

Mississippi will continue manual attestation or reporting of Clinical Quality Measures (CQMs)

NOTE: All providers who have not successfully demonstrated meaningful use in a prior year and are seeking to demonstrate meaningful use for the first time in 2017 to avoid the 2018 payment adjustment must attest to Modified Stage 2 objectives and measures.

Objectives and Measures

- All providers are required to attest to a single set of objectives and measures.
- For eligible professionals (EPs) and eligible hospitals there are 8 objectives.
- To meet Stage 3 requirements, all providers must use technology certified to the 2015 Edition. A provider who has technology certified to a combination of the 2015 Edition and 2014 Edition may potentially attest to the Stage 3 requirements, if the mix of certified technologies would not prohibit them from meeting the Stage 3 measures. However, a provider who has technology certified to the 2014 Edition only may not attest to Stage 3.
- Please note there are no alternate exclusions or specifications available.
- There are changes to the measure calculations policy, which specifies that actions included the numerator must occur within the EHR reporting period if that period is a full calendar year, or if it is less than a full calendar year, within the calendar year in which the EHR reporting period occurs. Specific measures affected are identified in the Additional Information section of the specification sheets.

Flexibility within Objectives and Measures

- Stage 3 includes flexibility within certain objectives to allow providers to choose the measures most relevant to their patient population or practice. The Stage 3 objectives with flexible measure options include Coordination of Care through Patient Engagement – Providers must attest to all three measures and must meet the thresholds for at least two measures to meet the objective.
- Health Information Exchange – Providers must attest to all three measures and must meet the thresholds for at least two measures to meet the objective.
- Public Health Reporting – Eligible professionals must report on two measures and eligible hospitals must report on four measures.

EHR Reporting Period

For Program Years from 2018 – 2020 all EPs will have an EHR Meaningful use Reporting Period of any continuous 90 days from the specified program year.

For Program Years from 2018 – 2020 all EPs will have a Clinical Quality Measure (CQM) Reporting Period of 365 days from the specified program year.

For program year 2021, EHR Meaningful Use and CQM reporting periods will be a 90-day between January 1 and August 31 of 2021. This is due to the shortened or compressed attestation and payment periods that will insure that all incentive payments are completely paid by December 31, 2021. Note: Mississippi plans to issue the last incentive payment through our SLR/MMIS payment interface by October 31, 2021, and plans to decommission the SLR by December 31, 2021.

Here is what Eligible Professionals (EPs) should know about Stage 3 Meaningful Use:

Stage Three Meaningful Use Objectives(beginning January 1, 2019)	Stage 3 Meaningful Use Measures for EPs
Protect electronic protected health information (ePHI)	Protect electronic protected health information (ePHI) created or maintained by the CEHRT through the implementation of appropriate technical, administrative, and physical safeguards.
Generate and transmit permissible prescriptions electronically (eRx)	<p>Measure: More than 60 percent of all permissible prescriptions written by the EP are queried for a drug formulary and transmitted electronically using CEHRT.</p> <p>Exclusions: Any EP who:</p> <ul style="list-style-type: none"> ➤ Writes fewer than 100 permissible prescriptions during the EHR reporting period; or ➤ Does not have a pharmacy within their organization and there are no pharmacies that accept electronic prescriptions within 10 miles of the EP's practice location at the start of his or her EHR reporting period.
Clinical Decision Support	<p>Measure 1: Implement five clinical decision support interventions related to four or more CQMs at a relevant point in patient care for the entire EHR reporting period. Absent four CQMs related to an EP's scope of practice or patient population, the clinical decision support interventions must be related to high-priority health conditions.</p> <p>Measure 2: The EP has enabled and implemented the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period.</p>

	<p style="text-align: center;">Exclusion:</p> <p style="text-align: center;">Any EP who writes fewer than 100 medication orders during the EHR reporting period.</p>
<p>Computerized Provider Order Entry (CPOE)</p>	<p>An EP, through a combination of meeting the thresholds and exclusions (or both), must satisfy all three measures for this objective:</p> <p>Measure 1: More than 60 percent of medication orders created by the EP during the HR reporting period are recorded using computerized provider order entry.</p> <p>Measure 2: More than 60 percent of laboratory orders created by the EP during the EHR reporting period are recorded using computerized provider order entry.</p> <p>Measure 3: More than 60 percent of diagnostic imaging orders created by the EP during the EHR reporting period are recorded using computerized provider order entry.</p> <p style="text-align: center;">Exclusions:</p> <p style="text-align: center;">Measure 1: Any EP who writes fewer than 100 medication orders during the EHR reporting period.</p> <p style="text-align: center;">Measure 2: Any EP who writes fewer than 100 laboratory orders during the EHR reporting period.</p> <p style="text-align: center;">Measure 3: Any EP who writes fewer than 100 diagnostic imaging orders during the EHR reporting period.</p>
<p>Patient Electronic Access</p>	<p>EPs must satisfy both measures to meet this objective:</p> <p>Measure 1: For more than 80 percent of all unique patients seen by the EP:</p> <ol style="list-style-type: none"> 1) The patient (or the patient-authorized representative) is provided timely access to view online, download, and transmit his or her health information; and 2) The provider ensures the patient’s health information is available for the patient (or patient-authorized representative) to access

	<p>using any application of their choice that is configured to meet the technical specifications of the Application Programming Interface (API) in the provider’s CEHRT.</p> <p>Measure 2: The EP must use clinically relevant information from CEHRT to identify patient-specific educational resources and provide electronic access to those materials to more than 35 percent of unique patients seen by the EP during the EHR reporting period.</p> <p>Exclusions:</p> <p>Measure 1 and Measure 2: A provider may exclude the measures if one of the following applies:</p> <ul style="list-style-type: none"> ➤ An EP may exclude from the measure if they have no office visits during the EHR reporting period. ➤ Any EP that conducts 50 percent or more of his or her patient encounters in a county that does not have 50 percent or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period may exclude the measure.
<p>Coordination of Care</p>	<p>Providers must attest to all three measures and must meet the thresholds for at least two measures to meet the objective:</p> <p>Measure 1: For an EHR reporting period in 2017, more than 5 percent of all unique patients (or their authorized representatives) seen by the EP actively engage with the electronic health record made accessible by the provider and either—</p> <ol style="list-style-type: none"> 1. View, download or transmit to a third party their health information; or 2. Access their health information through the use of an API that can be used by applications chosen by the patient and configured to the API in the provider's CEHRT; or 3. A combination of (1) and (2) <p>Threshold for 2018 and Subsequent Years: The resulting percentage must be more than 10 percent.</p> <p>Measure 2: For an EHR reporting period in 2017, more than 5 percent of all unique patients seen by the EP during the EHR reporting period, a secure message was sent using the electronic messaging function of CEHRT to the patient (or</p>

	<p>the patient authorized representative), or in response to a secure message sent by the patient or their authorized representative.</p> <p>Threshold in 2018 and Subsequent Years: The resulting percentage must be more than 25 percent in order for an EP to meet this measure.</p> <p>Measure 3: Patient generated health data or data from a nonclinical setting is incorporated into the CEHRT for more than 5 percent of all unique patients seen by the EP during the EHR reporting period.</p> <p>Exclusions:</p> <p>Measure 1, 2 and 3 Exclusion: A provider may exclude the measures if one of the following apply:</p> <ul style="list-style-type: none"> ➤ An EP may exclude from the measure if they have no office visits during the EHR reporting period, or; ➤ Any EP that conducts 50 percent or more of his or her patient encounters in a county that does not have 50 percent or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period may exclude the measure.
<p>Health Information Exchange</p>	<p>Providers must attest to all three measures and must meet the threshold for at least two measures to meet the objective.</p> <p>Measure 1: For more than 50 percent of transitions of care and referrals, the EP that transitions or refers their patient to another setting of care or provider of care:</p> <ol style="list-style-type: none"> 1) Creates a summary of care record using CEHRT; and 2) Electronically exchanges the summary of care record <p>Measure 2: For more than 40 percent of transitions or referrals received and patient encounters in which the provider has never before encountered the patient, the EP incorporates into the patient’s EHR an electronic summary of care document.</p> <p>Measure 3: For more than 80 percent of transitions or referrals received and patient encounters in which the provider has never before encountered the patient, the EP performs a clinical information reconciliation. The provider must implement clinical information reconciliation for the following three clinical information sets:</p>

	<ol style="list-style-type: none"> 1) Medication. Review of the patient’s medication, including the name, dosage, frequency, and route of each medication. 2) Medication allergy. Review of the patient’s known medication allergies. 3) Current Problem list. Review of the patient’s current and active diagnoses. <p>Exclusions:</p> <p>Measure 1: A provider may exclude from the measure if any of the following apply:</p> <ul style="list-style-type: none"> ➤ Any EP who transfers a patient to another setting or refers a patient to another provider less than 100 times during the EHR reporting period. ➤ Any EP that conducts 50 percent or more of his or her patient encounters in a county that does not have 50 percent or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period may exclude the measures. <p>Measure 2: A provider may exclude from the measure if any of the following apply:</p> <ul style="list-style-type: none"> ➤ Any EP for whom the total of transitions or referrals received and patient encounters in which the provider has never before encountered the patient, is fewer than 100 during the EHR reporting period is excluded from this measure. ➤ Any EP that conducts 50 percent or more of his or her patient encounters in a county that does not have 50 percent or more of its housing units with 4Mbps
<p>Public Health Reporting</p>	<p>Measure 1: Immunization Registry Reporting: The EP is in active engagement with a public health agency to submit immunization data and receive immunization forecasts and histories from the public health immunization registry/immunization information system (IIS).</p> <p>Measure 2: Syndromic Surveillance Reporting: The EP is in active engagement with a public health agency to submit syndromic surveillance data from an urgent care setting.</p> <p>Measure 3:</p>

Electronic Case Reporting: The EP is in active engagement with a public health agency to submit case reporting of reportable conditions.

Measure 4:

Public Health Registry Reporting: The EP is in active engagement with a public health agency to submit data to public health registries.

Measure 5:

Clinical Data Registry Reporting: The EP is in active engagement to submit data to a clinical data registry.

Exclusions:

Measure 1:

Any EP meeting one or more of the following criteria may be excluded from the immunization registry reporting measure if the EP—

- Does not administer any immunizations to any of the populations for which data is collected by their jurisdiction's immunization registry or immunization information system during the EHR reporting period;
- Operates in a jurisdiction for which no immunization registry or immunization information system is capable of accepting the specific standards required to meet the CEHRT definition at the start of the EHR reporting period; or
- Operates in a jurisdiction where no immunization registry or immunization information system has declared readiness to receive immunization data as of 6 months prior to the start of the EHR reporting period.

Measure 2:

Any EP meeting one or more of the following criteria may be excluded from the syndromic surveillance reporting measure if the EP—

- Is not in a category of providers from which ambulatory syndromic surveillance data is collected by their jurisdiction's syndromic surveillance system;
- Operates in a jurisdiction for which no public health agency is capable of receiving electronic syndromic surveillance data from EPs in the specific standards required to meet the CEHRT definition at the start of the EHR reporting period; or
- Operates in a jurisdiction where no public health agency has declared readiness to receive syndromic surveillance data from EPs as of 6 months prior to the start of the EHR

	reporting period.
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Clinical Quality Measures (CQMs) Reporting:

Starting with Program Year 2019, Meaningful Use Stage 3, EPs will select and report on 6 of 53 Clinical Quality Measures. EPs will be required to address at least one CMS-High Priority CQM according to their scope of practice. If EPs are unable to address at least one CMS-High Priority CQM, they will be expected to address at least one of the State’s High-Priority CQM. If EPs are not able address at least one of the State’s High-Priority CQM, they are free to select any 6 CQMs that are within their scope of practice that data has been captured.

EH functionality is available in the SLR. However, all dually eligible hospitals in Mississippi have completed their full three participation years. The following is included as information.

