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1. SMHP Purpose and Scope

The South Carolina Department of Health and Human Services (SCDHHS) State Medicaid Health Information Technology (HITECH) Plan (SMHP) provides a detailed plan of the past, present, and future planned activities SCDHHS utilizes to promote HIT availability and access to health care providers across the state. South Carolina is appreciative of and encouraged by the support and resources federal agencies have committed to making improved health outcomes and quality care a centerpiece of the Medicaid program.

In May 2018, CMS announced the decision to rename the Electronic Health Record (EHR) Incentive Programs to the Promoting Interoperability (PI) Programs. The program name change was made to better reflect the focus and dedication to improving interoperability and patients’ access to health information. Accordingly, South Carolina has retitled the former SMHP EHR Incentive Program to the South Carolina Medicaid Promoting Interoperability Program.

The South Carolina SMHP defines the calendar period for the primary organization and document content in Table 1 below:

<table>
<thead>
<tr>
<th>HIT Phase</th>
<th>Description</th>
<th>Beginning Month</th>
<th>Ending Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>“As-Is” HIT Landscape</td>
<td>Developed through one or more environmental scans</td>
<td>January 2015</td>
<td>June 2018</td>
</tr>
<tr>
<td>HIT Roadmap</td>
<td>Annual goals to achieve 5-year objective (&quot;To-Be&quot;)</td>
<td>July 2018</td>
<td>December 2021</td>
</tr>
<tr>
<td>“To-Be” HIT Landscape</td>
<td>5 years forward looking perspective</td>
<td>January 2022</td>
<td>December 2022</td>
</tr>
</tbody>
</table>

1.1 South Carolina Medicaid Program Overview

Medicaid is South Carolina’s Title XIX grant-in-aid program that provides health coverage to eligible low-income adults, children, pregnant women, elderly adults and people with disabilities. South Carolina began participating in the Medicaid program in July 1968. The Medicaid program is administered by the state, according to federal requirements, and funded jointly by the state and the federal government. Medicaid helps pay for health and long-term care services for over 1 million South Carolinians, including low income families, people with disabilities, and low-income Medicare recipients. Figure 1 illustrates 2016 South Carolina Medicaid enrollment demographics for full and limited benefit programs by eligibility category, race, and managed care vs. fee-for-service (FFS) enrollment.
Figure 1: SC Medicaid Enrollment Demographics (2016 data)

The South Carolina Medicaid annual budget is second only to public education and provides health care coverage to more than one-quarter of the state’s population. Figure 2 illustrates annual South Carolina Medicaid expenditures by State Fiscal Year (SFY) from 2012 through 2016.

Figure 2: Medicaid Dollars Paid by State Fiscal Year (July 1 – June 30)

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1 Aggregate totals by demographic or plan type subject to change based upon retroactive eligibility. Individuals may be represented in more than one category in a State Fiscal Year (i.e. reside in different counties or eligibility category change).

2 Data pulled 6/15/2017 representing claims paid through 5/31/2017. SFY data subject to change based upon retroactive eligibility and claim adjustments.
As of July 2017, 64% of Medicaid members are age 18 and under, and represent 33% of projected expenditures. Disabled adults comprise approximately 13% of Medicaid members, yet account for over 34% of projected expenditures. Medicaid pays for more than 50% of all in-state births.

1.2 South Carolina Health Rankings
South Carolina has made steady and sustained progress toward improving the health of its citizens, as evidenced in the United Health Foundation “America’s Health Rankings” growth from 46th in the nation in 2009 to 44th in the nation in the latest 2017 annual report. The report noted the following specific to South Carolina population health:

Statewide Highlights in the Past 10 Years
- Air pollution decreased by 40%.
- Violent crime decreased 34%.

Statewide Population Health Strengths
- Small disparity in health status by educational attainment.
- Low preventable hospitalization rate.
- Low incidence of pertussis.

Statewide Population Health Challenges
- High percentage of children in poverty.
- High premature death rate.
- High prevalence of diabetes.

The 2018 Health of Women and Children report issued by the United Health Foundation reflected an increased ranking from 39 in 2016 to 36 in 2018. The report noted the following specific to women and children’s health:

Women & Children Highlights since 2016 (1st Report Issued)
- Smoking among women aged 18-44 decreased 19%.
- Tobacco use during pregnancy decreased 13%.
- Teen births decreased 8%.
- Maternal mortality decreased 2%.
- Infant mortality decreased 7%.

---

3 Healthy Connections Medicaid Update 8/13/17, presented by Dr. Tan Platt SCDHHS Medical Director
4 The Annual Report is the longest running annual assessment of the nation’s health on a state-by-state basis. For nearly three decades, America’s Health Rankings® Annual Report has analyzed a comprehensive set of behaviors, public and health policies, community and environmental conditions, and clinical care data to provide a holistic view of the health of the people in the nation
5 With a focus on women of reproductive age, infants and children under age 18, this report emphasizes the population groups where change can make generational differences.
**Women & Children Population Health Strengths**

- Low prevalence of missed school days.
- Low prevalence of homeless family households.
- Low cost of infant child care.

**Women & Children Population Health Challenges**

- Low immunization coverage among adolescents.
- High percentage of preterm births.
- High prevalence of concentrated disadvantage.

### 1.3 From PCCM to Healthy Connections

SCDHHS introduced the Medical Homes Network (MHN) program in 2007, a statewide enhanced Primary Care Case Management program (PCCM) utilizing primary care provider networks to provide and arrange for most acute, primary, specialty care, and behavioral health for eligible Medicaid members\(^6\) with voluntary enrollment.

At that time, SCDHHS also began a concentrated effort to shift from the traditional Medicaid FFS delivery model to managed care to address the high rates of heart disease, strokes, and childhood obesity among members. Simply acting as the mechanism for Medicaid claims payment was no longer sufficient. The new goal was to create a value-driven system that emphasized improved health outcomes for Medicaid members and incentivized quality care. A blueprint of this plan, called *Healthy Connections Choices*, was submitted to the Centers for Medicare and Medicaid Services (CMS) in 2006 for review and approval. The plan included the following key concepts:

- Investing in preventive care and care coordination.
- Making data available to providers for improved clinical decision-making.
- Measuring quality care using Healthcare Effectiveness Data and Information Set (HEDIS) data and other measures.
- Engaging and educating Medicaid members on making good decisions about their own healthcare.

The *Healthy Connections* program began with field-based enrollment counselors to help members who were required to choose one of the three Medicaid delivery models available in the state: a managed care organization (MCO), the new PCCM program, or the traditional fee-for-service (FFS) option. That same year the state also introduced two additional new programs:

- Program of All-Inclusive Care for the Elderly (PACE) that provided all Medicare and Medicaid services, including long term care services, to individuals over age 55 who met a nursing home level of care.

---

\(^6\) excludes those in another managed care program, receiving home and community based waiver services, or residing in an institution.
Statewide Non-Emergency Transportation program for most Medicaid members. By 2011, all Medicaid members in South Carolina were in some form of managed care. The state further expanded managed care through its Healthy Connections program by enrolling eligible Medicaid members formerly served in the FFS system in either the MCO program or the MHN Program on a mandatory basis.

In 2013, the state further transitioned from the PCCM program to an MCO service delivery system by adding “carved in” inpatient behavioral health services to the MCO benefit package expanding mandatory managed care to all children under the age of one.

1.4 Healthy Connections to Health Information Technology (HIT)
State and federal legislative initiatives have expanded the opportunities to turn some of the Healthy Connections objectives into reality.

- **Children’s Health Insurance Program Reauthorization Act of 2009 (CHIPRA):** CHIPRA legislation introduced new managed care data requirements and quality of care measures. This facilitated enhanced data collection, data comparison, and the ability to pay for quality outcomes. In 2013, SCDHHS commissioned the “Medicaid Cost Effectiveness Analysis” and “Managed Care Savings Analysis” reports. These reports served as important tools in understanding South Carolina Medicaid’s recent experience with managed care and guided future development of service delivery models.

- **CHIPRA Quality Demonstration Grant:** South Carolina received a $9.2 million CHIPRA Quality Demonstration Grant to demonstrate that newly-developed quality indicators can be successfully utilized in pediatric practices. Goals included:
  - Sharing key clinical data through a statewide electronic quality improvement network.
  - Developing a physician-led peer-to-peer quality improvement network.
  - Expanding use of pediatric medical homes to address mental health challenges of children in the state.

- **American Recovery and Reinvestment Act (ARRA) of 2009/ Health Information Technology for Economic and Clinical Health (HITECH):** Perhaps most significantly, the passage of the ARRA and the HITECH Acts greatly accelerated South Carolina’s progress towards implementing a widely available statewide Health Information Exchange (HIE). SCDHHS partnered with the state’s Office of Research & Statistics (ORS) in 2006 on the Electronic Personal Health Record (EPHR) pilot program. The aim of the pilot was to provide physicians with a comprehensive patient history to make the best clinical decisions possible. The EPHR pilot began as a five-county pilot with 10 years of claims data (warehouse at ORS) available to providers through a secure web

---

7 Children in foster care and with certain disabilities, Medicaid waiver enrollees, certain people served in institutions, and dual-eligible members remained exempt from mandatory managed care.

8 The initial pilot involved 15 pediatric practices across the state.
portal. The EPHR pilot has since developed into the South Carolina HIE (SCHIEx), South Carolina’s recognized HIE and recipient of a $9.5 million grant from the Office of the National Coordinator (ONC).
2. **SECTION A: SOUTH CAROLINA “AS-IS” HIT LANDSCAPE**

SCDHHS has maintained an integral role in advancing HIT efforts in South Carolina. With the passage of the HITECH Act, SCDHHS emerged as a leader in developing the core infrastructure necessary for providers to become “meaningful users”. Figure 3 below illustrates key milestones in the South Carolina HIT landscape:

*Figure 3: South Carolina HIT Historical Milestones*

![HIT Landscape Timeline](image)

2.1 **SOUTH CAROLINA HIT VISION AND GUIDING PRINCIPLES**

The SCDHHS HIT vision is for a healthier South Carolina where shared health information is a critical tool for improving the overall performance of the health care system. The health care community will work together to achieve clinical effectiveness using health information technology, delivering better overall value and improving quality of life for South Carolinians.

Guiding principles to support the vision include the following:

- Individual consumers, patients, and their families will be engaged in and benefit from implementation of the HIT plan.
- Privacy and security will drive HIT selection, implementation, and support.
- HIT will greatly facilitate coordination of care.
- HIT is a vital tool to improve population and public health.
- Evaluation of the effectiveness of using HIT data to improve health outcomes will be integrated into the HIT plan.
- Access to care will be improved and disparities in care will be reduced using HIT.
- Training & support will be available throughout the state.
- Continuous improvement in quality, safety and efficiency will be aided by using HIT.
- Adoption of standards and the requirements of interoperability are essential to the success of the HIT plan.
- HIT will greatly facilitate translational, population-based and health services research.

2.2 Meaningful Use Overview

Under the HITECH Act, which was enacted under the ARRA (Recovery Act), incentive payments are available to for Eligible Professionals (EPs) and Eligible Hospitals (EHs) that successfully demonstrate meaningful use of certified EHR technology. The Recovery Act specifies three main components of meaningful use (MU) including the use of a certified EHR in a meaningful manner, the use of certified EHR technology for electronic exchange of health information to improve quality of health care, and the use of certified EHR technology to submit clinical quality and other measures. Meaningful Use requires that providers perform specific actions, primarily related to Certified Electronic Health Record Technology (CEHRT). The requirements to satisfactorily demonstrate MU compliance varies between program years and MU program stages. Meaningful Use is implemented in a phased approach over a series of 3 stages. A summary of three MU stages is provided below:

2.2.1 Stage 1

Stage One is the first phase of the MU incentive program detailing the requirements for the use of EHR systems by hospitals and eligible health care professionals. Consisting of 25 total criteria, the list for MU stage 1 is broken into 15 core requirements and 10 menu requirements. All core requirements are mandatory, while health care providers can choose five of the 10 menu requirements to meet. Within the confines of MU stage 1, all eligible parties were required to adopt an EHR that met the listed criteria by the end of Federal Fiscal Year (FFY) 2014 to be eligible for government incentives. To receive the maximum incentive, providers must have achieved meaningful use for at least 90 days by the end of FFY 2012.

2.2.2 Stage 2

Meaningful use stage 2 began in 2014. As with the stage 1 requirements, MU stage 2 has a menu section and a core section of requirements, with core requirements mandatory and menu requirements chosen from a larger list.

MU stage 2 consists of:

- Continuations of stage 1 requirements with increased percentage for the number of electronic transactions.
- Some stage 1 menu list items moved to the stage 2 core list -- meaning that optional choices from stage 1, such as submitting data to public health agencies and adding lab results to EHR systems, are required in stage 2.
- Adds a group of new requirements, many related to providing patients with access to their own medical records.
2.2.3 Stage 3

CMS and the ONC for Health IT published the final rule on MU stage 3 on October 6, 2015. Stage 3 was optional for providers in 2017 and became mandatory for all participants in 2018. Objectives and measures for all providers, regardless of prior participation, are finalized for the 2018 reporting period with this rule.

Along with MU stage 1 and MU stage 2, the third list of criteria and requirements mandates that all hospitals and eligible healthcare professionals use certified EHR systems. Stage 3 also promotes the use of application programming interfaces (APIs) to bridge the gaps between health IT systems and to provide increased data access. MU stage 3 includes all the requirements that physicians must meet to receive their incentives and avoid any penalties. In this program, physicians must meet all eight overall objectives, in contrast to the earlier requirement for them to choose from a core menu of options. The objectives cover the following areas:

**OBJECTIVE 1: PROTECTED HEALTH INFORMATION (PHI)**

Eligible physicians must attest to conducting a security risk analysis to assess vulnerabilities to PHI that could lead to data breaches. In addition to the fact that the Health Insurance Portability and Accountability Act (HIPAA) requires practices to perform risk analysis and other security audits, the requirements attached to meaningful use objectives make it a must-have to receive incentives.