Here is what Eligible Hospitals need to know about Stage 3 Meaningful Use:

Stage 3 Meaningful Use Objectives (beginning January 1, 2019)	Stage 3 Meaningful Use Measures:
Protect Electronic Protected Health Information (PHI)	<p>Measure: Conduct or review a security risk analysis in accordance with the requirements under 45 CFR 164.308(a)(1), including addressing the security (including encryption) of data created or maintained by CEHRT in accordance with requirements under 45 CFR 164.312(a)(2)(iv) and 45 CFR 164.306(d)(3), implement security updates as necessary, and correct identified security deficiencies as part of the provider’s risk management process.</p> <p style="text-align: center;">Exclusion:</p> <p style="text-align: center;">There is no exclusion for this Stage 3 Meaningful Use Objective</p>

<p>Transmitting Electronic Prescriptions</p>	<p>Measure:</p> <p>More than 25 percent of hospital discharge medication orders for permissible prescriptions (for new and changed prescriptions) are queried for a drug formulary and transmitted electronically using CEHRT.</p> <p style="padding-left: 40px;">Exclusion:</p> <p style="padding-left: 40px;">Any eligible hospital or CAH that does not have an internal pharmacy that can accept electronic prescriptions and there are no pharmacies that accept electronic prescriptions within 10 miles at the start of their EHR reporting period.</p>
<p>Clinical Decision Support</p>	<p>In order for eligible hospitals and CAHs to meet the objective they must satisfy both of the following measures:</p> <p>Measure 1: Implement five clinical decision support interventions related to four or more CQMs at a relevant point in patient care for the entire EHR reporting period. Absent four CQMs related to an eligible hospital or CAH's scope of practice or patient population, the clinical decision support interventions must be related to high-priority health conditions.</p> <p>Measure 2: The eligible hospital or CAH has enabled and implemented the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period.</p> <p style="padding-left: 40px;">There are no exclusions for the Stage 3 Meaningful Use Objective.</p>
<p>Computerized Provider Order Entry (CPOE)</p>	<p>An eligible hospital/CAH must meet the thresholds for all three measures:</p> <p>Measure 1: More than 60 percent of medication orders created by the authorized providers of the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using computerized provider order entry.</p> <p>Measure 2: More than 60 percent of laboratory orders created by the authorized providers of the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using computerized provider order entry.</p> <p>Measure 3: More than 60 percent of diagnostic imaging orders created by the</p>

	<p>authorized providers of the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using computerized provider order entry.</p> <p style="text-align: center;">There are no exclusions for the Stage 3 Meaningful Use Objective.</p>
<p>Patient Electronic Access</p>	<p>Eligible Hospitals and CAHs must satisfy both measures in order to meet the objective:</p> <p>Measure 1: For more than 80 percent of all unique patients discharged from the eligible hospital or CAH inpatient or emergency department (POS 21 or 23):</p> <ul style="list-style-type: none"> ➤ The patient (or the patient authorized representative) is provided timely access to view online, download, and transmit his or her health information; and ➤ The provider ensures the patient’s health information is available for the patient (or patient authorized representative) to access using any application of their choice that is configured to meet the technical specifications of the API in the provider’s CEHRT. <p>Measure 2: The eligible hospital or CAH must use clinically relevant information from CEHRT to identify patient-specific educational resources and provide electronic access to those materials to more than 35 percent of unique patients seen by the EP or discharged from the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period.</p> <p style="text-align: center;">Exclusion:</p> <p>Measures 1 and 2: Any eligible hospital or CAH will be excluded from the measure if it is located in a county that does not have 50 percent or more of their housing units with 4Mbps broadband availability according to the latest information available from the FCC at the start of the EHR reporting period.</p>

Coordination of Care	<p>Providers must attest to all three measures and must meet the thresholds for at least two measures to meet the objective:</p> <p>Measure 1: For an EHR reporting period in 2017, more than 5 percent of all unique patients (or their authorized representatives) discharged from the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) actively engage with the electronic health record made accessible by the provider and either—</p> <ol style="list-style-type: none"> 1. View, download or transmit to a third party their health information; or 2. Access their health information through the use of an API that can be used by applications chosen by the patient and configured to the API in the provider's CEHRT; or 3. A combination of (1) and (2) <p>Threshold for 2018 and Subsequent Years: The resulting percentage must be more than 10 percent.</p> <p>Measure 2: For an EHR reporting period in 2017, more than 5 percent of all unique patients discharged from the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period, a secure message was sent using the electronic messaging function of CEHRT to the patient (or the patient authorized representative), or in response to a secure message sent by the patient or their authorized representative.</p> <p>Threshold in 2018 and Subsequent Years: The resulting percentage must be more than 25 percent in order for an EP, eligible hospital, or CAH to meet this measure.</p> <p>Measure 3: Patient generated health data or data from a nonclinical setting is incorporated into the CEHRT for more than 5 percent of all unique patients discharged from the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period.</p> <p style="padding-left: 40px;">Exclusion:</p> <p style="padding-left: 40px;">Any eligible hospital or CAH will be excluded from the measure if it is located in a county that does not have 50 percent or more of their housing units with 4Mbps broadband availability according to the latest information available from the FCC at the start of the EHR reporting period.</p>
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**Health Information
Exchange**

Providers must attest to all three measures and must meet the thresholds for at least two measures to meet the objective.

Measure 1:

For more than 50 percent of transitions of care and referrals, the eligible hospital or CAH that transitions or refers their patient to another setting of care or provider of care:

- 1) Creates a summary of care record using CEHRT; and
- 2) Electronically exchanges the summary of care record.

Measure 2:

For more than 40 percent of transitions or referrals received and patient encounters in which the provider has never before encountered the patient, the eligible hospital or CAH incorporates into the patient's EHR an electronic summary of care document.

Measure 3:

For more than 80 percent of transitions or referrals received and patient encounters in which the provider has never before encountered the patient, the eligible hospital or CAH performs a clinical information reconciliation. The provider must implement clinical information reconciliation for the following three clinical information sets:

- 1) Medication. Review of the patient's medication, including the name, dosage, frequency, and route of each medication.
- 2) Medication allergy. Review of the patient's known medication allergies.
- 3) Current Problem list. Review of the patient's current and active diagnoses.

Exclusions:

Measure 1:

Any eligible hospital or CAH will be excluded from the measure if it is located in a county that does not have 50 percent or more of their housing units with 4Mbps broadband availability according to the latest information available from the FCC at the start of the EHR reporting period.

Measure 2:

A provider may exclude from the measure if any of the following apply:

- Any eligible hospital or CAH for whom the total of transitions or referrals received and patient encounters in which the provider has never before encountered the patient, is fewer than 100 during the EHR reporting period is excluded from this measure.

	<ul style="list-style-type: none"> ➤ Any eligible hospital or CAH that is located in a county that does not have 50 percent or more of their housing units with 4Mbps broadband availability according to the latest information available from the FCC at the start of the EHR reporting period. <p>Measure 3: Any eligible hospital or CAH for whom the total of transitions or referrals received and patient encounters in which the provider has never before</p>
Public Health Reporting	<p>Measure 1: – Immunization Registry Reporting: The eligible hospital or CAH is in active engagement with a public health agency to submit immunization data and receive immunization forecasts and histories from the public health immunization registry/immunization information system (IIS).</p> <p>Measure 2: – Syndromic Surveillance Reporting: The eligible hospital or CAH is in active engagement with a public health agency to submit syndromic surveillance data from an urgent care setting.</p> <p>Measure 3: – Electronic Case Reporting: The eligible hospital or CAH is in active engagement with a public health agency to submit case reporting of reportable conditions. NOTE: Electronic Case Reporting is not required until 2018.</p> <p>Measure 4 – Public Health Registry Reporting: The eligible hospital or CAH is in active engagement with a public health agency to submit data to public health registries.</p> <p>Measure 5 – Clinical Data Registry Reporting: The eligible hospital or CAH is in active engagement to submit data to a clinical data registry.</p> <p>Measure 6 – Electronic Reportable Laboratory Result Reporting: The eligible hospital or CAH is in active engagement with a public health agency to submit electronic reportable laboratory results.</p>

Appendix J: Post-Payment Audit Strategy for Meaningful Use

Appendix J will be submitted to CMS separate from this SMHP update to maintain confidentiality.

Appendix K: Meaningful Use Screenshots

Stage 3 Meaningful Use Objective: Protect Patient Health Information

Protect Patient Health Information

 Red asterisk indicates a required field.

Objective: Protect electronic protected health information (ePHI) created or maintained by the CEHRT through the implementation of appropriate technical, administrative, and physical safeguards.

Click [here](#) to view the CMS Stage 3 specification sheet for EPs.

Measure: Conduct or review a security risk analysis in accordance with the requirements in 45 CFR 164.308(a)(1), including addressing the security (to include encryption) of data created or maintained by CEHRT in accordance with requirements under 45 CFR 164.312(a)(2)(iv) and 45 CFR 164.306(d)(3), and implement security updates as necessary and correct identified security deficiencies as part of the EP's risk management process.

The ONC has created a security risk analysis questionnaire to assist providers in carrying out this objective. Click [here](#) to download a copy of the questionnaire.

MS requires the summary report as a supporting documentation. If you used a third-party consultant for your Security Risk Analysis, we would accept the summary report.

Complete the following information:

Have you conducted or reviewed a security risk analysis in accordance with the requirements?

Yes No


Attach Files

The following attachment is required:


- Summary Report of Security Risk Analysis

File Name	Subject	Remove
No records to display.		

Add Files 

Remove Selected 

Please select the 'Previous Screen' button to go back or the 'Save & Continue' button to proceed.

 Previous Screen

Save & Continue 

Security Risk Assessment Summary Report required as supporting documentation

Stage 3 Meaningful Use Objective: Electronic Prescribing

Electronic Prescribing

Red asterisk indicates a required field.

Objective: Generate and transmit permissible prescriptions electronically (eRx).
[Click here to view the CMS Stage 3 specification sheet for EPs.](#)

Exclusion Criteria: Meeting either of the following criteria qualifies for the exclusion for this measure.

Did you write **fewer than 100** permissible prescriptions during the EHR reporting period? No Yes

[What if I still want to report on the measure?](#)

Do you have a pharmacy within your organization or one that accepts electronic prescriptions within 10 miles of your practice location at the start of his or her EHR reporting period? No Yes

Measure: **More than 60%** of all permissible prescriptions written by the EP are queried for a drug formulary and transmitted electronically using CEHRT.

PATIENT RECORDS: Please select whether the data used to support the measure was extracted from ALL patient records or only from patient records maintained using certified EHR technology.

This data was extracted from ALL patient records not just those maintained using certified EHR technology.

This data was extracted only from patient records maintained using certified EHR technology.

Please make a selection for Patient Records.

Complete the following information:

Numerator = The number of prescriptions in the denominator generated, queried for a drug formulary and transmitted electronically using CEHRT.

Please enter a numerator.

Denominator = Number of prescriptions written for drugs requiring a prescription in order to be dispensed other than controlled substances during the EHR reporting period; or number of prescriptions written for drugs requiring a prescription in order to be dispensed during the EHR reporting period.

Please enter a denominator.

Attach Files

The following attachments are optional:

- Sample of ePrescribing (PHI redacted)

File Name	Subject	Remove
No records to display.		

No additional supporting documentation required for this objective

Stage 3 Meaningful Use Objective: Clinical Decision Support

Clinical Decision Support

 Red asterisk indicates a required field.

Objective: Implement clinical decision support (CDS) interventions focused on improving performance on high-priority health conditions.

[Click !\[\]\(830769b31eeeaca920791081939ff8ba_img.jpg\) here to view the CMS Stage 3 specification sheet for EPs.](#)

Exclusion Criteria

Did you write **fewer than 100** of the following orders during the EHR reporting period? Writing **fewer than 100** orders qualifies for the exclusion for Measure #2 only.

No

Yes

Measure #1: Implement five clinical decision support interventions related to four or more clinical quality measures at a relevant point in patient care for the entire EHR reporting period. Absent four clinical quality measures related to the EP's scope of practice or patient population, the clinical decision support interventions must be related to high-priority health conditions.

Complete the following information:

***** Have you implemented five clinical decision support interventions related to four or more clinical quality measures or high-priority health conditions at a relevant point in patient care for the entire EHR reporting period?

No Yes

***** List the five clinical decision support interventions you have implemented

1	
2	
3	
4	
5	

***** These clinical decision support interventions are related to

4 or more clinical quality measures 4 or more high priority health conditions

***** [Select CQMs](#)

See CQM selection screen (next page)

Clinical Quality Measures 			
CMS eMeasure ID	Title	Domain	Select
CMS2	Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan	Population/Public Health	<input type="checkbox"/>
CMS22	Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented	Population/Public Health	<input type="checkbox"/>
CMS50	Closing the referral loop: receipt of specialist report	Care Coordination	<input type="checkbox"/>
CMS52	HIV/AIDS: Pneumocystis jiroveci pneumonia (PCP) Prophylaxis	Clinical Process/Effectiveness	<input type="checkbox"/>
CMS56	Functional status assessment for hip replacement	Patient and Family Engagement	<input type="checkbox"/>
CMS65	Hypertension: Improvement in blood pressure	Clinical Process/Effectiveness	<input type="checkbox"/>
CMS66	Functional status assessment for knee replacement	Patient and Family Engagement	<input type="checkbox"/>
CMS68	Documentation of Current Medications in the Medical Record	Patient Safety	<input type="checkbox"/>
CMS69	Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up	Population/Public Health	<input type="checkbox"/>
CMS74	Primary Caries Prevention Intervention as Offered by Primary Care Providers, including Dentists	Clinical Process/Effectiveness	<input type="checkbox"/>
CMS75	Children who have dental decay or cavities	Clinical Process/Effectiveness	<input type="checkbox"/>
CMS82	Maternal Depression Screening	Population/Public Health	<input type="checkbox"/>
CMS90	Functional Status Assessment for Congestive Heart Failure	Patient and Family	<input type="checkbox"/>

Clinical Decision Support Continued ...

A cross reference listing of the Clinical Quality Measures is located in the User Guide to assist you with identifying the applicable CQM numbers, if needed.

Measure #2: The EP has enabled and implemented the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period.

Complete the following information:

- Have you enabled and implemented the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period?

No Yes

Attach Files

The following attachments are optional:

- Other

File Name	Subject	Remove
No records to display.		

Add Files +
Remove Selected X


Please select the 'Previous Screen' button to go back or the 'Save & Continue' button to proceed.

← Previous Screen
Save & Continue →

No additional supporting documentation required for this objective

Stage 3 Meaningful Use Objective: Computerized Provider Order Entry (CPOE)

Computerized Provider Order Entry (CPOE)

 Red asterisk indicates a required field.

Objective: Use computerized provider order entry (CPOE) for medication, laboratory, and diagnostic imaging orders directly entered by any licensed healthcare professional, credentialed medical assistant, or a medical staff member credentialed to and performing the equivalent duties of a credentialed medical assistant, who can enter orders into the medical record per state, local, and professional guidelines.

[Click here to view the CMS Stage 3 specification sheet for EPs.](#)

Exclusion Criteria : Did you write fewer than 100 of the following orders during the EHR reporting period? Writing fewer than 100 orders qualifies for the exclusion for the associated measure

Medication Orders (Measure #1)	No <input checked="" type="radio"/>	Yes <input type="radio"/>
Laboratory Orders (Measure #2)	No <input checked="" type="radio"/>	Yes <input type="radio"/>
Diagnostic Imaging Orders (Measure #3)	No <input checked="" type="radio"/>	Yes <input type="radio"/>

Measure #1: More than 80% of medication orders created by the EP during the EHR Reporting period are recorded using CPOE.

***PATIENT RECORDS:** Please select whether the data used to support the measure was extracted from ALL patient records or only from patient records maintained using certified EHR technology.

This data was extracted from ALL patient records not just those maintained using certified EHR technology.

This data was extracted only from patient records maintained using certified EHR technology.

Please make a selection for Patient Records.

Complete the following information:

- Numerator** = The number of orders in the denominator recorded using CPOE.
Please enter a numerator.
- Denominator** = Number of medication orders created by the EP during the EHR reporting period.
Please enter a denominator.

Full Meaningful Use and CQM Summary Reports (All Objectives) to be uploaded on this screen

Computerized Provider Order Entry (CPOE) Continued – Measures 2 and 3

Measure #2: More than 60% of laboratory orders created by the EP during the EHR Reporting period are recorded using CPOE.

▪ **PATIENT RECORDS:** Please select whether the data used to support the measure was extracted from ALL patient records or only from patient records maintained using certified EHR technology.

This data was extracted from ALL patient records not just those maintained using certified EHR technology.

This data was extracted only from patient records maintained using certified EHR technology.

Please make a selection for Patient Records.

Complete the following information:

▪ **Numerator** = The number of orders in the denominator recorded using CPOE.
Please enter a numerator.

▪ **Denominator** = Number of laboratory orders created by the EP during the EHR reporting period.
Please enter a denominator.

Measure #3: More than 60% of diagnostic imaging orders created by the EP during the EHR Reporting period are recorded using CPOE.

▪ **PATIENT RECORDS:** Please select whether the data used to support the measure was extracted from ALL patient records or only from patient records maintained using certified EHR technology.

This data was extracted from ALL patient records not just those maintained using certified EHR technology.

This data was extracted only from patient records maintained using certified EHR technology.

Please make a selection for Patient Records.

Complete the following information:

▪ **Numerator** = The number of orders in the denominator recorded using CPOE.
Please enter a numerator.

▪ **Denominator** = Number of diagnostic orders created by the EP during the EHR reporting period.
Please enter a denominator.

Attach Files

The following attachment is required:

- Full Meaningful Use Summary Report (All MU and CQM Objectives and Measures)

File Name	Subject	Remove
No records to display.		

Please select the 'Previous Screen' button to go back or the 'Save & Continue' button to proceed.

Stage 3 Meaningful Use Objective: Patient Electronic Access

Patient Electronic Access

Red asterisk indicates a required field.

Objective: Provide patients (or patient-authorized representative) with timely electronic access to their health information and patient-specific education

[Click here](#) to view the CMS Stage 3 specification sheet for EPs.

Exclusion Criteria: Meeting either of the following criteria qualifies for the exclusion for both measures.

Did you have any office visits during the EHR reporting period? No Yes

Did you conduct 50% or more of your encounters in a county/area that does not have more than 50% or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period? No Yes

Measure#1: More than 80% of all unique patients seen by the EP during the EHR reporting period are 1) provided timely access to view online, download, and transmit his or her health information; and 2) the EP ensures the patient's health information is available for the patient (or patient-authorized representative) to access using any application of their choice that is configured to meet the technical specifications of the API in the provider's CEHRT.

Complete the following information:

* **Numerator** = The number of patients in the denominator (or patient authorized representative) who are provided timely access to health information to view online, download, and transmit to a third party and to access using an application of their choice that is configured to meet the technical specifications of the API in the provider's CEHRT.

Please enter a numerator.

* **Denominator** = Number of unique patients seen by the EP during the EHR reporting period.

Please enter a denominator.

Measure#2: The provider must use clinically relevant information from CEHRT to identify patient-specific education resources and provide electronic access to those materials to more than 35% of unique patients seen by the EP during the EHR reporting period.

Complete the following information:

* **Numerator** = The number of patients in the denominator who were provided electronic access to patient-specific educational resources using clinically relevant information identified from CEHRT during the EHR reporting period.

Please enter a numerator.

* **Denominator** = Number of unique patients seen by the EP during the EHR reporting period.

Please enter a denominator.

No additional supporting documentation required for this objective

Stage 3 Meaningful Use Objective: Coordination of Care

Coordination of Care

Red asterisk indicates a required field.

Objective: Use CEHRT to engage with patients or their authorized representatives about the patient's care (providers must attest to all three measures and must meet the thresholds for at least two measures to meet the objective).
[Click here to view the CMS Stage 3 specification sheet for EPs.](#)

Exclusion Criteria: Meeting either of the following criteria qualifies for the exclusion for this measure.

Did you have any office visits during the EHR reporting period? No Yes

Did you conduct 50% or more of your encounters in a county/area that does not have more than 50% or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period? No Yes

Measure#1: During the EHR reporting period, more than 5 percent of all unique patients (or their authorized representatives) seen by the EP actively engage with the electronic health record made accessible by the provider and either: (1) View, download or transmit to a third party their health information; or (2) access their health information through the use of an API that can be used by applications chosen by the patient and configured to the API in the provider's CEHRT; or (3) a combination of (1) and (2).

Complete the following information:

* **Numerator** = The number of patients (or patient authorized representative) in the denominator who have viewed online, downloaded, or transmitted to a third party the patient's health information during the EHR reporting period and the number of unique patients (or patient authorized representative) in the denominator who have accessed their health information through the use of an API during the EHR reporting period.
Please enter a numerator.

* **Denominator** = Number of unique patients seen by the EP during the EHR reporting period
Please enter a denominator.

Measure#2: For more than 5 percent of all unique patients seen by the EP during the EHR reporting period, a secure message was sent using the electronic messaging function of CEHRT to the patient (or the patient authorized representative), or in response to a secure message sent by the patient or their authorized representative.

Complete the following information:

* **Numerator** = The number of patients in the denominator for whom a secure electronic message is sent to the patient (or patient-authorized representative) or in response to a secure message sent by the patient (or patient-authorized representative), during the EHR reporting period.
Please enter a numerator.

* **Denominator** = The number of unique patients seen by the EP during the EHR reporting period.
Please enter a denominator.

No additional supporting documentation required for this objective

Coordination of Care *continued* Measure 3

Measure#3: Patient generated health data or data from a nonclinical setting is incorporated into the CEHRT for more than 5 percent of all unique patients seen by the EP during the EHR reporting period.

Complete the following information:

■ **Numerator** = The number of patients in the denominator for whom data from non-clinical settings, which may include patient-generated health data, is captured through the CEHRT into the patient record during the EHR reporting period.

Please enter a numerator.

■ **Denominator** = The number of unique patients seen by the EP during the EHR reporting period.

Please enter a denominator.

Attach Files

The following attachments are optional:

- (Measure 1) Screenshot of Patient Portal Login screen
- (Measure 2) Sample of a Secure Message sent from the EHR to a patient (PHI redacted)
- (Measure 3) Sample of patient-submitted health data from a nonclinical setting (PHI redacted)

File Name	Subject	Remove
No records to display.		

Please select the 'Previous Screen' button to go back or the 'Save & Continue' button to proceed.

|

No additional supporting documentation required for this objective

Stage 3 Meaningful Use Objective: Health Information Exchange

Health Information Exchange

Red asterisk indicates a required field.

Objective: The EP provides a summary of care or record when transitioning or referring their patient to another setting of care, receives or retrieves a summary of care record upon receipt of a transition or referral or upon the first patient encounter with a new patient, and incorporates summary of care information from other providers into their EHR using the functions of CEHRT (providers must attest to all three measures and must meet the thresholds for at least two measures to meet the objective).

[Click here](#) to view the CMS Stage 3 specification sheet for EPs.

Exclusion Criteria : Meeting the following criteria qualifies for the exclusion for the relevant measures.

Did you transfer a patient to another setting or refer a patient to another provider less than 100 times during the EHR reporting period? (Measure #1)	No <input type="radio"/>	Yes <input type="radio"/>
Did you conduct 50% or more of your encounters in a county/area that does not have more than 50% or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period? (Measure #1)	No <input checked="" type="radio"/>	Yes <input type="radio"/>
Were transitions or referrals received and patient encounters in which the provider has never before encountered the patient fewer than 100 during the EHR reporting period? (Measure #2)	No <input type="radio"/>	Yes <input type="radio"/>
Did you conduct 50% or more of your encounters in a county/area that does not have more than 50% or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period? (Measure #2)	No <input checked="" type="radio"/>	Yes <input type="radio"/>
Were transitions or referrals received and patient encounters in which the provider has never before encountered the patient fewer than 100 during the EHR reporting period? (Measure #3)	No <input checked="" type="radio"/>	Yes <input type="radio"/>

No additional supporting documentation required for this objective

Health Information Exchange continued ... measures 1, 2 and 3 data entry form

Measure #1: For more than 50 percent of transitions of care and referrals, the EP that transitions or refers their patient to another setting of care or provider of care: (1) Creates a summary of care record using CEHRT; and (2) electronically exchanges the summary of care record.

Complete the following information:

- **Numerator** = The number of transitions of care and referrals in the denominator where a summary of care record was created using Certified EHR technology and is exchanged electronically.
Please enter a numerator.
- **Denominator** = Number of transitions of care and referrals during the EHR reporting period for which the EP was the transferring or referring provider.
Please enter a denominator.

Measure #2: For more than 40 percent of transitions or referrals received and patient encounters in which the provider has never before encountered the patient, the EP incorporates into the patient's EHR an electronic summary of care document.

▪ **PATIENT RECORDS:** Please select whether the data used to support the measure was extracted from ALL patient records or only from patient records maintained using certified EHR technology:

This data was extracted from ALL patient records not just those maintained using certified EHR technology.

This data was extracted only from patient records maintained using certified EHR technology.

Please make a selection for Patient Records.

Complete the following information:

- **Numerator** = Number of patient encounters in the denominator where an electronic summary of care record received is incorporated by the provider into the certified EHR technology.
Please enter a numerator.
- **Denominator** = Number of patient encounters during the EHR reporting period for which an EP was the receiving party of a transition or referral or has never before encountered the patient and for which an electronic summary of care record is available.
Please enter a denominator.

Measure #3: For more than 80 percent of transitions or referrals received and patient encounters in which the provider has never before encountered the patient, the EP performs clinical information reconciliation. The provider must implement clinical information reconciliation for the following three clinical information sets: (1) Medication. Review of the patient's medication, including the name, dosage, frequency, and route of each medication. (2) Medication allergy. Review of the patient's known medication allergies. (3) Current Problem list. Review of the patient's current and active diagnoses.

Complete the following information:



- **Numerator** = The number of transitions of care or referrals in the denominator where the following three clinical information reconciliations were performed: Medication list, medication allergy list, and current problem list.
Please enter a numerator.
- **Denominator** = Number of transitions of care or referrals during the EHR reporting period for which the EP was the recipient of the transition or referral or has never before encountered the patient
Please enter a denominator.

Attach Files

The following attachments are optional:

- (Measure 1) Sample Summary of Care Record (PHI redacted)
- (Measure 2-3) Sample of a Transitions of care document (PHI redacted)

File Name	Subject	Remove
No records to display.		

Please select the 'Previous Screen' button to go back or the 'Save & Continue' button to proceed.

 | 


No additional supporting documentation required for this objective

Stage 3 Meaningful Use Objective: Public Health Reporting

Selection Screen










Public Health Reporting

Objective: The EP is in active engagement with a Public Health Agency (PHA) or clinical data registry (CDR) to submit electronic public health data in a meaningful way using certified EHR technology, except where prohibited, and in accordance with applicable law and practice.

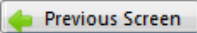

Click  [here](#) to view the CMS Stage 3 specification sheet for EPs.

In order to meet this objective, EPs must meet two of the total number of measures available to them. Reporting an exclusion for a measure does not qualify towards meeting the objective unless the EP can report on fewer than 2 measures. If an EP can report on fewer than 2 measures, the EP must report on any possible measures and claim the exclusion for the remaining measures. If no measures remain available, the EP can meet the objective by claiming applicable exclusions for all measures.

For Measure 4, EPs may choose to report to more than one public health registry to meet the number of measures required to meet the objective. For Measure 5, EPs may choose to report to more than one clinical data registry to meet the number of measures required to meet the objective. Select "I will report on this measure" to report for the specific measure. Select "I will claim exclusion for this measure" to claim exclusion for the specific measure."