**OBJECTIVE 2: ELECTRONIC PRESCRIBING**

Eligible physicians are required to have more than 80% of their permissible prescriptions queried for drug formulary and transmitted to pharmacies electronically.

**OBJECTIVE 3: CLINICAL DECISION SUPPORT (CDS)**

For this objective, there are two different measures available for eligible physicians.

- a. The first measure covers implementing five CDS interventions.
- b. The second measure relates to the active use of drug-drug and drug-allergy interaction checks during the reporting period, which are available within a certified EHR platform.

**OBJECTIVE 4: COMPUTERIZED PROVIDER ORDER ENTRY (CPOE)**

Eligible physicians are required, under this objective, to meet three different measures for medication, lab and diagnostic imaging orders.

**OBJECTIVE 5: PATIENT ELECTRONIC ACCESS**

To help encourage patient engagement, MU stage 3 includes an objective in which eligible physicians must provide access to EHRs to more than 80% of patients, with the option to view and download the records. In addition, eligible physicians must offer the option to receive educational data to more than 35% of their patients.
OBJECTIVE 6: COORDINATION OF CARE THROUGH PATIENT ENGAGEMENT

The measures included in this objective encourage patients to actively engage in their care by necessitating physicians to educate them on and offer capabilities to view patient health data. The measures in this objective cover three different aspects. Eligible providers must attest to all three measures but meet the thresholds for two of the three.

a. The first measure requires physicians to have more than 25% of patients interact with their EHR.

b. The second measure requires that more than 35% of patients receive a secure digital communication from a care provider.

c. The third measure focuses on encouraging the collection of patient-generated health data from fitness trackers or wearable devices from more than 15% of patients.

OBJECTIVE 7: HIE

The measures included in this MU objective encourage interoperability. Eligible providers must attest to all three measures but meet the thresholds for two of the three.

a. The first measure requires that more than 50% of care transition and referrals include the exchange of care records, such as continuity of care documentation (CCD), electronically.

b. The second measure requires physicians who are seeing a patient for the first time to receive care documents electronically from a secondary source more than 40% of the time.

c. The final measure requires physicians to use e-prescribing services to reconcile medication lists from online sources with their own for more than 80% of new patients.

OBJECTIVE 8: PUBLIC HEALTH AND CLINICAL DATA REGISTRY REPORTING

In this objective, providers must choose three out of five available EHR reporting destinations to which they will submit data periodically. Reporting options include:

a. immunization registry
b. syndromic surveillance
c. cases
d. public health registry
e. clinical data registry
The intended progression of MU activities toward improved patient outcomes is illustrated in Figure 4 below:

Figure 4: Meaningful Use Stages

![Figure 4: Meaningful Use Stages](image)

2.3 PROMOTING INTEROPERABILITY (PI) PROGRAM ACTIVITY

The South Carolina Medicaid PI Program (formerly the EHR Incentive Program) was initially developed in 2011 to promote the use of certified EHRs and the exchange of clinical data through financial incentives for EHs and EPs, ultimately resulting in improved quality of patient care.

In 2015, SCDHHS expanded the SMHP strategy with enhanced program governance for the HIT “to-be” environment. The governance modifications focused on strengthening, organizing, and implementing well-supported protocols to:

- Administer the South Carolina Medicaid EHR Incentive Program.
- Support providers who were adopters and meaningful users of certified EHR technology.
- Implement a permanent governance committee with policies and procedures that allowed for the movement and exchange of data in a secure, interoperable, and authorized manner.

In view of declining state financial resources, federal grant funding provided the necessary financial resources to establish the core HIT technical infrastructure. South Carolina anticipated two major outcomes from the HIT activities occurring throughout the state.

- Baseline EHR adoption rates looked promising, and Medicaid and Medicare incentives spurred additional interest in certified EHR adoption. SCDHHS anticipated the adoption rates to increase each year over year.
- SCDHHS believed a closed loop system reduced the administrative burden for providers, integrated claims and encounter data, improved outcomes, and provided the basis to update reimbursement methodologies.

In 2016 through 2017, SCDHHS focused on increasing Certified Electronic Health Record Technology (CEHRT) adoption rates of providers and promoting interaction with the statewide HIE and public health registries. Additionally, coordination with the South Carolina Department of Health and Environmental Control was successful in enabling HL7 version 2.5.1 capability to allow providers to meet MU using DHEC production level data from their CEHRT.
SCDHHS recognized that continuing changes with technology and MU criteria resulted in changes to the national HIT landscape as healthcare professionals became more sophisticated users of HIT and certified EHR technology. South Carolina accommodated the changes and adjusted the HIT operations and processes to incorporate each new instance of federal guidance and/or legislation.

2.4 **Changes to State Law**

There have been no recent changes to state law impacting the Promoting Interoperability Program since the original SMHP developed in 2011. The existing state provisions impacting program are as follows:

2.4.1 **SC Executive Order 2009-15 (October 16, 2009)**

Established an Interim Governance Committee to recommend strategies and policies to successfully implement and sustain an HIE. The complete executive order is provided in Appendix B.

2.4.2 **SC 2010-2011 Appropriation Act General Provisions – Proviso 89-120 (August 10, 2010)**

From the funds appropriated and awarded to the S.C. Department of Health and Human Services for the HITECH Act of 2009, directed SCDHHS to advance the use of HIT and HIE to improve quality and efficiency of health care and to decrease the costs of health care. The complete text is provided in Appendix C.

2.4.3 **SC H4446 To Establish Statewide Immunization Registry (June 1, 2010)**

Required the Department to establish a statewide immunization registry, to require health care providers to report the administration of immunizations to the Department, and to provide civil penalties for violations. The complete text is provided in Appendix D.

2.5 **Role of Medicaid in State HIT Coordination**

SCDHHS is dually invested in the state’s HIT efforts, as it is the state agency designated by the governor to receive the HIE Cooperative Agreement and is also responsible for administering the South Carolina PI Program (formerly the Medicaid Electronic Health Record Incentive Program).

Initially the SCDHHS Director and the ORS Chief of Health and Demographics jointly performed functions that fall within the State HIT Coordinator’s responsibility. Following changes in SCDHHS’ executive leadership in early 2011, the ORS Chief of Health and Demographics assumed all HIT Coordinator responsibilities.

SCDHHS attends Public Health meetings with South Carolina Department of Health and Environmental Control (SCDHEC), SCHEx, and SCDHHS executive management. The HIT Division has and will continue to have a presence in local, state, and national HIT/ HIE conferences. The HIT Division has also recently engaged health research groups in the state and has sought to educate them about MU initiatives and partnered with them to disseminate PI Program materials and information.

As grants become available, Medicaid leverages the ongoing work to further expand and strengthen the infrastructure to support HIT adoption and achieving meaningful use. Figure 5 illustrates the role of South Carolina Medicaid in context with some of the HIT activities and initiatives that have occurred in the state. Additional activities are detailed in subsections below.
In 2014 SCDHHS, with six other child-serving agencies, applied for a grant from SAMHSA to expand the state's system of care for youth with significant behavioral health challenges. The $2.8 million grant spans four years from October 1, 2014 through September 29, 2018. The grant funds infrastructure for a system of care including:

- Family organization capacity building.
- Residential provider transformation.
- Improved use of evidence-based practices for behavioral health.

Family organization capacity building includes social marketing about awareness of children's mental health, reducing stigma about mental health and monthly webinars focusing on different components within a system of care. Individual client services are provided by the S.C. Continuum of Care using a high-fidelity wraparound approach as a model of evidence-based practice.

The mission of the Center of Excellence in Evidence-Based Intervention is to support agencies and organizations in the selection and implementation of evidence-based interventions to promote youth and family well-being and to address challenges related to behavioral health problems and substance
use. Evidence-based programs are those that have been proven, through research, to achieve certain goals. The more evidence there is that a program, or approach, produces the desired results, the higher the level of confidence providers can have that the program, if used correctly, will achieve the outcomes that were seen in research studies. The Center’s vision is to:

- Make evidence-based support and intervention available when and where youth and families need them.
- Promote excellence and accountability in service provision.
- Encourage a ready workforce through education and support efforts.

The Center is newly established and supports the Palmetto Coordinated System of Care (PCSC). The PCSC is a multi-disciplinary partnership between families, youth, providers and child-serving public agencies to help children stay at home, in school and, when possible, out of the child welfare and juvenile justice systems. PCSC serves children and youth with serious behavioral health challenges who are in or at risk for out-of-home placements by providing best or evidence-based practices and supports that are convenient for children, youth and their families. When families are facing these problems, the PCSC believes the most successful path to healthy and happy homes rests on getting help with treatments that have been proven effective (evidence-based interventions).

The SC Center of Excellence helps and supports providers to deliver these kinds of high quality treatments that research has shown to be effective. Current activities include examining evidence-based intervention models. Future activities include facilitation of training and establishing systems for implementation support. The PCSC will also provide training and technical assistance for data collection efforts to ensure delivery of high quality services to families in need.

### 2.5.3 South Carolina HIT Summits

Following the ARRA legislation introduction in 2009, SCDHHS, ORS, and Health Sciences South Carolina (HSSC) came together and formed an e-Health group. The group initiated a series of monthly HIT meetings beginning in June 2009, providing a central forum for stakeholders to assess the status of HIT and HIE adoption in South Carolina and develop a cohesive strategic plan to move forward (i.e., the SMHP). The summits included representatives from the private sector, state government, providers, non-profit organizations, and universities. A total of 186 organizations and 465 unique individuals attended these HIT Summit planning sessions. These summits were attended by stakeholders across the state and were open to the public. Figure 6 illustrates the diversity of HIT summit attendees by industry and occupation.
The summits proved to be a vital setting for stakeholder input and feedback in development of the South Carolina Medicaid EHR Incentive Program. SCDHHS presented educational overviews on the EHR Incentive Program and the plan for development of the South Carolina Medicaid EHR Incentive Program. SCDHHS coordinated the SMHP development with the HIE Cooperative Agreement strategic and operational plans.

The chart below lists the theme of each summit and individual summit attendance numbers. The summits were well attended by a broad representation of stakeholders across South Carolina. Table 2 identifies presentation topics for each of the HIT planning summits.

Table 2: HIT Summit Topics

<table>
<thead>
<tr>
<th>SUMMIT DATE</th>
<th>ATTENDEE COUNT</th>
<th>TOPICS</th>
</tr>
</thead>
</table>
| 6/17/2009   | 114            | ▪ What’s going on in South Carolina HIT?  
              |                | ▪ Provider issues  
              |                | ▪ HIE |
| 7/29/2009   | 141            | ▪ Meaningful Use  
              |                | ▪ HIE selection  
              |                | ▪ Governance  
              |                | ▪ Provider issues |
| 8/27/2009   | 157            | ▪ Privacy and Security |
| 10/01/2009  | 136            | ▪ Experience & Success with EHRs  
              |                | ▪ Workforce Readiness |
| 10/29/2009  | 146            | ▪ Who are the vendors? |
| 12/10/2009  | 104            | ▪ Consumers and e-Prescribing |
### SUMMIT MEETINGS

<table>
<thead>
<tr>
<th>SUMMIT DATE</th>
<th>ATTENDEE COUNT</th>
<th>TOPICS</th>
</tr>
</thead>
</table>
| 1/13/2010   | 113            | ▪ Security  
▪ Interim Rule for the EHR Incentive Program  
▪ Standards/Certification for EHR technology |
| 4/22/2010   | 127            | ▪ Getting Started on Implementation of HIT |
| 8/18/2010   | 126            | ▪ The Age of Electronic Health Records is Here |
| 11/18/2010  | 98             | ▪ SC Medicaid EHR Incentive Program  
▪ Connecting to SCHIEX |

During these early summits, participants reached two significant consensus points—the development of a cohesive vision statement with guiding principles and leveraging a platform (formally called the South Carolina Health Information Exchange) to be the statewide HIE solution. Summit meetings transitioned from monthly to quarterly following the April 2010 Summit and ended in November 2010 as the input necessary for the initial SMHP outline and approach were completed.

The HIT summits were instrumental in fostering the environment and collaboration needed to set the foundation for establishing a successful HIE and EHR Incentive Program in South Carolina. These summits focused on bringing influential decision-makers to the table who would be able to effectively gain buy-in and promote these changes. The summits were critical activity in the project startup phase and served their purpose with the establishment of the SC HIE. The planned 2018 environmental scan will be used to evaluate if re-engagement of these activities would be beneficial for future initiatives.

#### 2.6 State Strategic and Operational Plans

The state’s strategic and operational plans required for the HIE Cooperative Agreement Program (reference Section 2.9.2 Grant Activities) were developed with significant stakeholder input, presented and discussed at the summits, and made available for public comment on the SC HIT website. Both plans were submitted to the ONC in April 2010 and received approval in September 2010. SCDHHS submitted an update for each plan to the ONC in February 2011 in accordance with the annual update requirement.

#### 2.7 Environmental Scan 2011 – EHR Adoption

##### 2.7.1 Methodology

SCDHHS conducted a cross sectional survey of hospitals and primary care practices to ascertain status on the following topics of interest:

- Knowledge of federal initiatives, incentives, penalties.
- Current EHR/EHR adoption & functionality.
- HIE readiness.
- Plans for adoption – financial, staffing, training.
- Anticipated costs & related expectations.
- Collection of quality indicators.
The 2011 survey content repeated the initial environmental scan conducted in 2010, which provided baseline information for the state’s HIT landscape and served as a resource for the HIE strategic and operational plans and the State Medicaid HIT Plan. To enhance response rates in both years, the SC Office of Rural Health, SC Hospital Association, and SC Primary Health Care Association sent email messages to encourage their members to respond to the survey. Surveys were mailed in April 2011 followed by a reminder letter mailed in May 2011. Institutional Review Board approval was obtained from the University of South Carolina to have the analysis performed by researchers at the South Carolina Rural Health Research Center in the Arnold School of Public Health, University of South Carolina.