Measure	I will report on this measure	I will claim exclusion for this measure
Measure 1 – Immunization Registry Reporting 	<input type="checkbox"/>	<input type="checkbox"/>
Measure 2 – Syndromic Surveillance Reporting 	<input type="checkbox"/>	<input type="checkbox"/>
Measure 3 – Electronic Case Reporting (this measure is not required until 2019). 	<input type="checkbox"/>	<input type="checkbox"/>
Measure 4 – Public Health Registry Reporting (Registry #1) 	<input type="checkbox"/>	<input type="checkbox"/>
Measure 4 – Public Health Registry Reporting (Registry #2) 	<input type="checkbox"/>	<input type="checkbox"/>
Measure 4 – Public Health Registry Reporting (Registry #3) 	<input type="checkbox"/>	<input type="checkbox"/>
Measure 5 – Clinical Data Registry Reporting (Registry #1) 	<input type="checkbox"/>	<input type="checkbox"/>
Measure 5 – Clinical Data Registry Reporting (Registry #2) 	<input type="checkbox"/>	<input type="checkbox"/>
Measure 5 – Clinical Data Registry Reporting (Registry #3) 	<input type="checkbox"/>	<input type="checkbox"/>

Please select the 'Previous Screen' button to go back or the 'Save & Continue' button to proceed.

Public Health Reporting continued Immunization Registry

Measure 1 – Immunization Registry Reporting

Red asterisk indicates a required field.

Measure: The EP is in active engagement with a Public Health Agency (PHA) to submit immunization data and receive immunization forecasts and histories from the public health immunization registry/immunization information system.
[Click here](#) to view the CMS Stage 3 specification sheet for EPs.

Exclusion Criteria: Meeting any of the following criteria qualifies for the exclusion for this measure. Select all that apply.

- Does not administer any immunizations to any of the populations for which data is collected by their jurisdiction's immunization registry or immunization information system during the EHR reporting period.
- Operates in a jurisdiction where no immunization registry or immunization information system is capable of accepting the specific standards required to meet the CEHRT definition at the start of the EHR reporting period.
- Operates in a jurisdiction where no immunization registry or immunization information system has declared readiness to receive immunization data as of 6 months prior to the start of the EHR reporting period.

Active Engagement: Select the level of active engagement you demonstrate for this measure. Only one level may be selected.

- Option 1 – Completed Registration to Submit Data:** the EP registered to submit data with the PHA, or where applicable, the clinical data registry to which the information is being submitted; registration was completed within 60 days after the start of the EHR reporting period; and the EP is awaiting an invitation from the PHA to begin testing and validation. Providers that have registered in previous years do not need to submit an additional registration to meet this requirement for each EHR reporting period.
- Option 2 – Testing and Validation:** the EP is in the process of testing and validation of the electronic submission of data. Providers must respond to requests from the PHA or where applicable, the clinical data registry within 30 days; failure to respond twice within an EHR reporting period would result in the provider not meeting the measure.
- Option 3 – Production:** the EP has completed testing and validation of the electronic submission and is electronically submitting production data to the PHA or clinical data registry.

Evidence of Level of Active Engagement with Immunization Registry documentation required

Attach Files

The following attachment is required:

- Evidence of Level of Active Engagement (Registration, Testing, Production) OR If Exclusion is reported – Brief statement detailing the reason for exclusion (ie. Provider type does not administer immunizations, etc...)

File Name	Subject	Remove
No records to display.		

Please select the 'Previous Screen' button to go back or the 'Save & Continue' button to proceed.

Public Health Reporting continued Syndromic Surveillance

Measure 2 – Syndromic Surveillance Reporting

Red asterisk indicates a required field.

Measure: The EP is in active engagement with a Public Health Agency (PHA) to submit syndromic surveillance data from an urgent care setting.
[Click here to view the CMS Stage 3 specification sheet for EPs.](#)

Exclusion Criteria: Meeting any of the following criteria qualifies for the exclusion for this measure. Select all that apply.

- Is not in a category of providers from which ambulatory syndromic surveillance data is collected by their jurisdiction's syndromic surveillance system;
- Operates in a jurisdiction where no public health agency is capable of receiving electronic syndromic surveillance data from EPs in the specific standards required to meet the CEHRT definition at the start of the EHR reporting period.
- Operates in a jurisdiction where no public health agency has declared readiness to receive syndromic surveillance data from the EP as of 6 months prior to the start of the EHR reporting period.

Active Engagement: Select the level of active engagement you demonstrate for this measure. Only one level may be selected.

- Option 1 – Completed Registration to Submit Data:** the EP registered to submit data with the PHA, or where applicable, the clinical data registry to which the information is being submitted; registration was completed within 60 days after the start of the EHR reporting period; and the EP is awaiting an invitation from the PHA to begin testing and validation. Providers that have registered in previous years do not need to submit an additional registration to meet this requirement for each EHR reporting period.
- Option 2 – Testing and Validation:** the EP is in the process of testing and validation of the electronic submission of data. Providers must respond to requests from the PHA or where applicable, the clinical data registry within 30 days; failure to respond twice within an EHR reporting period would result in the provider not meeting the measure.
- Option 3 – Production:** the EP has completed testing and validation of the electronic submission and is electronically submitting production data to the PHA or clinical data registry.

Attach Files

The following attachments are optional:

- Evidence of Level of Active Engagement (Registration, Testing, Production)


File Name	Subject	Remove
No records to display.		

Please select the 'Previous Screen' button to go back or the 'Save & Continue' button to proceed.


No additional supporting documentation required for this objective

Public Health Reporting continued Public Health Registry

Measure 4 – Public Health Registry Reporting (Registry #1)

 Red asterisk indicates a required field.


Measure: The EP is in active engagement with a Public Health Agency (PHA) to submit data to public health registries.
[Click !\[\]\(c263d81aa864cca596cad473a1cc9425_img.jpg\) here to view the CMS Stage 3 specification sheet for EPs.](#)

Exclusion Criteria: Meeting any of the following criteria qualifies for the exclusion for this measure. Select all that apply. 

- Does not diagnose or treat any disease or condition associated with a public health registry in their jurisdiction during the EHR reporting period.
- Operates in a jurisdiction where no public health agency is capable of accepting electronic registry transactions in the specific standards required to meet the CEHRT definition at the start of the EHR reporting period.
- Operates in a jurisdiction where no public health registry for which the EP is eligible has declared readiness to receive electronic registry transactions as of 6 months prior to the start of the EHR reporting period.

Active Engagement: Select the level of active engagement you demonstrate for this measure. Only one level may be selected.

- Option 1 - Completed Registration to Submit Data:** the EP registered to submit data with the PHA, or where applicable, the clinical data registry to which the information is being submitted; registration was completed within 60 days after the start of the EHR reporting period; and the EP is awaiting an invitation from the PHA to begin testing and validation. Providers that have registered in previous years do not need to submit an additional registration to meet this requirement for each EHR reporting period.
- Option 2 – Testing and Validation:** the EP is in the process of testing and validation of the electronic submission of data. Providers must respond to requests from the PHA or where applicable, the clinical data registry within 30 days; failure to respond twice within an EHR reporting period would result in the provider not meeting the measure.
- Option 3 – Production:** the EP has completed testing and validation of the electronic submission and is electronically submitting production data to the PHA or clinical data registry.

 Registry Name

Attach Files

The following attachments are optional:

- Evidence of Level of Active Engagement (Registration, Testing, Production)

File Name	Subject	Remove
No records to display.		

"/>
"/>

No additional supporting documentation required for this objective

Public Health Reporting continued Clinical Data Registry

Measure 5 – Clinical Data Registry Reporting (Registry #1)

Red asterisk indicates a required field.

Measure: The EP is in active engagement to submit data to a clinical data registry (CDR).
[Click here to view the CMS Stage 3 specification sheet for EPs.](#)

Exclusion Criteria: Meeting any of the following criteria qualifies for the exclusion for this measure. Select all that apply.

Does not diagnose or directly treat any disease or condition associated with a clinical data registry in their jurisdiction during the EHR reporting period.

Operates in a jurisdiction for which no clinical data registry is capable of accepting electronic registry transactions in the specific standards required to meet the CEHRT definition at the start of the EHR reporting period.

Operates in a jurisdiction where no clinical data registry for which the EP is eligible has declared readiness to receive electronic registry transactions as of 6 months prior to the start of the EHR reporting period.

Active Engagement: Select the level of active engagement you demonstrate for this measure. Only one level may be selected.

Option 1 - Completed Registration to Submit Data: the EP registered to submit data with the PHA, or where applicable, the clinical data registry to which the information is being submitted; registration was completed within 60 days after the start of the EHR reporting period; and the EP is awaiting an invitation from the PHA to begin testing and validation. Providers that have registered in previous years do not need to submit an additional registration to meet this requirement for each EHR reporting period.

Option 2 – Testing and Validation: the EP is in the process of testing and validation of the electronic submission of data. Providers must respond to requests from the PHA or where applicable, the clinical data registry within 30 days; failure to respond twice within an EHR reporting period would result in the provider not meeting the measure.

Option 3 – Production: the EP has completed testing and validation of the electronic submission and is electronically submitting production data to the PHA or clinical data registry.

Registry Name:

Attach Files

The following attachments are optional:

- Evidence of Level of Active Engagement (Registration, Testing, Production)

File Name	Subject	Remove
No records to display.		

Please select the 'Previous Screen' button to go back or the 'Save & Continue' button to proceed.

No additional supporting documentation required for this objective

Clinical Quality Measures Selection Screen (partial screen)

Clinical Quality Measures

EPs must report on a total of six (6) Clinical Quality Measures. EPs should select the CQMs that best apply to their scope of practice and/or unique patient population. If the EP's CEHRT does not contain patient data for at least 6 CQMs, then the EP must report the CQMs for which there is patient data and report the remaining CQMs for which there is patient data and report the remaining required CQMS as "zero denominators" as displayed by the EP's CEHRT.

[Import Clinical Quality Measure Data](#)

Clinical Quality Measures Summary


CMS eMeasure ID	Title	Description	Select
CMS117	Childhood Immunization Status	Percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); three H influenza type B (HiB); three hepatitis B (Hep B); one chicken pox (VZV); four pneumococcal conjugate (PCV); one hepatitis A (Hep A); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday.	<input type="checkbox"/>
CMS122	Diabetes: Hemoglobin A1c (HbA1c) Poor Control (> 9%)	Percentage of patients 18-75 years of age with diabetes who had hemoglobin A1c > 9.0% during the measurement period.	<input type="checkbox"/>
CMS123	Diabetes: Foot Exam	Percentage of patients 18-75 years of age with diabetes (type 1 and type 2) who received a foot exam (visual inspection and sensory exam with mono filament and a pulse exam) during the measurement period.	<input type="checkbox"/>
CMS124	Cervical Cancer Screening	Percentage of women 21 – 64 years of age who were screened for cervical cancer using either of the following criteria: -Women age 21-64 who had cervical cytology performed every 3 years -Women age 30-64 who had cervical cytology/human papillomavirus (HPV) co-testing performed every 5 years.	<input type="checkbox"/>
CMS125	Breast Cancer Screening	Percentage of women 50-74 years of age who had a mammogram to screen for breast cancer.	<input type="checkbox"/>
CMS127	Pneumococcal Vaccination Status for Older Adults	Percentage of patients 65 years of age and older who have ever received a pneumococcal vaccine.	<input type="checkbox"/>
CMS128	Anti-Depressant Medication Management	Percentage of patients 18 years of age and older who were diagnosed with major depression and treated with antidepressant medication, and who remained on antidepressant medication treatment. Two rates are reported. 1. Percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks). 2. Percentage of patients who remained on an antidepressant medication for at least 180 days (6 months).	<input type="checkbox"/>

Additional screens are created from selected CQMs above. See sample on next page.

Sample CQM data entry form

CQM CMS165

Questionnaire (1 of 6)

 Red asterisk indicates a required field.

CMS165

Title: Controlling High Blood Pressure

Description: Percentage of patients 18-85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (<140/90mmHg) during the measurement period.

Complete the following information:

Numerator: **Denominator:** **Performance Rate %:** **Exclusion:**

Attach Files

The following attachments are optional:

- Supporting Report from EHR

File Name	Subject	Remove
No records to display.		

Please select the 'Previous Screen' button to go back or the 'Save & Continue' button to proceed.

No additional supporting documentation required for this objective

2.4.3 EH – Stage 3 Screen Shots

1. About You

2. Confirm Medicaid Eligibility

3. Attestation of EHR

- EHR Certification
- EHR Reporting Period
- MU - Import
- MU Objectives
 - Protect Health
 - CDS
 - CPOE
 - CQM - Import
 - CQM

EHR Certification

EHR Certification

Providers must provide information demonstrating that their EHR technology is certified through the Office of the National Coordinator (ONC). The ONC Certified HIT Product List (CHPL) contains the list of all certified EHR technology products and is used by the providers to generate the unique EHR Certification ID that contains the list of all certified EHR technology products and is used by the providers to generate the unique EHR Certification ID that represents the system or combination of modules that is capable of meeting Meaningful Use. The State is required to validate the verification of the Certified EHR information before making any payment to providers.

It is the provider's responsibility to generate an EHR Certification ID that accurately reflects the complete EHR or combination of modules representing a complete EHR used by the provider before attesting to the State. Failure to do so could result in a false negative result that may disqualify the provider from receiving payment.

To proceed, please indicate your understanding of this responsibility by agreeing to the following statements. Note: the second statement is not required.

Provider Understands Responsibility *

Eligible Hospital or CAH **must attest** that they engaged in SPPC activities by attesting that they: (1) acknowledge of the requirement to cooperate in good faith with ONC direct review of their health information technology certified under the ONC Health IT Certification Program if a request to assist in ONC direct review is received; and (2) if a requested, cooperate in good faith in ONC direct review of health information technology under the ONC Health IT Certification Program as authorized by 45 CFR part 170, subpart E, to the extent that such technology meets (or can be used to meet) the definition of CEHRT, including by permitting timely access to such technology and demonstrating its capabilities as implemented and used by the eligible hospital, or CAH in the field

Optionally, the eligible hospital or CAH may also attest that they engaged in SPPC activities by attesting: (1) acknowledge the option to cooperate in good faith with ONC-ACB surveillance of their health information technology certified under the ONC Health IT Certification Program if a request to assist in ONC-ACB surveillance is received; and (2) if requested, cooperated in good faith with ONC-ACB surveillance of their health information technology certified under the ONC Health IT Certification Program, as authorized by 45 CFR part 170, subpart E, to the extent that such technology meets (or can be used to meet) the definition of CEHRT, including by permitting timely access to such technology and demonstrating its capabilities as implemented and used by the eligible hospital, or CAH in the field."

Eligible Hospital or CAH **must attest** that they engaged in the prevention of information blocking by attesting that they: (1) Did not knowingly and willfully take action (such as to disable functionality) to limit or restrict the compatibility or interoperability of certified EHR technology; and (2) Implemented technologies, standards, policies, practices, and agreements reasonably calculated to ensure, to the greatest extent practicable and permitted by law, that the certified EHR technology was, at all relevant times: (i) Connected in accordance with applicable law; (ii) Compliant with all standards applicable to the exchange of information, including the standards, implementation specifications, and certification criteria adopted at 45 CFR part 170; (iii) Implemented in a manner that allowed for timely access by patients to their electronic health information; and (iv) Implemented in a manner that allowed for the timely, secure, and trusted bi-directional exchange of structured electronic health information with other health care providers (as defined by 42 U.S.C. 300jj(3)), including unaffiliated providers, and with disparate certified EHR technology and vendors; and (3) Responded in good faith and in a timely manner to requests to retrieve or exchange electronic health information, including from patients, health care providers (as defined by 42 U.S.C. 300jj(3)), and other persons, regardless of the requestor's affiliation or technology vendor.

I understand that it is my responsibility, as the provider, to ensure that my certified EHR technology code is listed on the ONC public web service before submitting my attestation to the State. I understand that failing to ensure my code is listed may result in a false negative result that may disqualify me from receiving payment.

EHR Certification

EHR Certification Number *

1) Go to the ONC website: <https://chpl.healthit.gov>.
2) Search for your product(s) and select "+CertID" to add to the CMS EHR Certification ID widget on the right side of the page.
3) Once you have entered all of the desired products, click the "Get EHR Certification ID button".
4) Your CMS EHR Certification ID will be displayed on the screen. This is the number you will need to enter above as part of your attestation.

NOTE: ONC does not allow you to mix Inpatient products and Ambulatory products together to represent a complete EHR solution. Additionally, if the product(s) you add to your shopping cart do not represent a complete EHR solution capable of achieving meaningful use criteria, you will not be able to click "Get CMS EHR Certification ID" in step 3.

You must enter an EHR Certification ID that meets the 2014 certification criteria or 2015 certification criteria.
Systems certified to the 2011 criteria no longer qualify toward meeting Meaningful Use.

- 1. About You
- 2. Confirm Medicaid Eligibility
- 3. Attestation of EHR
 - EHR Certification
 - EHR Reporting Period
 - MU - Import
 - MU Objectives
 - Protect Health
 - CDS
 - CPOE
 - CQM - Import
 - CQM

EHR Reporting Period
EHR Reporting Period

CMS requires that providers meet the following regulations for attesting to Meaningful Use:

* 80% of patients must have records in the certified EHR technology

Numerator * Denominator * Percentage 100.00%

Numerator = number of patients with records in the certified EHR technology during this reporting period

Denominator = total number of patients during this reporting period

I agree that I meet the additional CMS regulations for attesting to Meaningful Use. I understand that the State may choose to audit my records to verify that I meet these regulations.

I agree with the following statements:

* The information submitted for clinical quality measures (CQMs) was generated as an output from an identified certified EHR technology

* The information submitted is accurate to the knowledge and belief of the person submitting on behalf of the eligible hospital or CAH

* The information submitted is accurate and complete for numerators, denominators, exclusions and measures applicable to the eligible hospital or CAH

* The information submitted includes information on all patients to whom the measure applies

NOTE: For Stage 2 and Stage 3 in 2017 new MU providers will attest with 90-day EHR reporting period but returning MU providers attest to a full year CQM reporting period

Reporting Period: Start Date* End Date*

I am reporting CQMs for a different reporting period than my meaningful use objectives

Attach Files

The following attachments are optional:

- Other Attachment

File Name	Subject	Remove
No records to display.		

Please select the 'Previous screen' button to go back or the 'Save & Continue' button to proceed.

- 1. About You
- 2. Confirm Medicaid Eligibility
- 3. Attestation of EHR
 - EHR Certification
 - EHR Reporting Period
 - MU - Import
- MU Objectives
 - Protect Health
 - CDS
 - CPOE
 - CQM - Import
 - CQM

Meaningful Use

Please select which Stage of MU you will report for 2017. You must attest to Stage 2 objectives if you are a new participant in 2017. You must have 2015 edition certified EHR technology if you attest to Stage 3 Objectives. You may not change your MU Stage selection option on individual MU objectives pages.

I will report Stage 2 objectives in 2017 (

 I will report Stage 3 objectives in 2017 (you must have 2015 edition CEHRT to attest to Stage 3 in 2017)

Objectives
Select the Save and Continue button to open each Objective Detail page in turn to complete the information for Meaningful Use attestation. Alternatively, select any of the links below to complete that Objective's Detail page. All objectives must be answered.

[Import Meaningful Use Objective Data](#) To be client configurable in 4.1

Stage 3 Objective	Status
Protect Patient Health Information	
Electronic Prescribing (eRx)	
Clinical Decision Support	
Computerized Provider Order Entry (CPOE)	
Patient Electronic Access	
Coordination of Care	
Health Information Exchange	
Public Health and Clinical Data Registry Reporting	

- 1. About You
- 2. Confirm Medicaid Eligibility
- 3. Attestation of EHR
 - EHR Certification
 - EHR Reporting Period
 - MU - Import
- MU Objectives
 - Protect Health
 - CDS
 - CPOE
 - CQM - Import
 - CQM

Protect Patient Health Information

Red asterisk indicates a required field.

Objective: Protect electronic protected health information (ePHI) created or maintained by the CEHRT through the implementation of appropriate technical, administrative, and physical safeguards.

Measure: Conduct or review a security risk analysis in accordance with the requirements in 45 CFR 164.308(a)(1), including addressing the security (to include encryption) of data created or maintained by CEHRT in accordance with requirements under 45 CFR 164.312(a)(2)(iv) and 45 CFR 164.306(d)(3), and implement security updates as necessary and correct identified security deficiencies as part of the EP's risk management process.

Placeholder for help text regarding the security questionnaire. Help text is configurable for each client and is hidden by default.

Complete the following information:

* Have you conducted or reviewed a security risk analysis in accordance with the requirements?

No Yes

* Date security risk analysis was completed:

Will display with calendar selector

Attach Files

The following attachments are optional:

- Other Attachment

File Name	Subject	Remove
No records to display.		

Electronic Prescribing

- 1. About You
- 2. Confirm Medicaid Eligibility
- 3. Attestation of EHR
 - EHR Certification
 - EHR Reporting Period
 - MU - Import
- MU Objectives
 - Protect Health
 - CDS
 - CPOE
 - CQM - Import
 - CQM

Red asterisk indicates a required field.

Objective: Generate and transmit permissible prescriptions electronically (eRx).

Exclusion Criteria: Meeting either of the following criteria qualifies for the exclusion for this measure.

Does eligible hospital or CAH have an internal pharmacy that can accept electronic prescriptions or any pharmacy that accept electronic prescriptions within 10 miles at the start of their EHR reporting period? No Yes

Measure: More than 25 percent of hospital discharge medication orders for permissible prescriptions (for new and changed prescriptions) are queried for a drug formulary and transmitted electronically using CEHRT.

Complete the following information:

Numerator = The number of prescriptions in the denominator generated, queried for a drug formulary, and transmitted electronically.

Denominator = The number of new or changed prescriptions written for drugs requiring a prescription in order to be dispensed other than controlled substances for patients discharged during the EHR reporting period.

Attach Files

The following attachments are optional:

- Other Attachment

File Name	Subject	Remove
No records to display.		

Clinical Decision Support

- 1. About You
- 2. Confirm Medicaid Eligibility
- 3. Attestation of EHR
 - EHR Certification
 - EHR Reporting Period
 - MU - Import
- MU Objectives
 - Protect Health
 - CDS
 - CPOE
 - CQM - Import
 - CQM

Red asterisk indicates a required field.

Objective: Implement clinical decision support (CDS) interventions focused on improving performance on high-priority health conditions.

Measure #1: Implement five clinical decision support interventions related to four or more CQMs at a relevant point in patient care for the entire EHR reporting period. Absent four CQMs related to an eligible hospital or CAH's scope of practice or patient population, the clinical decision support interventions must be related to high-priority health conditions.

Complete the following information:

* Have you implemented five clinical decision support interventions related to four or more clinical quality measures or high-priority health conditions at a relevant point in patient care for the entire EHR reporting period? No Yes

List the five clinical decision support interventions you have implemented.

1	
2	
3	
4	
5	

C5 files for dual EH will not contain CDS or CPOE objectives. SLR will pass MU validations if all other objectives and MU page validations are met. Medicaid only EH and EH that don't attest at CMS first will attest to these objectives.

Appendix K: Meaningful Use Screenshots

Page 225

These clinical decision support interventions are related to:

4 or more clinical quality measures 4 or more high priority health conditions

[Select CQMs](#)

CQM1
CQM4

A cross reference listing of the Clinical Quality Measures is located in the User Guide to assist you with identifying the applicable CQM numbers, if needed.

Measure #2: The EH or CAH has enabled and implemented the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period.

Complete the following information:

* Have you enabled and implemented the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period?

No Yes

Computerized Provider Order Entry (CPOE)

Red asterisk indicates a required field.

- 1. About You
- 2. Confirm Medicaid Eligibility
- 3. Attestation of EHR
 - EHR Certification
 - EHR Reporting Period
 - MU - Import
- MU Objectives
 - Protect Health
 - CDS
 - CPOE
 - CQM - Import
 - CQM

C5 files for dual EH will not contain CDS or CPOE objectives. SLR will pass MU validations if all other objectives and MU page validations are met. Medicaid only EH and EH that don't attest at CMS first will attest to these objectives.

Objective: Use computerized provider order entry (CPOE) for medication, laboratory, and diagnostic imaging orders directly entered by any licensed healthcare professional, credentialed medical assistant, or a medical staff member credentialed to and performing the equivalent duties of a credentialed medical assistant, who can enter orders into the medical record per state, local, and professional guidelines.

Measure #1: More than 60 percent of medication orders created by the authorized providers of the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using computerized provider order entry.

Complete the following information:

Numerator = The number of orders in the denominator recorded using CPOE.

Denominator = Number of medication orders created by the authorized providers in the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period.

Measure #2: More than 60 percent of laboratory orders created by the authorized providers of the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using computerized provider order entry.

Complete the following information:

Numerator = The number of orders in the denominator recorded using CPOE.

Denominator = Number of laboratory orders created by the authorized providers in the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period.

Measure #3: More than 60 percent of diagnostic imaging orders created by the authorized providers of the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using computerized provider order entry.

Complete the following information:

Numerator = The number of orders in the denominator recorded using CPOE.

Denominator = Number of diagnostic imaging orders created by the authorized providers in the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period.

Attach Files

The following attachments are optional:

- Other Attachment

File Name	Subject	Remove
No records to display.		

Please select the 'Previous screen' button to go back or the 'Save & Continue' button to proceed.

Patient Electronic Access To Health Information

Red asterisk indicates a required field.

Objective: Provide patients with timely access to their health information and patient-specific education.

Exclusion Criteria: Meeting either of the following criteria qualifies for the exclusion for both measures:

Is the EH or CAH in a county/area that does not have 50% or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period? No Yes

Measure #1: More than 80% of all unique patients discharged from the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) are: 1) provided timely access to view online, download, and transmit his or her health information; and 2) the provider ensures the patient's health information is available for the patient (or patient-authorized representative) to access using any application of their choice that is configured to meet the technical specifications of the API in the provider's CEHRT.

Complete the following information:

Numerator = The number of patients in the denominator (or patient authorized representative) who are provided timely access to health information to view online, download, and transmit to a third party and to access using an application of their choice that is configured to meet the technical specifications of the API in the provider's CEHRT.

Denominator = The number of unique patients discharged from an eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period.

Measure #2: The eligible hospital or CAH must use clinically relevant information from CEHRT to identify patient-specific educational resources and provide electronic access to those materials to **more than 35%** of unique patients discharged from the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period.

Complete the following information:

Numerator = The number of patients in the denominator who were provided electronic access to patient-specific educational resources using clinically relevant information identified from CEHRT during the EHR reporting period.

Denominator = The number of unique patients discharged from an eligible

Attach Files

The following attachments are optional:

- Other Attachment

File Name	Subject	Remove
No records to display.		

Please select the 'Previous screen' button to go back or the 'Save & Continue' button to proceed.

Coordination of Care Through Patient Engagement

Red asterisk indicates a required field.

1. About You
2. Confirm Medicaid Eligibility
3. Attestation of EHR
 EHR Certification
 EHR Reporting Period
 MU - Import
 MU Objectives
 Protect Health
 CDS
 CPOE
 CQM - Import
 CQM

Objective: Use CEHRT to engage with patients or their authorized representatives about the patient's care.