DHEC, which maintains the licensure files for all hospitals in South Carolina, furnished the mailing addresses for 104 licensed hospitals. The Office of Research and Statistics provided physician practice addresses using the Medicaid provider file linked to the National Provider Identifier (NPI). The 2009 survey included 1,495 practice networks. Based on the response to this initial survey, 185 practices were removed from the mailing list because they were not primary care providers, retired, or no longer at the address provided. The 2011 surveys were mailed to the resulting 1,310 practices. The survey objective was to understand HIT adoption issues and challenges at the organization-level and not the physician-level, therefore only one survey was sent to each practice network.

2.7.2 Survey Response Rate

Hospital response rate was 38.2% (n=39) with most respondents identifying as acute care hospitals (56.4%). This was small decrease in hospital response rate of 40.4% from 2009 survey.

Physician practices response rate was 34.5% (n=452). Of the total respondents, 26 were excluded from the analyses due to being specialty providers or because the practice was closed. The net 426 physician respondents incorporated 1066 practice sites. Most practices were single-specialty (19.8%), multi-specialty (18.6%), or small group primary care (17.4%). Rural Health Clinics represented 10% and Federally Qualified Health Centers were 10.8% of the total respondents. Physician response rate increased from the 25.2% from the 2009 survey, as illustrated in Figure 7.

*Figure 7: Survey Response Rates in 2009 and 2011*
2.7.3 Broadband/Internet Access

100% of the hospital respondents reported internet use and more than 99% of the physician practices reported internet access at their practice site. Hospitals were more likely to use fiber optic cables (38.5%) and T-1 lines (28.2%). Similarly, physician practices were more likely to use fiber optic cables (33.4%), T-1 lines (28.2%), and DSL (19.2%). Compared to the results in 2009, there was an increase in the use of fiber optic cable for an internet connection among physician practices in 2011. Figure 8 illustrates the type of internet access for all 2011 survey respondents.

Figure 8: Internet Access Method for Hospitals and Providers (2011 Survey)

2.7.4 Knowledge of Federal Initiatives, Incentives and Penalties

Respondent awareness and understanding of the federal legislation and incentives available for EHR adoption was moderate. Primary care practice respondents reported greater rates of knowledge than hospital respondents. Among the former, business managers were the most knowledgeable and CEO/COOs in the latter.

For hospitals, 46% were familiar with the ARRA components, 35% with the HITECH provisions, 38% understood meaningful use criteria, 33% were aware of the EHR incentive program, 35% were aware of the potential penalties for late adoption, and only 17% were aware of assistance available through the Regional Extension Center.

Among physician practices, knowledge of the various federal incentives for EHR adoption was higher than among the hospitals. Nearly two-thirds were informed about the ARRA components (62.1%); 59.7% were aware of HITECH provisions, 61.3% were familiar with meaningful use criteria and aware of the EHR incentive program, 59% understood the potential penalties for late adoption, and only 34.1% were knowledgeable of assistance available through the Regional Extension Center. Table 3 summarizes changes in level of knowledge for primary care practice respondents between 2009 and 2011 survey respondents. The most significant increase in awareness occurred with incentives and penalties for EHR adoption.
Table 3: Primary Care Practices with Knowledge of HIT-related Initiatives – 2009 & 2011 Surveys

<table>
<thead>
<tr>
<th>Initiative Type</th>
<th>Respondents (2009)</th>
<th>Respondents (2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARRA</td>
<td>62.1%</td>
<td>66.3%</td>
</tr>
<tr>
<td>HITECH Act</td>
<td>59.7%</td>
<td>60.9%</td>
</tr>
<tr>
<td>Meaningful Use Criteria</td>
<td>61.3%</td>
<td>55.5%</td>
</tr>
<tr>
<td>Incentive Program for EHR adoption</td>
<td>61.3%</td>
<td>71.9%</td>
</tr>
<tr>
<td>Potential penalties for delayed EHR adoption</td>
<td>59.0%</td>
<td>70.7%</td>
</tr>
<tr>
<td>Awareness of Regional Extension Center technical support</td>
<td>34.1%</td>
<td>33.1%</td>
</tr>
</tbody>
</table>

2.7.5 Electronic Health Record Adoption Rates

Nearly half of hospitals (48.7%) and almost 60% of physician practices reported using EHR to store patient medical information. Most hospital and physician practices, however, store patient data in multiple formats. More than 28% of hospital and 26% of physician practices reported using practice management programs and paper records together with an EHR. Many hospitals (35.9%) and physician practices (24.1%) reported using only paper records.

Hospitals reporting the use of EHR to store patient records decreased from 57% in 2009 to 48.7% in 2011, while physician practice use of EHR increased from 48.7% in 2009 to 60% in 2011.

When asked where they were on the continuum of EHR adoption, one-third of the responding hospitals (33.3%) reported they purchased an EHR and were beginning to implement it. One-fifth (20.5%) said they were using an EHR and it was working well, while nearly 13% reported that their EHRs were not working as well as expected. Another 13% identified that they were making plans and preparing for a future EHR implementation.

More than one third of the physician practices reported that they were in the process of implementing EHRs (38.6%) or beginning an implementation of EHR (29.4%). Of those practices using an EHR, almost one-third (29.6%) reported that their EHR was working well, with 9% reporting their EHR was not working well. Less than ten percent of the responding hospitals and physician practices (5.1% vs. 4.7%) reported not currently considering EHR adoption. The proportion of providers not considering EHR adoption or having no specific plans for implementing an EHR decreased by more than 15% between 2009 and 2011 surveys.

2.7.6 Financial Preparations for EHR Adoption or Upgrade

When asked to describe the financial mechanisms used to obtain or upgrade EHR, more than a third (35.9%) of hospitals reported they would apply for CMS incentives and more than a quarter (25.6%) would purchase EHR equipment and software outright. Inversely, more physician practices (30.0%) chose outright purchasing over applying for a CMS incentive (15.9%) or obtaining a loan (8.7%). Nearly 16% of physician practices reported they had no current plans to implement or upgrade their current EHR.

Outright purchasing and applying for CMS incentives were the primary financial methods used by hospitals and physician practices to pay for EHR adoption or upgrades in both 2009 and 2011. Notably,
there was an increased proportion of practices reporting outright purchasing in 2011 (30.0%), compared to 19.2% in 2009.

2.7.7 EHR Incentive Applications
Hospitals were more likely to pursue EHR incentives from both Medicaid and Medicare (48.7%). Less than 10% of hospitals reported applying for only Medicare incentives (7.7%) or only Medicaid incentives (2.6%). Similarly, over a quarter (29.4%) of physician practices reported applying for incentives from both Medicaid and Medicare while 27.5% chose incentives from only Medicare and 17.4% chose incentives from only Medicaid. Some providers reported they did not plan to apply for an incentive (20.5% hospitals and 15.1% physician practices). 20.5% of hospitals and 10.6% of practices reported that they were uncertain if EHR incentives would be pursued at the time of the survey.

2.7.8 HIE Participation
More than half of the hospitals and primary care practices reported in 2011 that they did not currently participate in an HIE (57.7% of hospitals vs. 61.9% of physician practices). However, about half of these respondents said they exchanged patient data (19.2% of hospitals vs. 16.1% of physician practices) despite the lack of a formal HIE. There was no change in the proportion of healthcare providers who participated in HIE or exchange of patient data rates among providers between the 2009 and 2011 surveys.

2.7.9 Training Needs
The most frequently reported training needs were information exchange for hospitals (69.2%) and workflow redesign for physician practices (59.2%). More than half of hospitals requested training on computer literacy, electronic clinical documentation, workflow redesign, federal incentives, and meaningful use criteria. More than half of the physician practices reported training needs specific to information exchange, electronic clinical documentation, and deferral incentives. Training on other funding opportunities (48.7% hospitals; 35.8% physician practices) and National Committee for Quality Assurance (NCQA) standards (48.7% hospitals; 40.1% physician practices) were also identified.

Training needs for workflow redesign, federal incentive, and MU criteria remained stable between the 2009 and 2011 surveys. However, hospitals training needs on electronic clinical documentation increased by 14% between 2009 and 2011. Physician practices training needs on other funding opportunities and NCQA standards decreased by 15% and 10%, respectively, between the two environmental scans.

2.7.10 EHR Certification
Most of hospitals (73.1%) and physician practices (86.1%) with EHRs reported having Certification Commission for Health Information Technology (CCHIT) certification. This represented a substantial increase in physician practices having EHRs certified by CCHIT, rising from 67.6% in 2009 to 86.1% in 2011. For hospitals, there were no significant changes in the percentages of those having CCHIT certification.

When asked if the EHR met their patient care needs, 65.4% of hospitals and 85.1% of practices reported affirmatively.
2.7.11 EHR Use Perceived Productivity Change
When asked about the impact that EHR usage had on productivity over various usage periods, hospitals were more likely to report major improvements in productivity across the three different periods (23.1% within 3 to 6-month period, 34.6% within 1-year period, and 26.9% over 3 to 5-year period).

The perceived impact of productivity for physician practices was varied. For the first 3 to 6 months, more than a third (33.9%) of practices reported major decreases in productivity, compared to only 19.2% of hospitals. After one year, 27.6% of physician practices reported minor decreases in productivity. After a 3 to 5 year period of use, 36% of practices reported they did not know the impact of EHR on productivity, while only 16.6% perceived a major improvement in productivity.

The 2011 environment scan results clearly identified that hospitals were likely to perceive a greater benefit in EHR adoption through improved productivity, while provider practices experienced a greater decrease in their productivity within the first year of EHR implementation and were unable to assess productivity impact over longer timeframes.

2.7.12 2011 Respondents with No EHR
2.7.12.1 Implementation Barriers
Barriers to implementing an EHR as reported by providers with no EHR in their hospital or practice remained essentially unchanged between the 2009 and 2011 surveys. Major reasons included, but were not limited to, the following:

- Cost of implementation.
- Lack of staff experience and expertise.
- Lack of EHR interoperability with other systems (hospitals).
- Productivity disruption (physician practices).
When asked about barriers to EHR implementation, virtually everyone attributed costs, both initial and recurring, as an obstacle. Lack of staff familiarity and experience with EHRs was also frequently cited as a barrier to EHR implementation for both hospitals (50.0%) and practices (53.6%). Lack of EHR interoperability with other information systems was reported by most hospitals (58.3%), but less than 20 percent of the physician practices (14.3%). The negative impact of productivity disruption was a major concern cited by physician practices (61.6%), yet this was not a primary reason for the absence of EHR implementation cited by hospitals (16.7%).

### 2.7.12.2 Planned EHR Implementation Timeline
Almost half (41.7%) of hospitals and over half (69%) of practices without an EHR reported that they would invest in an EHR within 1 or 2 years. One third (33.3%) of hospitals and only 11.5% of practices had no defined timeline for EHR adoption and implementation.

Logistic regression analyses were conducted to determine if there were any common determinants or provider characteristics associated with those respondents with no EHR. In 2009 environmental scan analyses, limited internet access and no academic affiliation were the primary characteristics associated with no EHR adoption. However, for the 2011 analysis, limited internet access was the only significant indicator and lack of affiliation was found insignificant.

Healthcare providers who lacked internet access or used dial-up services for an internet connection were less likely to have adopted an EHR. Further, among those without EHRs, those using satellite, T-1 lines, or fiber optic cables were more likely to express plans for EHR adoption in the next 24 months than the former group.

### 2.7.13 2011 Environment Scan Conclusion and Recommendations
The 2011 environmental scans showed improvement in the volume and progress level of healthcare providers moving through the EHR adoption curve. SCDHHS noted continued weakness in knowledge regarding HIE and meaningful use attestation requirements. Based on the participant responses, the following recommendations were developed for future planning towards improved EHR adoption and HIE participation.

a. **Continue to Address the Knowledge Gap.** Slight increases in knowledge of ARRA and HITECH and strong increases regarding incentives and penalties for EHR adoption were observed in the 2011 environmental scan. There were moderate decreases in knowledge of the Regional Extension Center (REC) and meaningful use criteria. Given that the REC had achieved its ONC goal of recruiting 1,000 providers prior to the 2011 environmental scan, it is possible that active outreach and awareness campaigns had decreased at the time of the survey. The REC would need additional resources to sustain the initial provider recruitment campaign, an allocation that is unlikely to come from the ONC given the current economic projections. With regards to meaningful use, the criteria have changed since the initial environmental scan, so it is understandable that respondents would feel insecure about their knowledge in this area. Moving forward, additional outreach and education on targeted EHR topics may be necessary, especially for meaningful use criteria.

b. **Assist EHR Users with Optimizing Functionality.** While it was encouraging to see a significant increase in the proportion of physician practices using EHRs that are CCHIT certified, there was a
decrease in respondents indicating their products met their patient care needs. One potential explanation is their EHR functionality has not been maximized.

c. **Provide Technical Assistance on Workflow Redesign.** Workflow redesign was the most frequently requested training need by physician practice respondents, which may explain some of the challenges expressed around EHRs not meeting patient care needs. As with EHR functionality, workflow redesign is a service available through the REC but is limited to the 1,000 providers served by it. Given the environmental and process-nature of the need, peer-learning may not be an appropriate solution. Broad scale education on how to conduct workflow redesign assessments and facilitate organizational change could be delivered through workshop formats. However, the tactical redesign planning and activities specific to each hospital and physician practice likely will require long term one:one support not available through the REC or SCDHHS at an individual provider level.

d. **Enhance HIE Participation.** There was no statistically significant change between the 2009 and 2011 environmental scans regarding HIE participation, with most respondents reporting they do not participate. There does, however, seem to progress towards preparatory activity for HIE participation given that a significant proportion of non-HIE respondents reported sharing patient information in the absence of participating in a formal HIE. The rate of data exchange among respondents indicating they are HIE participants remained. In summary, there seems to be an energy for HIE and an understanding of the conceptual benefit to participation, however the actual benefit has yet to be realized by existing participants. It was noteworthy that HIE was the most frequently identified training need by hospital respondents. More than half of physician practice respondents identified it as a need.

e. **Facilitate Financial Preparation for EHR Adoption.** As in the 2009 environmental scan, the most significant barrier to EHR adoption and information sharing reported by respondents was the cost, both initial and recurring. In both the 2009 and 2011 environmental scans, outright purchasing and CMS incentives were the most frequently cited source of financing EHR adoption activities. There was a significant increase in the proportion of physician practices reporting they will outright purchase an EHR (30.0% v. 19.2%). For those purchasing EHRs, they seem to be using informed financial plans given the sharp increase in knowledge about incentives. While education will remain a priority, additional financial solutions should be identified for those who opt not to pursue (or are ineligible for) CMS incentives.

### 2.8 Environmental Scan 2015 – Provider EHR Adoption

SCDHHS contracted with the South Carolina Rural Health Research Center (SCRHRC) in March 2015 to conduct a cross sectional survey of S.C. providers and hospitals to assess:

- Familiarity with and understanding of HIT legislation.
- Adoption of CEHRT and use of its functionalities.
- Health Information Exchange (HIE readiness, participation, and practices).
- Use of Meaningful Use /Clinical Quality Measures (CQM) data.
- Obstacles or motivation to adopt and meaningfully use CEHRT.
Resource needs

2.8.1 State Association Participants
To conduct the assessment, researchers from the SCRHRC conducted focus groups and structured interview discussions with professional organizations and HIT stakeholders. From the discussions, an electronic survey was created and distributed to members of state associations. Participating state associations included the following:

- SC Academy of Family Physicians
- SC Chapter of the American Academy of Pediatricians
- SC Dental Association
- SC Hospital Association
- SC Nurses Association
- SC Office of Rural Health
- SC Optometric Association
- SC Primary Health Care Association

2.8.2 Survey Methodology
Surveys were distributed beginning on August 21, 2015 with a final survey completion/submission date of September 18, 2015. While the survey content was similar in focus to the environmental scan conducted in 2011, the distribution platform was markedly different. The 2011 survey instrument was a paper form distributed by United States Postal Service (USPS). The 2015 survey utilized a web-based tool, Qualtrics, emailed directly to state association leadership, who then further disseminated the survey to association members. Survey results analysis was conducted by researchers at the SCRHRC in the Arnold School of Public Health, University of South Carolina.

While prior surveys had been physically mailed, the electronic survey instrument utilized a platform capable of instant distribution with a cost-effective and real-time method for response. The electronic survey contained built-in logic with dependent questions. For example, if the respondent self-identified as a hospital, hospital-specific questions were presented, as opposed to physician practice specific questions.

Despite the user-friendly survey methodology, the survey response rate was disappointingly low. Researchers were unable to calculate the response rate as the total number of members in each state association were unknown. There were 137 survey responses with less than half (53 practice-based respondents and 1 hospital respondent) answering every question. However, the response data analysis yielded several noteworthy data points. Figure 10 compares the number of hospital and physician practice respondents for the 2011 and 2015 environmental scans.

The survey and results analysis and comparative value with prior environmental scans were limited by several issues. The low survey response rate and use of slightly different terminology than in prior environmental scans results in researchers exercising caution and using qualifying language regarding drawing comparisons with the 2015 survey data.
Table 4 illustrates the response distribution across the involved state associations.

Table 4: 2015 Survey Responses by Referring State Association

<table>
<thead>
<tr>
<th>Organization/Association</th>
<th>Survey Started (not completed)</th>
<th>Survey Completed</th>
<th>Completion %</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCAAP – South Carolina American Academy of Pediatricians</td>
<td>18</td>
<td>8</td>
<td>14.8</td>
</tr>
<tr>
<td>SCAF – South Carolina Academy of Family Physicians</td>
<td>Did not distribute survey to members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCD – South Carolina Dental Association</td>
<td>2</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>SCHA – South Carolina Hospital Association</td>
<td>2</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>SCMA – South Carolina Medical Association</td>
<td>5</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>SCNA – South Carolina Nurses Association</td>
<td>45</td>
<td>9</td>
<td>16.7</td>
</tr>
<tr>
<td>SCOPA – South Carolina Optometric Association</td>
<td>31</td>
<td>19</td>
<td>35.2</td>
</tr>
<tr>
<td>SCORH – South Carolina Office of Rural Health</td>
<td>10</td>
<td>8</td>
<td>14.8</td>
</tr>
<tr>
<td>SCPHCA – South Carolina Primary Care Health Association</td>
<td>12</td>
<td>8</td>
<td>14.8</td>
</tr>
<tr>
<td>Not Identified</td>
<td>12</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>137</strong></td>
<td><strong>54</strong></td>
<td><strong>39.4</strong></td>
</tr>
</tbody>
</table>

2.8.3 Broadband/ Internet Access
Results of the 2015 environmental scan indicated that despite the predominantly rural geography of South Carolina, virtually all healthcare providers had internet access. Hospitals were more likely to use T-1 lines (28.6%) and fiber optic cable (50.0%). Physician practices were more likely to use DSL (17.8%), T-1 lines (29.9%), or cable (19.9%).

2.8.4 Knowledge of Federal Initiatives, Incentives, and Penalties
Most respondents understood HIT legislation, even if individual implementation was lagging or incomplete. The majority also indicated familiarity with meaningful use attestation and had either attested or were working towards attestation at differing stages. However, more than 25% were not
planning to attest or were unsure of their plans. Financial incentives and adequate system resources seemed to be drivers of those who had or were in the process of completing attestation and should be explored in the future as potential motivators. Barriers including lack of time, staff, and resources, were commonly cited as inhibitors to attestation. However, the most commonly cited barrier was ‘difficulty keeping up with CMS and ONC regulatory changes,’ indicating a substantial portion of respondents were unable to stay current with program changes and regulatory guidance. Additional support and education specifically targeted to keeping providers up to date with legislative and program changes would be helpful to these practices to achieve these goals.

2.8.5 Adoption and Use of CEHRT
A surprisingly high percentage of respondents (23.8%) reported having no CEHRT. Of these, 9.5% were considering implementation without specific timeline or strategic plans. This rate reflected a nearly triple increase from 2011, when 3.5% were considering an EHR but had no plans or were not considering EHR implementation (3.6%). One-fifth of the 2015 survey respondents reported some form of dissatisfaction with their CEHRT implementation, and a slightly higher proportion (22.6%) reported their product working well. These proportions are also substantially different from a 2013 survey of providers on health EHR utilization, where 64.5% reported having an EHR implemented that worked well and only 14.0% that did not work well. The proportion with an EHR is considerably higher when compared to survey results from 2011, where only 59.9% of practices had an implementation. The level of dissatisfaction with CEHRT implementation clearly indicates the continuing need to develop specialized and dedicated support mechanisms for providers when selecting and implementing CEHRT products that best meet their individual business needs.

2.8.6 Incentives and Barriers to CEHRT Adoption
The most commonly cited incentives for CEHRT were payment adjustments and requirements for board certification. Providers reported that having the necessary resources (staff, finances, or system) were also important facilitators to CEHRT adoption.

Survey results indicate a greater need for IT support and availability for MU, exchange, and Patient Centered Medical Home (PCMH) activities. While these programs offer potential financial benefits, the resources required to successfully initiate and implement these programs are often lacking, unless the provider is part of a larger system that can support these activities. Adequate staff and time allocation are vital for their success.

Establishing a PCMH designation did not influence CEHRT adoption decision processes for most of the respondents. The majority reported not planning to pursue a PCMH designation. Providers reporting that they were seeking PCMH designation also reported working towards the National Committee for

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9 This survey was conducted in 2013 to fulfill the requirements for the HIE Cooperative Agreement for SCDHHS according to Document Number ONC-HIE-PIN-002

10 This survey was conducted in 2011 to fulfill the requirements for the Memorandum of Agreement for SCDHHS, contract number 11550 GL02.
Quality Assurance (NCQA) designation. Interestingly, 56% of all respondents said that PCMH did not influence their choice of CEHRT product; this is perhaps a lost opportunity for those organizations to choose a product that would facilitate such a designation.

2.8.7 HIE Utilization
More than half of responding providers (59.6%) reported sharing health information in some form. This is encouraging for the future use and expansion of HIT in South Carolina, as one of the most commonly cited barriers to data exchange is a lack of providers with whom to exchange. This proportion shows steady and sustained growth over the past two environmental scans. 50% of the providers reported exchanging information in 2013, as compared to only 30% of practices which reported participation in HIE activities in the 2011 survey.

However, the 2015 survey identified that only 16.1% of those participating in an HIE said they exchanged patient data. As CEHRT implementation increases, the potential to share should improve, encouraging further use.

2.8.8 Meaningful Use & Clinical Quality Measures Utilization
When asked about the clinical quality measures in use, the responses were promising. Several providers stated they were actively using such measures for quality improvement, regular tracking via scorecards, and linking their use to better care. Only two responded with negative or non-use of these measures. One respondent did indicate that the measures added more work.

Overall, the respondents reported having reliable internet access, and a majority reported having adequate information technology support. The 2015 survey reflected an increase from 2011 in the rate of providers who have support for their CEHRT, MU, HIE, or PCMH activities. Despite the increase, there remains a need for South Carolina providers to acquire additional resources specific to supporting MU and PCMH to successfully attest and meet MU requirements.

2.8.9 2015 Environment Scan Summary & Recommendations
In summary, South Carolina has demonstrated improvements in EHR adoption and in HIE participation. Education on meaningful use, assistance with EHR functionality and workflow redesign, demonstrating HIE benefit, and financial preparation for HIT adoption continue to be critical to ensuring the successful migration of South Carolina’s healthcare providers into the electronic age.

SCDHHS is currently preparing another environmental scan for Calendar Year (CY) 2018 (Q4) and will use lessons learned from previous scans to ensure a satisfactory response rate, adequate statistical sampling, and comparable data elements. The CY 2018 (Q4) environmental scan questions will be tailored to correlate changes based on the previous environmental scans. SCDHHS will use additional avenues to disseminate the survey instrument for enhanced response rates.

SCDHHS is also planning the dissemination of provider feedback surveys and adding additional features to the State Level Repository (SLR) web portal to enable anonymous feedback submission to the South Carolina Medicaid PI Program.
2.9 Coordination with Managed Care Entities

As the majority of South Carolina’s Medicaid population is enrolled in a managed care plan, SCDHHS has coordinated its planning efforts for the South Carolina PI Program with the South Carolina Medicaid managed care plans. The state has six MCOs under contract in the Medicaid program providing healthcare services to over 750,000 South Carolina Medicaid members. As of 2018, participating MCOs include the following:

- Absolute Total Care, Inc
- Advicare Corp
- BlueChoice HealthPlan
- Molina HealthCare of SC
- Select Health of SC
- WellCare of SC

The managed care plans were invited and present for the SCDHHS series of HIT summit meetings beginning in June 2009 as detailed in Section 2.5.3. The HIT summits were one of the methods established by SCDHHS offering stakeholders the forum to comment on and contribute to plans for the South Carolina Medicaid EHR Incentive Program. The SCDHHS agency director and the HIT Division Director attend the monthly managed care meeting to provide educational sessions, legislative updates, and introduce changes to the South Carolina Medicaid Promoting Interoperability Program.

2.10 VHA EHR Adoption

South Carolina has two major VHA medical centers located in Charleston and Columbia for military veterans and their families. The Veterans Health Administration operates many geographically dispersed facilities including clinics and centers in Aiken, Anderson, Beaufort, Florence, Goose Creek, Greenville, Myrtle Beach, North Charleston, Orangeburg, Rock Hill, and Spartanburg. Facilities range from small clinics that provide outpatient care to large medical centers with significant inpatient populations and their associate specialties such as surgical care. All locations use an electronic health record system known as VistA. All VHA facilities are connected to the Veterans Administration’s infrastructure through VistA and the Computerized Patient Record System (CPRS) to share clinical information within VHA locations in South Carolina and across the nation within the VA’s technical infrastructure.

2.11 IHS EHR Adoption

The Indian Health Service (IHS) Catawba Unit is an ambulatory outpatient care facility serving the Catawba Indian Nation and other federally recognized American Indians and Alaska Natives. Located in Rock Hill, the service unit includes a Medical Clinic, Dental Clinic, Pharmacy, Laboratory, Nutritional Department and partners with other ancillary support entities. The IHS clinical information system is called the Resource and Patient Management System (RPMS). Its development began nearly 30 years ago.

Excerpt from report “Review of PI Operations at Six Managed Care Organizations Delivering Services under a Contact with SCDHHS”, Office of State Inspector General, April 2016
ago, and many facilities have access to decades of personal health information and epidemiological data on local populations. In April 2011, the IHS RPMS was certified according to standards established by the ONC for Health Information Technology. This accomplishment allowed EPs and EHs to participate in the CMS EHR Incentive Program. With the release of the 2014 ONC Rule and the 2014 CMS Stage 2 Rule, the scope of requirements for demonstrating MU were greatly increased, and new CEHRT became necessary. As of August 22, 2014, the 2014 RPMS EHR was certified according to the 2014 ONC standards.

2.12 FQHC EHR ADOPTION
South Carolina Medicaid has 22 Federally Qualified Health Centers (FQHCs) with a 100% participation rate in the SC PI Program. 95% of the facilities (21 out of 22) have an EHR installed and in use, with all facilities submitting electronic prescriptions and utilizing computerized clinical decision support services.

Health Resources and Services Administration (HRSA) grants have provided funding for providers to Adopt, Implement, and Upgrade (AIU) to CEHRT. SC FQHCs have a 100% participation rate with the EHR Incentive program; 95% of these have CEHRT. The next goal is to encourage the FQHC EPs to incorporate the meaningful use requirements in their clinical care for improved patient outcomes. The EHR incentive payments will further enable FQHCs to hire additional providers, thereby expanding capacity and improving service delivery. Appendix G. HRSA GRANT ACTIVITIES IN SOUTH CAROLINA includes an Excel spreadsheet with detailed grant amounts, by entity, from 2011 through May 2018. There are 62 Rural Health Center (RHC) grants totaling $16,299,985.