Exclusion Criteria: Meeting either of the following criteria qualifies for the exclusion for the measures:

Is the EH or CAH in a county/area that does not have 50% or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period? No Yes

Measure #1: During the EHR reporting period, **more than 5** percent of all unique patients (or their authorized representatives) discharged from the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) actively engage with the electronic health record made accessible by the provider and either: (1) View, download or transmit to a third party their health information; or (2) access their health information through the use of an API that can be used by applications chosen by the patient and configured to the API in the provider's CEHRT; or (3) a combination of (1) and (2).

Measure #2: For **more than 25** percent of all unique patients discharged from the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period, a secure message was sent using the electronic messaging function of CEHRT to the patient (or the patient authorized representative), or in response to a secure message sent by the patient or their authorized representative.

CMS says providers need to attest with num/denom data but only pass threshold for 2 out of 3 measures

Measure #3: Patient generated health data or data from a nonclinical setting is incorporated into the CEHRT for more than 5 percent of all unique patients discharged from the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period.


Attach Files

The following attachments are optional:

- Other Attachment

File Name	Subject	Remove
No records to display.		

Add Files 

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Previous Screen

Save & Continue

Health Information Exchange

Red asterisk indicates a required field.

1. About You

2. Confirm Medicaid Eligibility

3. Attestation of EHR

- EHR Certification
- EHR Reporting Period
- MU - Import
- MU Objectives
 - Protect Health
 - CDS
 - CPOE
 - CQM - Import
 - CQM

Objective: The eligible hospital or CAH provides a summary of care or record when transitioning or referring their patient to another setting of care, receives or retrieves a summary of care record upon receipt of a transition or referral or upon the first patient encounter with a new patient, and incorporates summary of care information from other providers into their EHR using the functions of CEHRT.

Exclusion Criteria: Meeting the following criteria qualifies for the exclusion for relevant measures.

Is the EH or CAH in a county/area that does not have 50% or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period? **(Measure #1)** No Yes

Were transitions or referrals received and patient encounters in which the provider has never before encountered the patient **fewer than 100** during the EHR reporting period? **(Measure #2)** No Yes

Is the EH or CAH in a county/area that does not have 50% or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period? **(Measure #2)** No Yes

Were transitions or referrals received and patient encounters in which the provider has never before encountered the patient **fewer than 100** during the EHR reporting period? **(Measure #3)** No Yes

CMS says providers need to attest with num/denom data but only pass threshold for 2 out of 3 measures

Measure #1: For **more than 50** percent of transitions of care and referrals, the eligible hospital or CAH that transitions or refers their patient to another setting of care or provider of care: (1) Creates a summary of care record using CEHRT; and (2) electronically exchanges the summary of care record.

Complete the following information:

Numerator = The number of transitions of care and referrals in the denominator where a summary of care record was created using Certified EHR technology and is exchanged electronically.

Denominator = Number of transitions of care and referrals during the EHR reporting period for which the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) was the transferring or referring provider.

Measure #2: For **more than 40** percent of transitions or referrals received and patient encounters in which the provider has never before encountered the patient, the eligible hospital or CAH incorporates into the patient's EHR an electronic summary of care document.

Complete the following information:

Numerator = Number of patient encounters in the denominator where an electronic summary of care record received is incorporated by the provider into the certified EHR technology.

Denominator = Number of patient encounters during the EHR reporting period for which an eligible hospital or CAH was the receiving party of a transition or referral or has never before encountered the patient and for which an electronic summary of care record is available.

Measure #3: For **more than 80** percent of transitions or referrals received and patient encounters in which the provider has never before encountered the patient, the eligible hospital or CAH performs a clinical information reconciliation. The provider must implement clinical information reconciliation for the following three clinical information sets: (1) Medication. Review of the patient's medication, including the name, dosage, frequency, and route of each medication. (2) Medication allergy. Review of the patient's known medication allergies. (3) Current Problem list. Review of the patient's current and active diagnoses.

Complete the following information:

Numerator = The number of transitions of care or referrals in the denominator where the following three clinical information reconciliations were performed: Medication list, medication allergy list, and current problem list.

Denominator = Number of transitions of care or referrals during the EHR reporting period for which the eligible hospital or CAH inpatient or emergency department (POS 21 or 23) was the recipient of the transition or referral or has never before encountered the patient.

Public Health and Clinical Data Registry Reporting

Objective: The eligible hospital or CAH is in active engagement with a Public Health Agency (PHA) or clinical data registry (CDR) to submit electronic public health data in a meaningful way using certified EHR technology, except where prohibited, and in accordance with applicable law and practice.











In order to meet this objective, eligible hospital or CAH would need to meet four of the total number of measures available to them. Reporting an exclusion for a measure does not qualify towards meeting the objective unless the eligible hospital or CAH can report on fewer than four measures. If an EH or CAH can report on fewer than four measures, the eligible hospital or CAH must report on any possible measures and claim the applicable exclusions for the remaining measures. If no measures remain available, the eligible hospital or CAH can meet the objective by claiming applicable exclusions for all measures.

For Measure 4, eligible hospital or CAH may choose to report to more than one public health registry to meet the number of measures required to meet the objective. For Measure 5, eligible hospital or CAH may choose to report to more than one clinical data registry to meet the number of measures required to meet the objective.

Select "I will report on this measure" to report for the specific measure. Select "I will claim exclusion for this measure" to claim exclusion for the specific measure.

Active Engagement: If your state has one public health agency that manages registration for all the public health measures, you may use this option to select the level of active engagement to apply to all measures with reporting to a Public Health Agency. Select the level of active engagement you demonstrate for this measure. Only one level may be selected.

- Option 1 - Completed Registration to Submit Data:** The eligible hospital or CAH registered to submit data with the PHA or, where applicable, the clinical data registry to which the information is being submitted; registration was completed within 60 days after the start of the EHR reporting period; and the eligible hospital or CAH is awaiting an invitation from the PHA to begin testing and validation. This option allows providers to meet the measure when the PHA or the CDR has limited resources to initiate the testing and validation process. Providers that have registered in previous years do not need to submit an additional registration to meet this requirement for each EHR reporting period.
- Option 2 - Testing and Validation:** The eligible hospital or CAH is in the process of testing and validation of the electronic submission of data. Providers must respond to requests from the PHA or, where applicable, the clinical data registry within 30 days; failure to respond twice within an EHR reporting period would result in the provider not meeting the measure.
- Option 3 - Production:** The eligible hospital or CAH has completed testing and validation of the electronic submission and is electronically submitting production data to the PHA or clinical data registry.

Measure		I will report on this measure	I will claim exclusion for this measure
Measure 1 - Immunization Registry Reporting		<input type="checkbox"/>	<input type="checkbox"/>
Measure 2 - Syndromic Surveillance Reporting		<input type="checkbox"/>	<input type="checkbox"/>
Measure 3 - Electronic Case Reporting (not required until 2018)		<input type="checkbox"/>	<input type="checkbox"/>
Measure 4 - Public Health Registry Reporting (Registry #1)		<input type="checkbox"/>	<input type="checkbox"/>
Measure 4- Public Health Registry Reporting (Registry #2)		<input type="checkbox"/>	<input type="checkbox"/>
Measure 4- Public Health Registry Reporting (Registry #3)		<input type="checkbox"/>	<input type="checkbox"/>
Measure 5 - Clinical Data Registry Reporting (Registry #1)		<input type="checkbox"/>	<input type="checkbox"/>
Measure 5 - Clinical Data Registry Reporting (Registry #2)		<input type="checkbox"/>	<input type="checkbox"/>
Measure 5 - Clinical Data Registry Reporting (Registry #3)		<input type="checkbox"/>	<input type="checkbox"/>
Measure 6 - Electronic Reportable Lab Results Reporting		<input type="checkbox"/>	<input type="checkbox"/>


Please select the 'Previous Screen' button to go back or the 'Save & Continue' button to proceed.

Measure 1 - Immunization Registry Reporting

 Red asterisk indicates a required field.

- 1. About You
- 2. Confirm Medicaid Eligibility
- 3. Attestation of EHR
 - EHR Certification
 - EHR Reporting Period
 - MU - Import
 - MU Objectives
 - Protect Health
 - CDS
 - CPOE
 - CQM - Import
 - CQM

Measure: The EH or CAH is in active engagement with a Public Health Agency (PHA) to submit immunization data and receive immunization forecasts and histories from the public health immunization registry/immunization information system.

Exclusion Criteria: Meeting any of the following criteria qualifies for the exclusion for this measure. Select all that apply. 

- Does not administer any immunizations to any of the populations for which data is collected by its jurisdiction's immunization registry or immunization information system during the EHR reporting period.
- Operates in a jurisdiction for which no immunization registry or immunization information system is capable of accepting the specific standards required to meet the CEHRT definition at the start of the EHR reporting period.
- Operates in a jurisdiction where no immunization registry or immunization information has declared readiness to receive immunization data as of 6 months prior to the start of the EHR reporting period.

Active Engagement: Select the level of active engagement you demonstrate for this measure. Only one level may be selected.

- Option 1 - Completed Registration to Submit Data:** The eligible hospital or CAH registered to submit data with the PHA to which the information is being submitted; registration was completed within 60 days after the start of the EHR reporting period; and the The eligible hospital or CAH is awaiting an invitation from the PHA to begin testing and validation. Providers that have registered in previous years do not need to submit an additional registration to meet this requirement for each EHR reporting period.
- Option 2 - Testing and Validation:** The eligible hospital or CAH is in the process of testing and validation of the electronic submission of data. Providers must respond to requests from the PHA or, where applicable, the clinical data registry within 30 days; failure to respond twice within an EHR reporting period would result in the provider not meeting the measure.

- Option 3 - Production:** The eligible hospital or CAH has completed testing and validation of the electronic submission and is electronically submitting production data to the PHA.

Attach Files

The following attachments are optional:

- Other Attachment

File Name	Subject	Remove
No records to display.		

Please select the 'Previous screen' button to go back or the 'Save & Continue' button to proceed.

Measure 2 - Syndromic Surveillance Reporting

Red asterisk indicates a required field.

1. About You

2. Confirm Medicaid Eligibility

3. Attestation of EHR

- EHR Certification
- EHR Reporting Period
- MU - Import

4. MU Objectives

- Protect Health
- CDS
- CPOE
- CQM - Import
- CQM

Measure: The eligible hospital or CAH is in active engagement with a public health agency to submit syndromic surveillance data from an urgent care setting.

Exclusion Criteria: Meeting one or more of the following criteria qualifies for the exclusion for this measure. Select all that apply. i

- Does not have an emergency or urgent care department;
- Operates in a jurisdiction for which no public health agency is capable of receiving electronic syndromic surveillance data from eligible hospital or CAH in the specific standards required to meet the CEHRT definition at the start of the EHR reporting period;
- Operates in a jurisdiction where no public health agency has declared readiness to receive syndromic surveillance data from eligible hospital or CAH as of 6 months prior to the start of the EHR reporting period.

Active Engagement: Select the level of active engagement you demonstrate for this measure. Only one level may be selected.

Option 1 - Completed Registration to Submit Data: the eligible hospital or CAH registered to submit data with the PHA, or where applicable, the clinical data registry to which the information is being submitted; registration was completed within 60 days after the start of the EHR reporting period; and the eligible hospital or CAH is awaiting an invitation from the PHA to begin testing and validation. Providers that have registered in previous years do not need to submit an additional registration to meet this requirement for each EHR reporting period.

Option 2 - Testing and Validation: the eligible hospital or CAH is in the process of testing and validation of the electronic submission of data. Providers must respond to requests from the PHA or, where applicable, the clinical data registry within 30 days; failure to respond twice within an EHR reporting period would result in the provider not meeting the measure..

Option 3 - Production: the eligible hospital or CAH is in active engagement with a public health agency to submit electronic reportable laboratory results, has completed testing and validation of the electronic submission and is electronically submitting production data to the PHA or clinical data registry.

Attach Files

The following attachments are optional:

- Other Attachment

File Name	Subject	Remove
No records to display.		

Add Files
Remove Selected

Please select the 'Previous screen' button to go back or the 'Save & Continue' button to proceed.

Previous Screen
Save & Continue

1. About You

2. Confirm Medicaid Eligibility

3. Attestation of EHR

EHR Certification

EHR Reporting Period

MU - Import

4. MU Objectives

Protect Health

CDS

CPOE

CQM - Import

CQM

Measure 4 - Public Health Registry Reporting

Red asterisk indicates a required field.

Measure: The eligible hospital or CAH is in active engagement with a Public Health Agency (PHA) to submit data to public health registries.

Exclusion Criteria: Meeting any of the following criteria qualifies for the exclusion for this measure. Select all that apply. ?

Does not diagnose or directly treat any disease or condition associated with a public health registry in their jurisdiction during the EHR reporting period;

Operates in a jurisdiction for which no public health agency is capable of receiving electronic registry transactions in the specific standards required to meet the CEHRT definition at the start of the EHR reporting period.

Operates in a jurisdiction where no public health registry for which the eligible hospital or CAH is eligible has declared readiness to receive electronic registry transactions as of 6 months prior to the start of the EHR reporting period.

Active Engagement: Select the level of active engagement you demonstrate for this measure. Only one level may be selected.