Table 5 provides additional details regarding FQHC participation levels in the SC Promoting Interoperability Program.
Table 5: FQHC and RHC EHR Capabilities and Quality Recognition (CY 2016 data)

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Number of Health centers</th>
<th>% of Total</th>
<th>Response Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Health centers that have an EHR installed and in use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1a. Installed at all sites and for all providers</td>
<td>21</td>
<td>95.45%</td>
<td></td>
</tr>
<tr>
<td>1f. Health centers who have Not Planned on installing the EHR system</td>
<td>1</td>
<td>4.55%</td>
<td></td>
</tr>
</tbody>
</table>

**Total Health centers reported** 22  100.00%

**EHR Functionalities**

2  **Does your center send prescriptions to the pharmacy electronically?** (Do not include faxing)
   Yes  21  95.45%

3  **Does your center use computerized, clinical decision support such as alerts for drug allergies, checks for drug-drug interactions, reminders for preventive screening tests, or other similar functions?**
   Yes  21  95.45%

4  **Does your center exchange clinical information electronically with other key providers/health care settings such as hospitals, emergency rooms, or subspecialty clinicians?**
   Yes  17  77.27%

5  **Does your center engage patients through health IT such as patient portals, kiosks, secure messaging (i.e., secure email) either through the EHR or through other technologies?**
   Yes  18  81.82%

6  **Does your center use the EHR or other health IT system to provide patients with electronic summaries of office visits or other clinical information when requested?**
   Yes  20  90.91%

7  **How do you collect data for UDS clinical reporting (Tables 6B and 7)?**
   - We use the EHR to extract automated reports  11  50.00%
   - We use the EHR but only to access individual patient charts  0  0.00%
   - We use the EHR in combination with another data analytic system  10  45.45%
2.13 Grant Activities
South Carolina state agencies and organizations are committed to coordinating all grant activities throughout the state, ensuring that each grant pursues unique objectives that will support the collective goal of HIT adoption and meeting MU. The major theme and high-level objectives of each funding opportunity are distinct and require each program to operate efficiently in order to support the state’s overall HIT initiative.

SCDHHS works closely with its stakeholders to ensure that all activity specific to HITECH and related grants, programs, and projects avoid duplication, inadvertent overlap, or displace existing funding.

EPs and EHs are able to pursue ARRA incentive payments for adopting certified EHR technology and becoming meaningful users. SCDHHS successfully leveraged the Regional Extension Center’s (REC) regular grant-funded activities to help those providers who did not currently have or use an EHR to successfully select and adopt certified EHRs for their offices. Qualifying South Carolina providers received free services from the REC for up to one year if they signed up to receive services prior to April 6, 2011. After April 6, 2011, the REC worked with providers to negotiate a rate for services. ARRA incentive payments and the REC’s initiatives provided the necessary resources to help clinicians’ offices become basic, but successful, adopters and meaningful users of EHRs. Additional details on the REC grant activities are provided in Section 2.1.3.

2.13.1 Health Resources and Services Administration (HRSA) Grant Activities
HRSA grant activities from 2009 through 2018 are detailed in Appendix F, HRSA Grant Activities in South Carolina.

2.13.2 State HIE Cooperative Agreement Program
As part of the ARRA, Congress passed the HITECH Act, to promote the electronic movement and use of health information among organizations using nationally recognized interoperability standards. The HITECH Act provided $564 million to the ONC for HIT in the U.S. Department of Health and Human Services (HHS), to enable rapid development of an HIE across the nation. The State Health Information Exchange Cooperative Agreement (State HIE) Program was created to achieve this objective via tailored, state-level solutions. Organizations in all 56 states and territories submitted strategic and operational plans; and during the four-year program\(^{12}\), they received funding and ongoing ONC guidance for development and implementation of their plans.

SCDHHS was the governor-designated applicant for the State HIE Cooperative Agreement Program and received a grant award on March 15, 2010 totaling $9,576,408. Grant funding supported scaling the SCHIEx for statewide use. Grant partners included SC ORS, SCDHEC, the South Carolina Department of Commerce, CareEvolution, and the Division of State Information Technology. Figure 11 illustrates the grant participants functional organization chart.

\(^{12}\) Initial awards were made in February and March 2010; the program ended in February 2014.
2.13.2.1 Grant Objectives and Outcomes

SCDHHS and the grant participants (identified above) established six grant objectives:

- Set up a governance structure for the exchange of health information.
- Transition SCHIEx to a statewide hosting environment.
- Scale SCHIEx for statewide use.
- Connect SCHIEx to the state immunization and disease registries.
- Inform providers and other stakeholders about HIT adoption and meaningful use.
- Work with partners to remove barriers to MU.

The South Carolina grant participants further identified two specific outcomes that would result from achieving the grant objectives:

- Providers will adopt and use EHRs to improve patient care.
- SCHIEx will become a self-sustaining operation.

2.13.2.2 Grant Project Strategy

SCDHHS submitted draft strategic and operational plans to the ONC in April 2010. The plans included all required content including a gap analysis to meet meaningful use. These plans were approved by the ONC in September 2010.

Under contract with SCDHHS, the South Carolina Department of Commerce assisted with the development of a business sustainability plan, a required component of the operational plan. The South Carolina Department of Commerce developed an economic model to sustain SCHIEx through user fees after the grant funding period ended. Data from the 2009 HIT environmental scan was used as the variable for the economic model developed initially for providers and hospitals. Based upon recommendations from the ONC, SCDHHS worked with the South Carolina Department of Commerce to adjust the economic model to include other subscribers, thus making SCHIEx available to additional users as well as reducing the subscription cost for each type of subscription entity.
SCDHHS coordinated several meetings with its Interim Governance Committee (IGC) that included representation from hospital associations, provider associations, other state agencies, and other professional organizations. The revised final fee schedule was approved by the IGC in December 2010. SCDHHS coordinated the development of these deliverables with the SMHP to ensure a shared vision for future HIT activities in the State.

The objectives of the grant were accomplished.

2.13.2.3 Current HIE Governance

SCHIEx is South Carolina’s state-wide HIE. SCHIEx is organized as a non-profit entity governed by a Board of Directors comprised of private sector representatives. Although the SCDHHS continues to maintain a productive working relationship with SCHIEx, SCDHHS does not have a governance role specific to directing SCHIEx activities.

SCHIEx was formed in 2008, in partnership with SCDHHS. SCHIEx enables healthcare providers to view clinical data derived from more than 10 years of Medicaid claims data stored in the DRS data warehouse. This clinical data included key medical information such as diagnoses, prescriptions, and procedures to provide clinicians with a more complete history for patient care. To protect privacy, an opt-out program is adopted, under which SCDHHS informs all Medicaid beneficiaries that their claims data would be included in SCHIEx and gives them the opportunity to opt out of the program.

SCHIEx was always envisioned to become a self-sufficient entity with an independent revenue and governance structure. Once the State HIE Cooperative Agreement Program project objectives were accomplished through the grant funding, the time was appropriate for transition of governance. The Interim Governance Committee which had been governing SCHIEx before, during, and post ONC grant, ceased governance activities on March 14, 2014, and SCHIEx established its own independent governing board. SCDHHS’s direct involvement with governance ended on this date and SCDHHS does not currently have a seat on the board. SCHIEx now operates as a self-sustaining non-profit entity which relies on participant service subscription fees, set by the SCHIEx board of directors, to cover annual operating costs.

This is a common HIE governance model utilized by states, as the HIE (once in place and operational) is best managed by the private sector where state does not provide governance but does collaborate with HIE. As the administrator of HITECH funds in South Carolina, SCDHHS will continue to engage stakeholders and facilitate discussions that drive towards identifying, initiating, monitoring, and trending SC HIE initiatives and needs.

2.13.3 HIT Extension Program: Regional Centers Cooperative Agreement Program

Providers that seek to adopt and effectively use HIT face a complex variety of tasks. Those tasks include assessing needs, selecting and negotiating with a system vendor or reseller, and implementing workflow changes to improve clinical performance and, ultimately, outcomes. Past experiences have shown that without robust technical assistance, many EHRs that are purchased are never installed or are not used by some providers.

Section 3012 of the Public Health Service Act (PHSA), as added by the HITECH Act, authorizes a Health Information Technology Extension Program (aka “Extension Program”) to make assistance available to
all providers, but with priority given to assisting specific types of providers. By statute, the Extension Program consists of a National Health Information Technology Research Center (HITRC) and Regional Extension Centers (or “regional centers”). The major focus for the Centers’ work with most of the providers that they serve will be to help to select and successfully implement certified EHRs. While those providers that have already implemented a basic EHR may not require implementation assistance, they may require other technical assistance to achieve “meaningful user” status. All regional centers will assist adopters to effectively meet or exceed the requirements.13

The Extension Program will include provisions in both the HITRC and regional centers awards to assure that the program addresses the unique needs of providers serving American Indian and Alaska Native, non-English speaking and other historically underserved populations, as well as those that serve patients with maternal, child, long-term care, and behavioral health needs.

On April 6, 2010, HSSC received $5,581,407 for the Regional Centers Cooperative Agreement Program. With grant funding, HSSC and its partners established the Center for Information Technology Implementation Assistance South Carolina (CITIA-SC). CITIA-SC assists priority designated primary care providers across South Carolina improve the quality and value of health care through the selection, adoption, and meaningful use of EHR systems. As illustrated in Figure 12 below, grant partners included the Carolinas Center for Medical Excellence (CCME), SCORH, and SCPHCA.

Figure 12 – Regional Centers Cooperative Agreement Grant Functional Organization Chart (2010)

2.13.3.1 Grant Objectives and Outcomes
HSSC and the grant participants (identified above) established two grant objectives:

▪ Establish CITIA-SC to provide pre and post-EHR adoption services.
▪ Develop a CITIA-SC preferred vendor list.

The grant participants further identified two specific outcomes that would result from achieving the grant objectives:

▪ Priority primary care physicians will become users of certified EHRs and advance to become meaningful users.

13 Source: draft published in Federal Register / Vol. 74, No. 101 / Thursday, May 28, 2009
2.13.3.2 Grant Project Strategy
The CITIA-SC has deployed a two-tiered services model that will offer pre-EHR adoption services (practice assessment, system selection, implementation support) and post-EHR adoption services (post-implementation consultation on EHR system optimization, achieving MU, connecting to the HIE).

Of particular importance, a vendor selection and group purchasing committee was formed to identify available EHR software systems that are appropriate for a variety of practices. The committee evaluated vendor proposals and produced a recommended listing of EHR systems for practices to purchase through group purchasing contracts.

It was essential for this grant program to be coordinated with the EHR incentive Program as CITIA-SC often served as the front line for questions and communication concerning the EHR Incentive Program. SCDHHS and CITIA-SC met regularly to discuss the programs and identified the following collaboration opportunities:

- Both organizations shared their list of providers that have signed letters of commitment or registered for the incentive program. This allowed both organizations to conduct outreach efforts to providers for both programs.
- CITIA-SC staff assisted providers with the volume requirement for appropriate sizing of an EHR purchase.
- CITIA-SC staff advised providers on how to organize documentation in the event of an audit.
- CITIA-SC notified SCDHHS when providers reach the “go live” status, including certification information.
- CITIA-SC provided feedback on the EHR incentive Program.
- CITIA-SC solicited provider input on how to facilitate certified EHR adoption and shared the results with SCDHHS.

2.13.4 CHIPRA Quality Demonstration Grant Program
In February 2010, CMS awarded 10 grants, funding 18 States, to improve health care quality and delivery systems for children enrolled in Medicaid and the Children’s Health Insurance Program (CHIP). Funded by CHIPRA, the Quality Demonstration Grant Program aims to identify effective, replicable strategies for enhancing quality of care for children. As a group, the 18 demonstration States are implementing projects in five general categories:

- Using quality measures to improve child health care.
- Applying health information technology for quality improvement.
- Implementing provider-based delivery models.
- Investigating a model format for pediatric EHRs.
- Assessing the utility of other innovative approaches to enhance quality.

SCDHHS was awarded one of the 10 CHIPRA Quality Demonstration Grants on February 22, 2010 and received a grant award totaling $9,277,361. The grant program includes a nine-month planning phase to be completed in the first year prior to implementation of the proposed project. SCDHHS named its
demonstration project the Quality through Technology and Innovation in Pediatrics (QTIP) project. Grant partners included ORS, the South Carolina Chapter of the American Academy of Pediatrics (AAP), CareEvolution, Thomson Reuters, the South Carolina Offering Prescribing Excellence (SCORxE) program, and the Institute for Families in Society (IFS). Figure 13 illustrates the functional organization of the grant participants.

Figure 13: SC CHIPRA Quality Demonstration Grant Functional Organization (2010)

### 2.13.4.1 Grant Objectives and Outcomes

SCDHHS and the grant participants (identified above) established three grant objectives:

- Providers will demonstrate the ability to collect the new CHIPRA measures using certified EHR technology and view quality reports prepared by Thomson Reuters.
- Providers will pursue NCQA certification of the PCMH model.
- Providers will identify quality improvement tactics that will impact their practices.

The grant participants further identified the outcome that would result from achieving the grant objectives:

- SCDHHS will determine the impact of collecting CHIPRA measures and identify any barriers that impeded data collection.
- SCDHHS and its grant partners will create a clinical data repository and the necessary adapters that can deliver quality report cards via SCHIEx to providers’ EHRs.

### 2.13.4.2 Grant Project Strategy

QTIP represents a unique opportunity for South Carolina pediatricians to help develop quality improvement tools that will lead to better health outcomes for current and future generations of patients.

South Carolina is currently one of many states pursuing an increased focus on issues that negatively impact maternal and child health, including the rate of scheduled early deliveries.

The project’s key goals are to:

- Work on children's quality care measures.
- Develop a physician-led, peer-to-peer quality improvement network.
Address mental health challenges of children in our state.
Provide practices with the skills to become a PCMH.

Because of the grant funding, the following new services became available in 2016:

- Twice-yearly Learning Collaborative sessions.
- Technical assistance.
- Working with pediatric practices on mental health skill-building.
- Expanding to 30 pediatric practices (due to staff and resource availability limitations, QTIP will restrict active participation to 30 practices).
- Teaching quality improvement skills.

In South Carolina, these maternal and child health improvement efforts are being spearheaded through the SC Birth Outcomes Initiative, a collaboration of SCDHHS, South Carolina Hospital Association, March of Dimes, Blue Cross Blue Shield of South Carolina and more than 100 stakeholders to improve the health outcomes for newborns, not only in the Medicaid program, but throughout the state’s newborn population.