Option 1 - Completed Registration to Submit Data: the eligible hospital or CAH registered to submit data with the PHA, or where applicable, the clinical data registry to which the information is being submitted; registration was completed within 60 days after the start of the EHR reporting period; and the eligible hospital or CAH is awaiting an invitation from the PHA to begin testing and validation. Providers that have registered in previous years do not need to submit an additional registration to meet this requirement for each EHR reporting period

Option 2 - Testing and Validation: the eligible hospital or CAH is in the process of testing and validation of the electronic submission of data. Providers must respond to requests from the PHA or where applicable, the clinical data registry within 30 days; failure to respond twice within an EHR reporting period would result in the provider not meeting the measure.

Option 3 - Production: the eligible hospital or CAH has completed testing and validation of the electronic submission and is electronically submitting production data to the PHA or clinical data registry.

Registry Name:

Attach Files

The following attachments are optional:

- Other Attachment

File Name	Subject	Remove
No records to display.		

Please select the 'Previous screen' button to go back or the 'Save & Continue' button to proceed.

Measure 5 - Clinical Data Registry Reporting

Red asterisk indicates a required field.

- 1. About You
- 2. Confirm Medicaid Eligibility
- 3. Attestation of EHR
 - EHR Certification
 - EHR Reporting Period
 - MU - Import
- 4. MU Objectives
 - Protect Health
 - CDS
 - CPOE
 - CQM - Import
 - CQM

Measure: The eligible hospital or CAH is in active engagement to submit data to a clinical data registry (CDR).

Exclusion Criteria: Meeting any of the following criteria qualifies for the exclusion for this measure. Select all that apply. ?

- Does not diagnose or directly treat any disease or condition associated with a clinical data registry in their jurisdiction during the EHR reporting period.
- Operates in a jurisdiction for which no clinical data registry is capable of accepting electronic registry transactions in the specific standards required to meet the CEHRT definition at the start of the EHR reporting period.
- Operates in a jurisdiction where no clinical data registry for which the eligible hospital or CAH is eligible has declared readiness to receive electronic registry transactions as of 6 months prior to the start of the EHR reporting period.

Active Engagement: Select the level of active engagement you demonstrate for this measure. Only one level may be selected.

- Option 1 - Completed Registration to Submit Data:** the eligible hospital or CAH registered to submit data with the PHA, or where applicable, the clinical data registry to which the information is being submitted; registration was completed within 60 days after the start of the EHR reporting period; and the eligible hospital or CAH is awaiting an invitation from the PHA to begin testing and validation. Providers that have registered in previous years do not need to submit an additional registration to meet this requirement for each EHR reporting period
- Option 2 - Testing and Validation:** the eligible hospital or CAH is in the process of testing and validation of the electronic submission of data. Providers must respond to requests from the PHA or where applicable, the clinical data registry within 30 days; failure to respond twice within an EHR reporting period would result in the provider not meeting the measure.

- Option 3 - Production:** the eligible hospital or CAH has completed testing and validation of the electronic submission and is electronically submitting production data to the PHA or clinical data registry.

Registry Name:

Attach Files

The following attachments are optional:

- Other Attachment

File Name	Subject	Remove
No records to display.		

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Appendix K: Meaningful Use Screenshots

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Measure 6 - Electronic Reportable Lab Results Reporting

Red asterisk indicates a required field.

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- 2. Confirm Medicaid Eligibility
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 - Protect Health
 - CDS
 - CPOE
 - CQM - Import
 - CQM

Measure: The eligible hospital or CAH is in active engagement with a public health agency to submit electronic reportable laboratory results.

Exclusion Criteria: Meeting any of the following criteria qualifies for the exclusion for this measure. Select all that apply. i

Does not perform or order laboratory tests that are reportable in their jurisdiction during the EHR reporting period;

Operates in a jurisdiction for which no public health agency is capable of accepting the specific ELR standards required to meet the CEHRT definition at the start of the EHR reporting period;

Operates in a jurisdiction where no public health agency has declared readiness to receive electronic reportable laboratory results from an eligible hospital or CAH as of 6 months prior to the start of the EHR reporting period.

Active Engagement: Select the level of active engagement you demonstrate for this measure. Only one level may be selected.

Option 1 - Completed Registration to Submit Data: the eligible hospital or CAH registered to submit data with the PHA, or where applicable, the clinical data registry to which the information is being submitted; registration was completed within 60 days after the start of the EHR reporting period; and the eligible hospital or CAH is awaiting an invitation from the PHA to begin testing and validation. Providers that have registered in previous years do not need to submit an additional registration to meet this requirement for each EHR reporting period

Option 2 - Testing and Validation: the eligible hospital or CAH is in the process of testing and validation of the electronic submission of data. Providers must respond to requests from the PHA or, where applicable, the clinical data registry within 30 days; failure to respond twice within an EHR reporting period would result in the provider not meeting the measure.

Option 3 - Production: the eligible hospital or CAH has completed testing and validation of the electronic submission and is electronically submitting production data to the PHA or clinical data registry.

Registry Name:

Attach Files

The following attachments are optional:

- Other Attachment

File Name	Subject	Remove
No records to display.		

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Appendix K: Meaningful Use Screenshots

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 - CDS
 - CPOE
 - CQM - Import
 - CQM

Clinical Quality Measures

EHs and CAHs must report on a total of sixteen (16) Clinical Quality Measures. If an eligible hospital's or CAH's CEHRT does not contain patient data for at least 16 CQMs, then the EH or CAH must report the CQMs for which there is patient data and report the remaining required CQMs as "zero denominators" as displayed by the EH's or CAH's CEHRT.

Eligible hospitals and CAHs that have 5 or fewer discharges per quarter in the same quarter as their reporting period, or 20 or fewer discharges per full FY reporting period for which data is being electronically submitted as defined by the CQM's denominator population are exempted for reporting the CQM.

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[Import Clinical Quality Measure Data](#)

This table should function like MU Summary page. User can navigate to CQM by selecting hyperlink. The status displays check mark when objective has been met.

Clinical Quality Measures Summary

CMS eMeasure ID	Title	Description	NQF (not final if this column will be Domain)	Status
CMS53	AMI-8a- Primary PCI Received within 90 Minutes of Hospital Arrival	Acute myocardial infarction (AMI) patients with ST-segment elevation or LBBB on the ECG closest to arrival time receiving primary PCI during the hospital stay with a time from hospital arrival to fibrinolysis of 90 minutes or less.	0163	
CMS32	ED-3-Median time from ED arrival to ED departure for discharged ED patients	Median time from emergency department arrival to time of departure from the emergency room for patients discharged from the emergency department.	0496	
CMS26	CAC-3: Home Management Plan of Care (HMPC) Document given to Patient/Caregiver	An assessment that there is documentation in the medical record that a Home Management Plan of Care (HMPC) document was given to the pediatric asthma patient/caregiver.	+	
CMS55	Emergency Department (ED) - 1 Emergency Department Throughput - Median time from ED arrival to ED departure for admitted ED patients	Median time from emergency department arrival to time of departure from the emergency room for patients admitted to the facility from the emergency department.	0495	

CMS111	ED-2 Emergency Department Throughput - admitted patients - Admit decision time to ED departure time for admitted patients	Median time (in minutes) from admit decision time to time of departure from the emergency department for emergency department patients admitted to inpatient status.	0497	
CMS31	EHDI-1a - Hearing screening prior to hospital discharge	This measure assesses the proportion of births that have been screened for hearing loss before hospital discharge.	1354	
CMS113	PC-01 Elective Delivery Prior to 39 Completed Weeks Gestation	Patients with elective vaginal deliveries or elective cesarean sections at >= 37 and < 39 weeks of gestation completed.	0469	
CMS9	PC-05 Exclusive Breast Milk Feeding	Exclusive breast milk feeding during the newborn's entire hospitalization	0480	
CMS104	Stroke-2 Ischemic stroke - Discharged on anti-thrombotic therapy	Ischemic stroke patients prescribed antithrombotic therapy at hospital discharge	0435	
CMS71	Stroke-3 Ischemic stroke - Anticoagulation Therapy for Atrial Fibrillation/Flutter	Ischemic stroke patients with atrial fibrillation/flutter who are prescribed anticoagulation therapy at hospital discharge.	0436	
CMS72	Stroke-5 Ischemic stroke - Antithrombotic therapy by end of hospital day two	Ischemic stroke patients administered antithrombotic therapy by the end of hospital day two.	0438	
CMS105	Stroke-6 Ischemic stroke - Discharged on Statin Medication	Ischemic stroke patients with LDL greater than or equal to 100 mg/dL or LDL not measured, or who were on a lipid lowering medication prior to hospital arrival are prescribed statin medication at hospital discharge.	0439	

CMS107	Stroke-8 Ischemic or hemorrhagic stroke - Stroke education	Ischemic or hemorrhagic stroke patients or their caregivers who were given educational materials during the hospital stay addressing all of the following: activation of emergency medical system, need for follow-up after discharge, medications prescribed at discharge, risk factors for stroke, and warning signs and symptoms of stroke.	+	
CMS102	Stroke-10 Ischemic or hemorrhagic stroke - Assessed for Rehabilitation	Ischemic or hemorrhagic stroke patients who were assessed for rehabilitation services.	0441	
CMS108	Venous Thromboembolism (VTE)-1 VTE prophylaxis	This measure assesses the number of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission.	0371	
CMS190	VTE-2 Intensive Care Unit (ICU) VTE prophylaxis	This measure assesses the number of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after the initial admission (or transfer) to the Intensive Care Unit (ICU) or surgery end date for surgeries that start the day of or the day after ICU admission (or transfer).	0372	

Please select the 'Previous Screen' button to go back or the 'Save & Continue' button to proceed.

Appendix L: DOM Connectivity and Interoperability Strategy

(Retired with 2017 SMHP)

This document defined the DOM Connectivity & Interoperability Strategy from its inception and was updated through calendar year 2016. The IOP strategy is now only of value as an historical document so with the 2017 SMHP and subsequent versions the contents of Appendix L have been removed for efficiency. The Appendix L header page, Table of Contents, Table of Tables and Table of Figures have been retained for anyone considering review of the retired document available in the CMS approved 2016 SMHP.



DOM Connectivity & Interoperability Strategy

As-Is, To-Be and Roadmap Report

2016

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2.1.2	Connectivity.....	Error! Bookmark not defined.
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Appendix M: CMS Guidelines Cross-Reference

The following tables identify the sections of this document where specific SMHP document requirements, primarily the CMS Guidelines, are addressed. An asterisk, “*”, indicates the requirement is considered optional by CMS.

Cross Reference from CMS Guidelines to Section 3 – Current HIT Landscape Assessment – The “As-Is” Environment:

CMS Guidelines Section A: The State’s “As-Is” HIT Landscape	Location in Document
1. What is the current extent of EHR adoption by practitioners and by hospitals? How recent is this data? Does it provide specificity about the types of EHRs in use by the State’s providers? Is it specific to just Medicaid or an assessment of overall statewide use of EHRs? Does the SMA have data or estimates on eligible providers broken out by types of provider? Does the SMA have data on EHR adoption by types of provider (e.g., children’s hospitals, acute care hospitals, pediatricians, nurse practitioners, etc.)?	Section 3.1
2. To what extent does broadband internet access pose a challenge to HIT/E in the State’s rural areas? Did the State receive any broadband grants?	Section 3.7
3. Does the State have Federally-Qualified Health Center networks that have received or are receiving HIT/EHR funding from the Health Resources Services Administration (HRSA)? Please describe.	Section 3.11
4. Does the State have Veterans Administration or Indian Health Service clinical facilities that are operating EHRs? Please describe.	Section 3.12
5. What stakeholders are engaged in any existing HIT/E activities and how would the extent of their involvement be characterized?	Section 3.1 and Section 3.9 of SMHP version 1.1
6. * Does the SMA have HIT/E relationships with other entities? If so, what is the nature (governance, fiscal, geographic scope, etc) of these activities?	Section 3.4. Yes, clinical data interoperability between Medicaid and large health systems for C-CDA exchange in real-time.
7. Specifically, if there are health information exchange organizations in the State, what is their governance structure and is the SMA involved? ** How extensive is their geographic reach and scope of participation?	Section 3.9, 4.7 Public data about utilization of the HIE is not available.
8. Please describe the role of the MMIS in the SMA’s current HIT/E environment. Has the State coordinated their HIT Plan with their MITA transition plans and if so, briefly describe how.	Section 3.5
9. What State activities are currently underway or in the planning phase to facilitate HIE and EHR adoption? What role does the SMA play? Who else is currently involved? For example, how are the regional extension centers (RECs) assisting Medicaid eligible providers to implement EHR systems and achieve meaningful use?	Section 3.5

CMS Guidelines Section A: The State's "As-Is" HIT Landscape, continued	Location in Document
10. Explain the SMA's relationship to the State HIT Coordinator and how the activities planned under the ONC-funded HIE cooperative agreement and the Regional Extension Centers (and Local Extension Centers, if applicable) would help support the administration of the EHR Incentive Program.	Section 3.9
11. What other activities does the SMA currently have underway that will likely influence the direction of the EHR Incentive Program over the next five years?	Section 4.1 We plan to use available data to identify providers that once participated and have dropped out of the EHR Incentive Program through the years. We plan to ramp up education and outreach efforts that will help participants better utilize their new or existing EHRs
12. Have there been any recent changes (of a significant degree) to State laws or regulations that might affect the implementation of the EHR Incentive Program? Please describe.	No changes to State Laws that might impact the EHR Incentive Program
13. Are there any HIT/E activities that cross State borders? Is there significant crossing of State lines for accessing health care services by Medicaid beneficiaries? Please describe.	Section 3.4. No State border initiatives currently. Significant crossing of State lines to areas such as New Orleans and Memphis by Medicaid beneficiaries.
14. What is the current interoperability status of the State Immunization registry and Public Health Surveillance reporting database(s)?	Section 3.9. Public Health infrastructure was connected to the now defunct State HIE, MS-HIN. DOM is investigating options for connectivity with Public Health Registries. .
15. If the State was awarded an HIT-related grant, such as a Transformation Grant or a CHIPRA HIT grant, please include a brief description.	No such award.

*May be deferred

**The first part of this question may be deferred but States do need to include a description of their HIE(s); geographic reach and current level of participation.

Cross Reference from CMS Guidelines to Section 4 – To-Be:

CMS Guidelines Section B: The State's "To-Be" Landscape	Location in Document
1. Looking forward to the next five years, what specific HIT/E goals and objectives does the SMA expect to achieve? Be as specific as possible; e.g., the percentage of eligible providers adopting and meaningfully using certified EHR technology, the extent of access to HIE, etc.	Section 4.3
2. *What will the SMA's IT system architecture (potentially including the MMIS) look like in five years to support achieving the SMA's long term goals and objectives? Internet portals? Enterprise Service Bus? Master Patient Index? Record Locator Service?	Section 4.2, 4.3
3. How will Medicaid providers interface with the SMA IT system as it relates to the EHR Incentive Program (registration, reporting of MU data, etc.)?	Section 4.1 and Blue Print in Section 5
4. Given what is known about HIE governance structures currently in place, what should be in place by 5 years from now in order to achieve the SMA's HIT/E goals and objectives? While we do not expect the SMA to know the specific organizations will be involved, etc., we would appreciate a discussion of this in the context of what is missing today that would need to be in place five years from now to ensure EHR adoption and meaningful use of EHR	Section 4.7, 4.3
5. What specific steps is the SMA planning to take in the next 12 months to encourage provider adoption of certified EHR technology?	Section 4.1 We will continue utilizing existing technology and deploy updated SLR releases as required by future CMS regulatory changes.
6. * If the State has FQHCs with HRSA HIT/EHR funding, how will those resources and experiences be leveraged by the SMA to encourage EHR adoption?	Section 4.9, 4.3
7. * How will the SMA assess and/or provide technical assistance to Medicaid providers around adoption and meaningful use of certified EHR technology?	Section 4.1 The SMA will no longer work to get new providers into the EHR Provider Incentive Program after the conclusion of Program Year 2016. However, we plan to continue providing resources, education and support for remaining participants, helping them better utilize their existing and new EHR systems to meet Meaningful Use
8. * How will the SMA assure that populations with unique needs, such as children, are appropriately addressed by the EHR Incentive Program?	Plans to assure that specific populations are appropriately addresses by the EHR Incentive Program have not been designed at this time.



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CMS Guidelines Section B: The State's "To-Be" Landscape, continued	Location in Document
9. If the State included in a description of a HIT-related grant award (or awards) in Section A, to the extent known, how will that grant, or grants, be leveraged for implementing the EHR Incentive Program, e.g., actual grant products, knowledge/lessons learned, stakeholder relationships, governance structures, legal/consent policies and agreements, etc.?	No such award
10. Does the SMA anticipate the need for new or State legislation or changes to existing State laws in order to implement the EHR Incentive Program and/or facilitate a successful EHR Incentive Program (e.g., State laws that may restrict the exchange of certain kinds of health information)? Please describe.	There is not an expectation for state regulatory changes in the near future that could impact the EHR Incentive Program.
Please include other issues that the SMA believes need to be addressed, institutions that will need to be present and interoperability arrangements that will need to exist in the next five years to achieve its goals.	Section 4.3

*This question may be deferred if the timing of the submission of the SMHP does not accord with when the long-term vision for the Medicaid IT system is decided. It would be helpful though to note if plans are known to include any of the listed functionalities / business processes.

** May be deferred.

Cross Reference from CMS Guidelines to Section 5 – Provider Incentive Program Blueprint:

CMS Guidelines Section C: Activities Necessary to Administer and Oversee the EHR Incentive Payment Program	Location in Document
1. How will the SMA verify that providers are not sanctioned, are properly licensed/qualified providers?	Section 5.3.2 Verification or validation of professional licensing uses our Provider Master File which is updated weekly from MMIS data
2. How will the SMA verify whether EPs are hospital-based or not?	Section 5.2.2.1.3
3. How will the SMA verify the overall content of provider attestations?	Section 5.4
4. How will the SMA communicate to its providers regarding their eligibility, payments, etc?	Section 5.4
5. What methodology will the SMA use to calculate patient volume?	Section 5.5
6. (a) What data sources will the SMA use to verify patient volume for EPs and acute care hospitals?	Section 5.5.1.2
6. (b) How will the SMA verify adopt, implement or upgrade of certified electronic health record technology by providers?	
7. (a) How will the SMA verify that EPs at FQHC/RHCs meet the practices predominately requirement?	Section 5.2.2.1.1
7. (b) How will the SMA verify meaningful use of certified electronic health record technology for providers' second participation years?	Section 5.4.2
8. Will the SMA be proposing any changes to the MU definition as permissible per rule-making? If so, please provide details on the expected benefit to the Medicaid population as well as how the SMA assessed the issue of additional provider reporting and financial burden.	Section 5.4.2
9. How will the SMA verify providers' use of certified electronic health record technology?	Section 5.4
10. How will the SMA collect providers' meaningful use data, including the reporting of clinical quality measures? Does the State envision different approaches for the short-term and a different approach for the longer-term?	Section 5.4
11. * How will this data collection and analysis process align with the collection of other clinical quality measures data, such as CHIPRA?	Section 5.
12. What IT, fiscal and communication systems will be used to implement the EHR Incentive Program?	Section 5.9
13. What IT systems changes are needed by the SMA to implement the EHR Incentive Program?	Section 5.9 and Section 4.1.1 in SMHP version 1.1
14. What is the SMA's IT timeframe for systems modifications?	Section 5.9 enhanced in SMHP version 1.1
15. When does the SMA anticipate being ready to test an interface with the CMS National Level Repository (R&A)?	Section 5.5.2 All interfaces between MS SLR and CMS have been tested, approved and deployed (D16, D18, E7, E8, etc...)

CMS Guidelines Section C: Activities Necessary to Administer and Oversee the EHR Incentive Payment Program, continued	Location in Document
16. What is the SMA's plan for accepting the registration data for its Medicaid providers from the CMS R&A (e.g., mainframe to mainframe interface or another means)?	Section 5.3.3
17. What kind of website will the SMA host for Medicaid providers for enrollment, program information, etc?	Section 5.9.1
18. Does the SMA anticipate modifications to the MMIS and if so, when does the SMA anticipate submitting an MMIS I-APD?	DOM is preparing an annual update to the MMIS IAPD as well as an update to the MES IAPD. No HIT costs will occur.
19. What kinds of call centers/help desks and other means will be established to address EP and hospital questions regarding the incentive program?	Section 5.10.1.2
20. What will the SMA establish as a provider appeal process relative to: a) the incentive payments, b) provider eligibility determinations, and c) demonstration of efforts to adopt, implement or upgrade and meaningful use certified EHR technology?	Section 5.12
21. What will be the process to assure that all Federal funding, both for the 100 percent incentive payments, as well as the 90 percent HIT Administrative match, are accounted for separately for the HITECH provisions and not reported in a commingled manner with the enhanced MMIS FFP?	Section 5.10.2
22. (a) What is the SMA's anticipated frequency for making the EHR Incentive payments (e.g., monthly, semi-monthly, etc.)? 22. (b) What will be the process to assure that Medicaid provider payments are paid directly to the provider (or an employer or facility to which the provider has assigned payments) without any deduction or rebate?	Section 5.6
23. What will be the process to assure that Medicaid payments go to an entity promoting the adoption of certified EHR technology, as designated by the State and approved by the US DHHS Secretary, are made only if participation in such a payment arrangement is voluntary by the EP and that no more than 5 percent of such payments is retained for costs unrelated to EHR technology adoption?	Section 5.10.1.1
24. What will be the process to assure that there are fiscal arrangements with providers to disburse incentive payments through Medicaid managed care plans does not exceed 105 percent of the capitation rate per 42 CFR Part 438.6, as well as a methodology for verifying such information?	Not Done in State of MS
25. What will be the process to assure that all hospital calculations and EP payment incentives (including tracking EPs' 15% of the net average allowable costs of certified EHR technology) are made consistent with the Statute and regulation?	This requirement is no longer relevant
26. What will be the role of existing SMA contractors in implementing the EHR Incentive Program – such as MMIS, PBM, fiscal agent, managed care contractors, etc.?	Section 5.10.1

<p>CMS Guidelines Section C: Activities Necessary to Administer and Oversee the EHR Incentive Payment Program, continued</p>	<p>Location in Document</p>
<p>27. * States should explicitly describe what their assumptions are, and where the path and timing of their plans have dependencies based upon: The role of CMS (e.g., the development and support of the National Level Repository; provider outreach/help desk support) The status/availability of certified EHR technology The role, approved plans and status of the Regional Extension Centers The role, approved plans and status of the HIE cooperative agreements State-specific readiness factors</p>	<p>Section 6.3</p>
<p>*May be deferred</p>	

Cross Reference from CMS Guidelines to Section 5 – Provider Incentive Program Blueprint:

CMS Guidelines Section D: The State’s Audit Strategy**	Location in Document***
1. (a) What will be the SMA’s methods to be used to avoid making improper payments? (Timing, selection of which audit elements to examine pre or post-payment, use of proxy data, sampling, how the SMA will decide to focus audit efforts etc):	Section 5.3.1, 5.3.3, 5.5.2, 5.10.1.1 prepayment checks
1. (b) Describe the methods the SMA will employ to identify suspected fraud and abuse, including noting if contractors will be used. Please identify what audit elements will be addressed through pre-payment controls or other methods and which audit elements will be addressed post-payment.	Section All sections listed for 1(a) and 5.3.2, 5.5.1.1, 5.5.1.2 5.6, 5.10.1.2.1, 5.10.2 prepayment actions
2. How will the SMA track the total dollar amount of overpayments identified by the State as a result of oversight activities conducted during the FFY?	Section 5.10.2, 5.7, 5.14 payment reporting
3. Describe the actions the SMA will take when fraud and abuse is detected.	Section 5.11.3
4. Is the SMA planning to leverage existing data sources to verify meaningful use (e.g., HIEs, pharmacy hubs, immunization registries, public health surveillance databases, etc.)? Please describe.	Appendix I - describes the requirement surrounding the State’s Immunization roll to provide documentation of registration.
5. Will the State be using sampling as part of audit strategy? If yes, what sampling methodology will be performed?* (i.e. probe sampling; random sampling)	Appendix J Audit Strategy will be submitted separately and confidentially
6. **What methods will the SMA use to reduce provider burden and maintain integrity and efficacy of oversight process (e.g., above examples about leveraging existing data sources, piggy-backing on existing audit mechanisms/activities, etc)?	Section 3.8, 4.1.1, 5.10.2
7. Where are program integrity operations located within the State Medicaid Agency, and how will responsibility for EHR incentive payment oversight be allocated?	Section 5.10.2 enhanced in SMHP version 1.1

*The sampling methodology part of this question may be deferred until the State has formulated a methodology based upon the size of their EHR incentive payment recipient universe.

** The Comprehensive Audit Strategy is referenced as Appendix J of the SMHP. However, Appendix J only contains the statement: *Appendix J will be submitted to CMS separate from this SMHP update to maintain confidentiality.* None of the post-payment audit information is contained in the public facing SMHP.

***SMHP content referenced in this section applies to Pre-payment actions and are not confidential.

Cross Reference from CMS Guidelines to Section 6 – HIT Roadmap:

CMS Guidelines Section E: The State's HIT Roadmap	Location in Document
1. *Provide CMS with a graphical as well as narrative pathway that clearly shows where the SMA is starting from (As-Is) today, where it expects to be five years from now (To-Be), and how it plans to get there.	Section 4.3, 6.1
2. What are the SMA's expectations re provider EHR technology adoption over time? Annual benchmarks by provider type?	Section 6.6.1, Table 6-1 enhanced in SMHP version 1.1
3. Describe the annual benchmarks for each of the SMA's goals that will serve as clearly measurable indicators of progress along this scenario.	Sections 6.6.1, 6.6.2 and 6.6.2 replaced in SMHP version 1.1
4. Discuss annual benchmarks for audit and oversight activities.	Appendix J is the Audit Strategy, which is submitted as a separate document.
CMS is looking for a strategic plan and the tactical steps that SMAs will be taking or will take successfully implement the EHR Incentive Program and its related HIT/E goals and objectives. We are specifically interested in those activities SMAs will be taking to make the incentive payments to its providers, and the steps they will use to monitor provider eligibility including meaningful use. We also are interested in the steps SMAs plan to take to support provider adoption of certified EHR technologies. We would like to see the SMA's plan for how to leverage existing infrastructure and/or build new infrastructure to foster HIE between Medicaid's trading partners within the State, with other States in the area where Medicaid clients also receive care, and with any Federal providers and/or partners.	HIE: Section 4.3, HIT: Section 6.6

*Where the State is deferring some of its longer-term planning and benchmark development for HIT/ E in order to focus on the immediate implementation needs around the EHR Incentive Program, please clearly note which areas are still under development in the SMA's HIT Roadmap and will be deferred.