Launched in July 2011, this Initiative is focused on:

- Eliminating elective inductions for non-medically indicated deliveries prior to 39 weeks gestation.
- Reducing the number of neonatal intensive care unit admissions (NICU).
- Preventing pre-term births by making it available to all at-risk pregnant women.
- Implementing a universal screening and referral tool Screening, Brief Intervention, and Referral to Treatment (SBIRT\textsuperscript{14}) to screen pregnant women and 12 months post-delivery.
- Promoting Baby-Friendly certified hospitals and breastfeeding.

SCDHHS is continuing many components started under the grant. Additional areas of focus since the initiative inception have included supporting the Centering Pregnancy Model, inpatient insertion of Long Acting Reversible Contraceptives, innovative program development for the management of Neonatal Abstinence Syndrome in the Level I nursery, and most recently, the reduction of cesarean sections for first-time, low-risk mothers.

2.13.5 Palmetto State Integrated Fiber Infrastructure (PSIFI) Grant
In December 2007, the Federal Communications Commission (FCC) awarded a $7.9-million grant to South Carolina to interconnect 35 rural locations via broadband with the goal to improve early healthcare intervention and service delivery quality in rural areas.

\textsuperscript{14} SBIRT is an evidence-based approach to identifying patients who use alcohol and other drugs at risky levels with the goal of reducing and preventing related health consequences, disease, accidents and injuries.
2.13.5.1 Grant Objectives

The PSIFI grant funding was based on state plans to connect additional hospitals, FQHCs, community health centers, health departments, and prison telemedicine units to broadband access within South Carolina.

At the time of the grant, the South Carolina Light Rail (SCLR) and the Palmetto State Provider Network (PSPN) represented the current network/broadband access in the state and met the requirements of HIPAA and other federal regulatory requirements.

SCLR, was a collaboration between Clemson University (CU), the Medical University of South Carolina, and the University of South Carolina. The universities established a public-private partnership to provide a statewide broadband, high-speed optical network that linked to regional and national networks such as Southern Light Rail, National Lambda Rail, Internet2, and SURAgrid and TeraGrid. The three universities were actively engaged in extensive planning to further expand the network over the next two years.

The PSPN was a dedicated health care network that provided private scalable broadband to every county in South Carolina using Internet 2 for all participants. Internet 2 was most commonly used by government agencies (state and federal), universities, healthcare organizations, and industry. It had more bandwidth available, was easy to secure, and had very little commodity traffic. The PSPN, funded by the FCC Rural Health Care Pilot Program, was used to connect organizations such as the e-Health Alliance for the transport of clinical data. The PSPN was also active with the South Carolina Area Health Education Consortium (AHEC) in providing training, education, and continuing education.

2.13.5.2 Grant Project Strategy

Both SCLR and PSPN networks were active in the use of telemedicine across the state and delivered care into unserved and underserved areas and the rural areas of the state. Plans to expand and strengthen broadband access to the “Middle Mile” were in progress. Grant funding allowed for the additional hardware and fiber to be integrated with the SCLR and expanded the “Middle Mile” to have more flexibility and be easier to connect to, therefore forming a more complex and sophisticated network.

Funded through the Broadband Technology Opportunities Program (BTOP) that was administered by the National Telecommunications and Information Administration (NTIA), the PSIFI grant project provided fiber based broadband network access to all two and four-year higher education anchor sites as well as over 40 medical, public safety, and public services sites in South Carolina, which totaled to over 100 locations.

2.14 Interstate HIE Activities

During the HIE Leadership Forum in May 2010, South Carolina met with representatives from North Carolina and Tennesssee to address interstate issues faced by bordering states with practice referrals and patient demographics crisscrossing state lines. South Carolina was also interested in working with Georgia to resolve interstate issues, but due to Georgia’s extended planning period, discussions between the two states were initially deferred.
In CY 2018, SCDHHS established relationships with HIEs and health associations in North Carolina, Georgia and the eHealth Initiative Sequoia project. SCDHHS plans to discuss further HIE connectivity with other states, including TN, in Q4 2018.

SCDHHS HIT administration representatives actively attend local, regional, and nationwide HIT summits and conferences to facilitate collaboration and exchange of ideas and information with other state HIE/HIT leaders and decision makers. These efforts are expected to increase in the future, with the goal of having a HIT summit in South Carolina for interstate and intrastate stakeholders in CY 2018.

SCHIEx currently connects to HIEs in North Carolina, Georgia, and nationally via the Sequoia Project and SCDHHS maintains active and routine communication regarding the capabilities, connectivity, and utilization of SCHIEx.

2.15 Stakeholder Communication
The overall communications goal of the South Carolina Medicaid SMHP is to raise awareness among providers about EHR incentive payments and the specific requirements associated with the qualifying for the incentive program.

Development of educational and promotional materials is geared towards provider needs as identified through feedback, surveys, and legislative changes regarding meaningful use. The SCDHHS HIT Division coordinates provider outreach and support through a dedicated website, email listserv, and program email address. Administrative initiatives include promoting training, conference attendance for HIT Division staff to strengthen subject matter expertise and stay up to date with the latest HIT/HIE information, attending weekly meetings to design consistent messages and responses for program inquiries, developing and publishing materials such as tip sheets and user guides; and routine monitoring of the CMS website for newly added resources and changes affecting the PI program.

SCDHHS maintains continuous interaction with providers utilizing a variety of communication methods. To determine the relative success of these efforts, SCDHHS utilizes comparison of actual survey results vs. projected EHR adoption rates, monitoring reduced HIT knowledge and awareness rates collected in environmental scans, and continually soliciting and monitoring provider feedback. For example, the HIT requested detailed feedback from providers on difficulties with meeting meaningful use. In response, SCDHHS developed and disseminated specific strategies and helpful tips to assist providers in meeting MU requirements in current and future program years. This information was sent to provider associations, providers, and is posted on the HITSC website.

SCDHHS engages our stakeholders early and often and listens to their needs to provide the highest quality resources and information. Because of the dynamic nature of the HIT PI Program, communications to our providers occur frequently, utilizing email campaigns and direct email correspondence. In October 2015, SCDHHS completed an email campaign to all program providers regarding the release of the Stage 3 and Modifications to Meaningful Use in the 2015-2017 final rule. The HIT team also initiates, and hosts live educational webinars, develops and publishes content with strategies for meeting MU, schedules individual provider or group phone conferences, and attends national and local health conferences and association meetings.
The HIT team coordinates with SCDHEC, senior SCDHHS Information Management leadership, and CMS officials to explore options for HIE-related initiatives.

2.15.1 Provider Outreach Methods
Current and planned communication methods fall into four general categories:

- Written communication from SCDHHS to individual providers and provider groups.
- Face-to-face interaction among SCDHHS, its business partners, providers and other key stakeholders.
- Electronic communications such as surveys, webinars, and email.
- Individual phone consultations to address a provider’s specific questions, concerns, and/or issues.

Web-based meetings provide an important capability to providers who learn visually and enables Q&A sessions in a group setting for the benefit of all participants. SCDHHS is coordinating with primary care and community clinic associations in association-led webinars and conferences to educate attendees regarding participation in the PI Program. The first event was held on June 27, 2017 and additional sessions are anticipated.

SCDHHS continuously provides information to providers to ensure they stay informed about the Promoting Interoperability Program, using a variety of means, such as the SCDHHS website (www.scdhhs.gov/hit) resources and Frequently Asked Questions, Medicaid provider bulletins, SLR provider guides, direct e-mail correspondence and outreach campaigns, engagement with provider and hospital associations, and through working with partners like SCHIEX and the SC public health agency, SCDHEC.

In 2017, the HIT Division expanded its outreach campaign to include 50% more provider and health associations and has also partnered with groups interested in promoting MU activities in South Carolina. This collaboration is expected to help maintain and increase participation in future years. Listed below are a several specific examples of how these methods are currently operationalized.

2.15.1.1 Medicaid Basics – Provider Workshops
SC HIT Division staff attends the SCDHHS-hosted monthly workshops offering training to newly enrolled Medicaid providers and their staff. The workshop includes an agenda item to confirm that the provider/staff are aware of the EHR incentive program and its purpose. Participants are encouraged to contact the SC HIT Division with a list of their providers to request confirmation regarding the eligibility/payment and MU status for these provider(s) regarding the SC Medicaid EHR Incentive Program. As of the start of Payment Year (PY) 2017, such determination by staff includes confirmation of an initial payment to the provider having been made prior to PY 2017 either in South Carolina or another state. The monthly presentation covers other requirements such as the percentage mix of Medicaid patients, hospital based and practiced predominantly requirements.

2.15.1.2 Medicaid Bulletins
Medicaid Bulletins are a vital tool for information and communication pertaining to the South Carolina Medicaid EHR Incentive Program. Electronic Medicaid Bulletins are the primary mode for communicating important policy information to individual Medicaid providers. Archived bulletins are
available at www.scdhhs.gov for reference purposes. Providers can enroll online to receive Medicaid Bulletins such as those pertaining to the EHR incentive program and meaningful use. E-Bulletin subscription is also part of the provider enrollment business process for prospective providers. More than 8,000 practices and health care entities currently subscribe to the Medicaid Bulletin listserv.

2.15.1.3 SC HIT Email Listserv Signup
In 2018, SCDHHS added the option on its HITSC website for anyone to enroll in the SC HIT listserv to receive SC PI Program updates. The listserv objective is to expand the level of participation, interest, and knowledge related to HIT and HIE amongst all interested parties and not limit email distribution to contact information obtained from attestations.

In order to facilitate two-way communication, SCDHHS solicits and responds provider comments through a dedicated email address (hitsc@scdhhs.gov), which is posted prominently on the SCDHHS HIT website (http://www.scdhhs.gov), SLR (www.scdhhs.gov/slr), in all program literature and communications. Questions and their corresponding answers are also posted on the SCDHHS HIT website for the benefit of all providers. The newsletter includes additional resources, such as websites from state and federal HIT-related organizations, for providers interested in additional information on the PI Program regulations and federal guidance.

2.15.1.4 Provider Eligibility Verification Assistance
In 2017, SCDHHS distributed outreach to encourage providers to contact the program with any questions regarding their eligibility to participate in the Program. SCDHHS will continue to encourage providers to contact the program to determine eligibility for themselves or providers in their organization. SCDHHS is currently developing a database that will allow lookup of provider eligibility based upon a recorded Medicaid EHR incentive payment. SCDHHS anticipates that this functionality will increase provider engagement and easily allow providers to determine the number of participation years they have left and plan accordingly for achieving MU.

2.15.1.5 State Level Repository User Guides
The SCDHHS Bureau of Federal Contracts and Grants Administration (in consultation with the Office of General Counsel and the HIT Division) developed detailed State Level Repository user guides for providers. Guidance for EPs and EHs is separate and clearly identified. This guidance includes information concerning the types of Medicaid providers eligible for the program, how to apply, and other program participation requirements. Information concerning audits, incentive payment recoupment, and provider appeals is also included. The guides are available on the SCDHHS HIT website (http://www.scdhhs.gov/hit) and are continually updated as necessary to stay in accord with CMS’ requirements. SCDHHS currently develops and produces all PI outreach materials in-house.

2.15.1.6 AIU and Meaningful Use User Guides
SCDHHS currently publishes and regularly updates user guides for EPs and EHs to assist them with understanding program requirements. These guides detail the MU requirements for the given program year and provide guidance and contact information for providers.
2.15.1.7 Provider Marketing Contract
SCDHHS contracted with the Maxim Communications Group, Inc. in December 2009 to assist with the development of MU educational materials and additional provider outreach strategies. A series of special brochures were produced that focused on several aspects of the HIT initiative and the HITECH Act, including, but not limited to, the following:

- Medicaid incentive payments.
- Medicare incentive payments and associated penalties for non-adoption.
- Technology and EHR certification.
- Regional Extension Centers.

Importantly, the series adhered to consistent themes and design elements that were mirrored in other mediums, including The Provider Perspective, portable displays, educational PowerPoint presentations, and web content maintained by the South Carolina AHEC. SCDHHS now maintains and updates these materials as necessary to be in accord with current CMS program requirements and the final rule.

2.15.1.8 Provider Education and Outreach Contract via AHEC
SCDHHS contracted with the South Carolina AHEC to provide introductory face-to-face education for providers regarding the EHR incentive program and other aspects of the statewide HIT initiative. AHEC scheduled regional meetings dedicated to sharing news about EHR incentives with providers. The educational program offered basic information about EHRs and benefits of EHRs to providers and their patients, such as disease management and preventive care. Because AHEC maintains offices throughout South Carolina, the opportunity to engage providers directly was greatly enhanced and served to reinforce formal written communications. AHEC utilized the educational materials produced by Maxim Communications Group to reach broad audiences, including individual providers, practice staff, and provider groups and associations (e.g. School Nurses Association, Academy of Family Practices, South Carolina Medical Association, Office of Rural Health, and the South Carolina Hospital Association). AHEC also developed a special educational supplement to The Journal of the South Carolina Medical Association that featured in-depth articles concerning various aspects of EHR adoption.

2.16 Interaction with MMIS and MITA

2.16.1 Medicaid Information Technology Architecture (MITA) State Self-Assessment (SS-A)
SCDHHS submitted the 2017 annual update to the SC MITA state self-assessment (SS-A) to CMS on July 12, 2017. The 2018 annual update is in SCDHHS review prior to CMS submission.

The 2017 SS-A annual update includes information on planning efforts underway for the SC Medicaid Management Information System (MMIS) replacement project. A summary of the SS-A results follows.

2.16.1.1 Seven Standards and Conditions Assessment 2017 Annual Update
CMS issued standards and conditions that states must meet to be eligible for enhanced funding. Its purpose is intended to foster better collaboration with states, reduce unnecessary paperwork, and focus attention on the key elements of success for modern systems development and deployment. In April of 2011, under the Social Security Act, CMS issued new standards and conditions that must be met by
states to be eligible for enhanced federal funding. In January 2016, CMS established new conditions that states must meet to receive approval for enhanced federal funding.

Table 6 - Seven Standards and Conditions Capability Matrix

<table>
<thead>
<tr>
<th>MITA 3.0 Business Area</th>
<th>As-Is Assessment</th>
<th>To-Be Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Relationship Management</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Care Management</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Contractor Management</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Eligibility &amp; Enrollment</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Financial Management</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Member Management</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Operations Management</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Performance Management</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Plan Management</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Provider Management</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Area Assessment</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

2.16.1.2 Modularity Standard
This condition requires the use of a modular, flexible approach to systems development, including the use of open interfaces and exposed APIs, the separation of business rules from core programming; and the availability of business rules in both human and machine-readable formats. Interface Control Document (ICD) analysis and documentation of internal and external interfaces is under way and an interface manual will be created to document interfaces appropriately. SCDHHS continues by an iterative release of rule discovery, analysis, design, authoring, validation and deployment to ensure standards are applied to enable submission of rules so they may be utilized by the FFM and human components.

2.16.1.3 Medicaid Information Architecture Condition
The MITA condition requires states to align and incrementally advance in MITA maturity for business, architecture and data. States demonstrate this by completing a MITA Roadmap and performing MITA Self-Assessments. States also develop a concept of operations (COO) and document business process and data flows. These processes should align with the MITA Business Processes provided by CMS. This SS-A update includes the yearly update to the five-year roadmap for achieving MITA Maturity Matrix (MMM) level goals.

2.16.1.4 Industry Standards Condition
The Industry Standards Condition requires States to ensure alignment with, and incorporation of industry standards. This covers HIPAA security, privacy, and transaction standards, accessibility standards established under section 508 of the Rehabilitation Act or standards that provide greater accessibility for individuals with disabilities and compliance with federal civil rights laws, standards adopted by the Secretary under Section 1104 of the ACA, and standards and protocols adopted by the Secretary under Section 1561 of the ACA.
SCDHHS Project Management Office (PMO) is in the process of ensuring that all projects follow a formal system development life cycle (SDLC) and is rolling out the processes to the agency via lunch and learn sessions. The utilization of industry standards continues to play a major role in the conceptualization and design of the technology strategy. The state utilizes industry standards and best practices for requirements, development and testing practices.

2.16.1.5 Leverage Condition

The Leverage Condition requires State solutions to promote sharing, leverage, and reuse Medicaid technologies and systems within and among states. States can benefit substantially from the experience and investments of other states through the reuse of components and technologies already developed, consistent with a SOA, from publicly available or commercially sold components and products and from the use of cloud technologies to share infrastructure and applications.

SCDHHS had been in negotiations with Michigan to enter a consortium with Michigan and Illinois and use the Michigan solution for provider enrollment and re-validation but after much review it was determined that including the functionality in the ASO RFP was the best solution for the State.

2.16.1.6 Business Results Condition

The Business Results Condition requires systems to support accurate and timely processing of claims (including claims of eligibility), adjudications, and effective communications with providers, beneficiary, and the public. It is still the state's intent to achieve a MITA Maturity Level 3 at a minimum for all conditions and processes in the next five years, and to elevate where possible to Levels 4 and 5 within a 10-year period, or as the internal or external capabilities become available.

2.16.1.7 Reporting Condition

The Reporting Conditions requires solutions to produce transaction data, reports, and performance information that would contribute to program evaluation, continuous improvement in business operations, and transparency and accountability. SCDHHS released an RFP in May 2016 for services to support a BIS that includes reporting. The intent is to revamp and implement new reporting and analytical capabilities for continuous improvement, program integrity, fraud and abuse detection, and overall program monitoring and evaluation. Reports should be automatically generated through open interfaces to designated federal repositories or data hubs, with appropriate audit trails.

2.16.1.8 Interoperability Condition

The interoperability condition ensures that seamless systems coordination and integration exists with the HIE and HIX (whether run by the State or federal government), and allows systems interoperability with public health agencies, EHS and EPs enrolled in South Carolina EHR Incentive Program, human services programs, and community organizations providing outreach and enrollment assistance services. SCDHHS identifies areas where it interacts other agencies to allow interoperability. Interaction with other entities: should enable exchange with public health agencies, human services programs, and community organizations providing outreach and enrollment assistance services.

2.16.1.9 Modified Adjusted Gross Income (MAGI)-Based System Functionality

The MAGI Based System Functionality condition requires that Medicaid E&E systems be able to adequately process MAGI-based Medicaid applications with limited mitigations and workarounds. The
MAGI-based system functionality condition primarily applies to states’ Medicaid E&E systems. This condition would seldom impact states’ MMIS and is therefore generally not applicable to those systems. MAGI-based system functionality could be relevant to an MMIS, for interoperability with the Medicaid E&E system for certain functions, for example, to carry out cost sharing requirements, or changes related to Medicaid expansion. CMS expects that states will demonstrate their satisfaction of this condition in the APD as well as in relevant artifacts submitted to CMS along the system lifecycle.

SCDHHS uses ACCESS for MAGI based programs. Currently, ACCESS can store participant data such as age, gender, race, date of birth, date of death, financial information, and coverage category for all applicants and members in the system. This information and other data stored in the system is used to make determinations in coverage for the MAGI population. The Member Management Program (MMRP) continues to work on the development and implementation of the Cúram system which will be the source of comprehensive information about applicants and members, and their interaction with the state.

2.16.1.10 Mitigation Plan
The Mitigation Plan condition requires states submit mitigation plans addressing strategies to reduce the consequences of failure for all major milestones and functionality. SCDHHS included a mitigation analysis in the 2016 Replacement Medicaid Management Information System (RMMIS) APD. SCDHHS addressed minimum expected functionality, critical success factors and risk factors tied to major milestones identified analysis in the 2016 RMMIS APD. SCDHHS also includes a mitigation plan in the RMMIS risk registry.

2.16.1.11 Key Personnel
The Key Personnel condition requires that states identify their key state personnel assigned to each major project by name, role, and time commitment. SCDHHS included state key personnel information analysis in the 2016 RMMIS APD and will add time commitment in the next APD. SCDHHS will notify CMS of any key personnel change and include in the next APD.

2.16.1.12 Documentation
The Documentation condition requires that states maintain documentation for certain software such that the software could be operated by contractors and other users. This condition is limited to software that is developed using federal funds; it does not apply to Commercial Off-the-Shelf (COTS) software, Software-as-a-Service, or Business-Solutions-as-a-Service. Adequate documentation means that other users could operate the software with reasonable alterations for a specific hardware or operating system. CMS is neutral as to the specific hardware or operating system that the software uses. Documentation must follow industry standards and best practices, and must include components, procedures, layouts, interfaces, inputs, outputs, and other necessary information so that the systems could be installed and operated by a variety of contractors or other users. SCDHHS incorporated plans to maintain documentation in our APD process.

2.16.1.13 Minimization of Cost for Operation on an Alternate System
The Minimization of Cost for Operation on an Alternate System requires that states consider strategies to minimize the costs and difficulty of operating the software on alternate hardware or operating systems. This condition recognizes the significant federal and state investments that are involved with
major Medicaid IT projects and requires that states consider options beyond software that will reduce costs or promote reuse. SCDHHS included alternative system analysis in the 2016 RMMIS APD and will continue to incorporate in our APD process.

2.16.2 ARRA and MITA Connection
MITA and ARRA are highly interdependent. MITA emphasizes the role of technology in improving health outcomes, and ARRA lays out a few key routes for that transformation.

As SCDHHS continues progress planning towards MITA 3.0 “to-be” goals identified in Table 4 above, SCDHHS is also working to implement key HIT provisions of ARRA. These provisions are intended to promote health care quality and health information exchange facilitated by certified EHR technology adoption. The HIT provisions are being taken into consideration in design and development of the Medicaid Enterprise System (MES) architecture.

SCDHHS is the agency tasked with promoting, measuring and rewarding meaningful use of certified EHRs for the state of South Carolina. The future Medicaid Enterprise could facilitate the measuring, tracking and reporting of meaningful use and the distribution of incentive payments to meaningful users. In addition, use of a statewide HIE will promote sharing of health care information and improvement of health outcomes throughout our state.

2.16.3 Replacement Medicaid Management Information System (RMMIS) Project
SCDHHS is actively involved in replacing the decentralized MMIS legacy systems. This includes the following modules:

- Pharmacy ASO
- Dental ASO
- TPL (Third Party Liability)
- Business Analytics
- Medical ASO
- Electronic Visit and Verification
- Finance and Accounting

Each replacement solution will align with the MITA initiative. The new functionality of the replacement MMIS solutions will interact to achieve mutual goals, including expediting the prior authorization process and increased consumer access to healthcare data.

The MMIS replacement project in modular in nature, consisting of 7 functional modules procured and implemented individually. All new modules will initially integrate with the legacy MMIS, except for the ASO. The ASO module will be integrated with the new MES at the time of implementation. SCDHHS submitted the MECT Project Partnership Understanding (PPU) and Certification Mitigation Plan to CMS and has received approval. These documents identify the projected award date, DDI period, implementation date, certification date, and MES integration date for each module. These dates are subject to change, based upon project procurement and DDI activity.
2.17 **HIT Program Stakeholders**

Table 7 below identifies key state agencies and other state organizations involved in HIT activities throughout the state.

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15 Per SCDHHS RMMIS PPU, v. 4.0, March 6, 2018


<table>
<thead>
<tr>
<th>Entity</th>
<th>HIT role in South Carolina</th>
</tr>
</thead>
</table>
| South Carolina Department of Health and Human Services (SCDHHHS)  | ▪ HIE Cooperative Agreement Program Grantee  
▪ South Carolina PI Program Administrator  
▪ e-Health Group Member  
▪ IGC Member |
| Revenue and Fiscal Affairs Office of Research and Statistics (ORS)| ▪ State HIT Coordinator  
▪ HIE Cooperative Agreement Partner  
▪ State Data Warehouse Oversight  
▪ e-Health Group Member  
▪ IGC Member |
| South Carolina Department of Health and Environmental Control (SCDHEC) | ▪ HIE Cooperative Agreement Partner  
▪ Immunization and Disease Registries Owner  
▪ IGC Member  
▪ Meaningful Use Collaborator |
| Health Sciences South Carolina (HSSC)                             | ▪ e-Health Group Member  
▪ Regional Centers Cooperative Agreement Recipient  
▪ IGC Member |
| South Carolina Rural Health Research Center (SCRHRC)              | ▪ Environmental Scan Contractor  
▪ Regional Centers Cooperative Agreement Partner |
| Department of Mental Health (DMH)                                 | ▪ The DMH Telepsychiatry Program Administrator |
| South Carolina Primary Care Association                           | ▪ Regional Centers Cooperative Agreement Partner |
| South Carolina Office of Rural Health (SCORH)                     | ▪ Regional Centers Cooperative Agreement Partner |
| Carolinas Center for Medical Excellence (CCME)                    | ▪ Regional Centers Cooperative Agreement Partner |
| Florence-Darlington Technical College                            | ▪ Workforce Development Grant Recipient |
| Carolina Health Centers                                          | ▪ Quality Reporting Pilot Participant  
▪ LRHN member |
| Thomson Reuters                                                   | ▪ Quality Reporting Pilot Participant |
| SCHIEx                                                            | ▪ Statewide Health Information Exchange  
▪ Connects providers with other state HIEs such as Georgia (GAHIN) and North Carolina (CCHIE)  
▪ Meaningful Use Collaborator  
▪ Facilitates Immunization Registry Health Information Exchange with Providers |
3. SECTION B: SOUTH CAROLINA “TO-BE” LANDSCAPE

South Carolina has taken significant steps in developing a statewide vision of its HIT future, including the following components:

- Continue supporting the Promoting Interoperability Program and encourage eligible providers to continue participation to become meaningful users and successfully attest to each successive program year for which they are eligible. SCDHHS will work with the provider community to collaborate on helpful information and presentations so that more individuals are informed of the Program and can more easily interpret its requirements.

- Continue collaboration with SCDHEC on its public health registries to accomplish successful declaration of readiness for MU stage 3 requirements.

- Continue relationships with the statewide and regional health information exchanges and their partners to foster health information exchange and demonstration of meaningful use requirements.

SCDHHS believes that while new participation in the program is no longer permitted, practices may be encouraged to use CEHRT across their practice sites despite only have a limited number of providers who are eligible to receive the incentive payments. As the usage of CEHRT underlies the framework for further implementation of HIEs across the state and its providers, even a few providers from larger practices continuing to participate opens opportunities to work with the practices and include them in the SC HIE.

Some of the costs associated with health information exchange can be offset by PI Program Incentive payments and SCDHHS will work toward establishing the willingness of ineligible providers to adopt MU and HIE, despite the limited number who may be eligible to receive an incentive payment. As some practices may have a few providers who are eligible but employ hundreds or even thousands of providers; these few participating providers can provide an inroad to gaining insight into the practice, willingness to adopt aspects of meaningful use and health information exchange and reporting of clinical quality measures. As the PI Program can establish relationships with these organizations through the existing eligible providers, this expands the opportunity to continue discussion of the broader context of HIE and promoting interoperability throughout South Carolina.

3.1 “TO-BE” GOALS

South Carolina’s prescription drug monitoring program (PDMP) is known as SCRIPTS which stands for South Carolina Reporting & Identification Prescription Tracking System. SCRIPTS is intended to improve the state’s ability to identify and stop diversion of prescription drugs which are considered controlled substances under schedules II, III & IV (title 21 Code of Federal Regulations (C.F.R.) §§ 1308.11 through 1308.15) in an efficient and cost-effective manner that will not impede the appropriate medical utilization of licit controlled substances where there is a valid prescriber-patient or pharmacist-patient relationship. SCRIPTS is overseen by SCDHEC which provides governance, oversight, and funding.

South Carolina has several specific future goals related to SCRIPTS:
• Expand SCDHEC’s Prescription Drug Monitoring Database (PDMP) to become a specialized registry which providers can engage with in order to meet MU. SCDHHS and SCDHEC are currently collaborating on how to best implement this initiative, with SCDHEC providing governance and SCDHHS providing consultation and guidance.

• Related to expanding PDMP usage, SCDHHS recognizes that implementing the ability for clinicians to directly communicate with the PDMP using their CEHRT will help combat opioid addiction and reduce clinician burden. SCDHHS is currently working closely with SCDHEC to further develop this goal.

SCDHHS will encourage providers participating in the PI program to use the PDMP as part of meeting MU requirements, once this initiative is implemented.

3.2 Expand Provider CEHRT Adoption Rates
In the next 12 months, the HIT Division plans to encourage provider adoption of CEHRT include:

• Fill additional positions and ramp up outreach efforts to onboard more providers to MU and public health registry engagement.

• Environmental scan in 2018 Q4.

• Outreach campaign to request feedback from stakeholders regarding MU experience (positive and pain points) and barriers to adoption. The HIT program will review all feedback and further refine outreach and communication efforts.

• Development of new website link to initiate provider feedback survey after the environmental scan is complete Q3-Q4 2019. SCDHHS will use data from environmental scan to craft feedback survey.

3.3 2018 Planned Environmental Scan
SCDHHS has drafted a follow-up environmental scan which is anticipated to be initiated in early Q4 2018. The new scan will follow prior scans with similar survey topics, data aggregation, and assessment of gains and gaps. The results of the scan will be used to further refine outreach and program goals.

The primary goal of the survey is to map the existing connectivity points for interoperability geographically in SC and identify areas where providers currently do not connect and the reasons why they don’t (i.e., they don’t have CEHRT, are open to getting it, but cost is a problem).

Sub-goals of the environmental scan include assessing eligible provider responses to the following topics:

• Determine how many providers plan to restart or continue their participation in the HIT program.

• Provider technology capabilities.

• Willingness to connect to an HIE.

• Understanding of the Promoting Interoperability program.

• Providers current or planned engagement with HIE and how they envision this usage changing over time.

• Confusion regarding eligibility requirements/ MU requirements/ current interaction level with any state/ regional/ out-of-state HIE.
### 3.4 ADDRESSING UNIQUE POPULATION NEEDS

SCDHHS, in consultation and accord with CMS guidance, has reduced the minimum Medicaid patient volume eligibility qualification for pediatricians from 20% to 19.5%. SCDHHS hopes to encourage more pediatricians to participate in the program with this reduced threshold. SCDHHS actively works with several pediatric associations to encourage pediatrician participation in the PI Program.

SCDHHS also works closely with its public health partner, SCDHEC, to facilitate MU production data reporting to its cancer registry. Through partnership with SCDHEC and SCDHHS, DHEC’s cancer registry has declared readiness to meet meaningful use. This declaration provided an additional specialized registry for pediatric oncologists to engage with and meet meaningful use.

By participating in the PI Program, SC is receiving an increased volume of data about pediatric oncology which is used to study trends in how often cancer occurs in a defined area, changes in diagnosis, treatment patterns, and survival rates.

Additionally, SCDHHS promotes the use of CDS interventions that benefit and improve the quality of care of children. Additional information on the SCDHEC Cancer Registry is provided in Section 4.10.3.

### 3.5 INCENTIVE PAYMENT FORECASTING

As of Program Year 2017, 50% of providers participating in South Carolina's PI Program have not transitioned to MU from AIU. SCDHHS’s goal is to raise the number of AIU providers who have attested and successfully met MU requirements in South Carolina to 65% in Program Year 2018, 75% in Program Year 2019, 85% in Program Year 2020, and 95% in Program Year 2021. The goals are illustrated in Figures 15 and 16 for Payment Years 2018 through 2022. Please refer to sections 3.6 and 3.7 for SCDHHS’s provider engagement and communication strategy. SCDHHS recently made a request to CMS for additional positions to provide increased outreach and one-on-one consultation to eligible providers to meet this goal.
Figure 15: Payment Year 2018 – Payment Count Forecast

Figure 16: PY 2019 – 2022 Payment Count and Amount Forecast
3.6 Provider Communication Strategy
The current outreach goals of SC HIT Promoting Interoperability Program for provider outreach in FFY19 include the following:

- Identifying and engaging its 2,796 eligible providers as well as health care organizations and associations, research groups, statewide and regional HIEs and other stakeholders to facilitate renewed participation and maintain participation.
- Ensuring that stakeholder engagement is a continual priority.
- Facilitating an integrated approach and recognition that program success is based upon the EPs and EHS who share the program’s vision and value program benefits, including supporting the goals of MU and HITECH initiatives by encouraging and enabling continued eligible provider participation in the PI program.

3.7 Provider Retention
For FFY 2019, SCHHS is focusing on provider retention and providing increased engagement strategies to re-start eligible provider participation in meaningful use in each year for which they are eligible. Several providers have opted not to continue participation into Stages 2 and 3, thus provider outreach efforts will be focused on improved customer service and surveying eligible nonparticipating providers regarding reason(s) for non-participation. The goal is to overcome participation obstacles, address misconceptions discouraging engagement, and provide additional resources.

SCDHHS has developed a focused outreach program to provide increased actionable knowledge and information useful to assist EPs and EHS meet meaningful use. As part of this effort, SCDHHS staff will increase travel to engage directly with more providers and stakeholders about their difficulties with meeting meaningful use, assess their data and calculation methodologies, and provide specific feedback, advice, and strategic options for success. The SC HIT program team is confident that in-person engagement with providers at their practice site is key to re-engagement with the program.

In tandem with this outreach, SCDHHS is developing a methodology to facilitate ongoing monitoring of SC Medicaid providers who have received at least one EHR Incentive Payment from another state and are currently practicing within South Carolina or adjoining borders with North Carolina and Georgia. The outreach objective is to target geographical areas with lower PI Program participation and educate groups of potentially eligible providers. Data is currently being gathered in a centralized database for simplified evaluation of national EHR incentive payment data to establish if a South Carolina provider has a recorded EHR incentive payment from another state.

3.8 Interaction with MMIS and MITA

3.8.1 RMMIS and SLR
Due to the Promoting Interoperability program sunsetting in 2021, there is no interaction planned between RMMIS and the SLR at this time.

3.8.2 RMMIS and PI Program
The current RMMIS design does not include changes specific to the South Carolina Medicaid PI Program. The existing credit adjustment process is used for making incentive payments; SCDHHS added additional
fund codes to track incentive payments. Plans will be coordinated to ensure the new Medical ASO solution will continue to support the credit adjustment process. SCDHHS anticipates that the new MMIS will reduce manual processes for the HIT Division for verifying that providers meet eligibility requirements such as enrollment in Medicaid, patient volume, and hospital-based exclusions.
4. SECTION C: ACTIVITIES NECESSARY TO ADMINISTER EHR INCENTIVE PROGRAM

4.1 EHR ADMINISTRATION FRAMEWORK

In preparation for administering the South Carolina Medicaid EHR Incentive Program, SCDHHS developed a roles and responsibility framework payment administration, tools and procedures development and maintenance, provider enrollment and participation protocols, and establishing the basic financial processes needed to oversee the program. Figure 17 below is a high-level depiction of what SCDHHS envisions is needed to administer and manage the EHR Incentive Program.

Figure 17: EHR Administration Components

SCDHHS, the South Carolina Medicaid agency, is fully responsible for the South Carolina PI Program and for making payments to EPs and EHs. A combination of existing technology and tools are used to manage and monitor the program including the MMIS, Decision Support Services (DSS)/ Surveillance Utilization Review System (SURS), the National Level Repository (NLR), and the SLR.

SCDHHS forecast the financial costs for incentive payments, providers enrollment verification, validation of incentive program conditions, hospital payment calculations, credit adjustments processed through the MMIS, reporting all expenditures, and auditing protocols necessary to identify (and prevent) fraud and abuse.

4.2 ASSUMPTIONS

The following assumption were developed in advance of the South Carolina PI Program implementation in January 2011:
CMS NLR will continue to transmit data concerning EPs and EHs registered for participation in the South Carolina program. The NLR is the “front door” for all providers, whether they participate in the Medicare or Medicaid EHR Incentive Program, and SCDHHS is dependent on the NLR interface to share provider registration data and ongoing data sharing for the program duration.

SCDHEC’s public health registries will continue to be an option to allow providers to meet MU requirements. The immunization registry, cancer and syndromic surveillance registries, with Stage 3 capability for immunization and syndromic registries, will continue to allow providers to share public health and clinical data to meet MU requirements.

SCDHHS will continue its relationship with SCDHEC to foster collaboration, communication, and encouragement and support of providers to meet MU.

HIEs within the state will continue to facilitate actions that will allow providers to meeting MU objectives.

CMS will continue to provide funding to support the administration of the PI program in South Carolina and its promotion of meaningful use and interoperability activities.

Options for developing additional SC specialized registries will continue to be pursued to enable more provider engagement and allow them to meet MU.

4.3 SCDHHS HIT DIVISION STAFFING

The HIT Division is directly responsible for the South Carolina Promoting Interoperability Program. The Division reports to Medicaid Operations under the Office of Information Management. Functions of the Division include but are not limited to:

- Quality reporting, both clinically and outreach focused.
- Attestation validation and auditing
- Outreach and customer service.
- Division budgeting.
- SLR administration, design, testing, and oversight.
- Payment calculation, verification, and validation.
- Research of HITECH funded projects.
- Coordination and engagement with other agencies and stakeholders.
- Fiscal oversight and financial reporting.
- Provider appeals.
- Coordination with SCDHHS programs for shared resources.
- Administration of the HIT Division website.
- Development and oversight of Division contracts, procurements, projects, and deliverables.

The Division includes 10 temporary grant positions and may be expanded or contracted as defined by business and program needs. The HIT Division Director and three Project Coordinators are currently in place. Position descriptions for each temporary grant position have been written including the minimum education, training, and experience requirements, job functions, ADA requirements, and work hour schedules. A joint task force formed by the American Health Information Management Association (AHIMA) and the American Medical Informatics Association (AMIA) defined workforce core competencies for individuals working with EHRs.

Other functions will be supported by staff located within other organizational units within SCDHHS including:
### Staff for the SC PI Program and RMMIS program will be co-located within the SCDHHS Office of Information Management. As planning and development efforts continue, it is essential that staff from these initiatives collaborate to effectively share resources and design solutions that address the needs of both projects. The core structure of the HIT Division was established with the intent that this organizational unit will undergo adjustments as functional needs become more apparent and as the program evolves.

### 4.4 Clemson Contract – SLR Deployment & Maintenance

Clemson University, a South Carolina state university, provides the system hardware, software, and staff to support the SLR, through contract initiated in 2012. CU shall provide technology and services to deploy the SLR, including but not limited to:

- Update the SLR to respond to CMS requirements for the Medicaid EHR Incentive Program (continue to develop and document the SLR changes requirements and code in response to CMS changes for Modifications to MU for 2016-2018, and in response to CMS’ Stage 3 Final Rule, as well as other changes yet unknown).
- Maintain and expand reporting capabilities within the SLR, including but not limited to administrative functionality to generate quarterly MU reports required by CMS.
- Generate annual reports on the Medicaid EHR Incentive Program for CMS reporting from data within the SLR.
- Implement means for providers to self-manage secure SLR passwords.
- Technology and services include:
  - Computer processing to include hardware support and housing of the data center, network support, operations support, input and output control, and coordination with other data processing vendors;
  - Applications support and systems administration;
  - Systems security and disaster recovery measures; and
  - SLR system technical requirements and development, and production support.

SCDHHS has and will continue to coordinate with CU concerning the credit adjustment process for incentive payments and the interface between the SLR and NLR.

### 4.5 Bureau of Fiscal Affairs – Inventive Payment Funding Projections

The SCDHHS Bureau of Fiscal Affairs forecasts South Carolina PI Program funds via the CMS-37 report. The CMS-37 is a quarterly financial report submitted by the State which provides a statement of the state’s Medicaid funding requirements for a certified quarter and includes estimates and underlying assumptions for two fiscal years (FYS) – the current FY and the budget FY. Based on the CMS-37 submission and subsequent review, CMS issues the state a grant award authorizing Federal funding to the state for the certified quarter.
Estimated funding for the incentive payments was based on the anticipated provider adoption rates for physicians and hospitals. The initial 2009 environmental scan data provided these adoption rates, which are updated following each environmental scan event. Professional organizations such as the South Carolina Hospital Association, SCPHCA, and SCORH also worked with SCDHHS to share data on their anticipated adoption rates and predictions. Over the duration of the program, these estimates are continually adjusted as providers adopt certified EHR technology.

The MMIS is the primary data source to track total incentive payments made as well as any overpayments. In the cases of suspected fraud and/or abuse, the Finance Division maintains data on incentive payments and recoupments.

4.6 **Program Reporting**

The HIT Division is responsible for preparing and distributing all programmatic reporting related to the South Carolina Medicaid PI Program. The Division Director oversees preparation of these reports and ensures their accuracy and completeness.

Information submitted to CMS annually includes:

- Reports on AIU of certified EHR technology
- Activities, payments, and recoupments
- Fiscal reporting
- Aggregated data on AIU, MU, and clinical quality measures
- Volume statistics on type, practice locations, providers who qualified for incentive payment
- Audit payment history from the NLR and SLR (which must be reconciled)
- Facility participation by type
- Audit activities

4.7 **Supporting IT Systems & Tools**

The SC PI Program requires IT system integration to administer and oversee the EHR incentive payment program, in addition to fiscal and communications processes. The primary systems used to administer and execute the EHR incentive program include:

4.7.1 MMIS

PI Program incentive payments are processed as credit adjustments through the MMIS using existing functionality. MMIS maintains an audit trail of all payments.

4.7.2 The CMS Registration and Attestation System (including NLR)

This is a federal database that is the front door for EPs and EHs seeking incentive payments.

4.7.3 State Level Repository (SLR)

The SLR is the front door to the South Carolina Promoting Interoperability Program for EPs and EHs and is the main tool used by the HIT Division to oversee and administer the EHR incentive Program. The web portal located at [www.scdhhs.gov/slr](http://www.scdhhs.gov/slr) is a mechanism to allow EPs and EHs to enter the attestation information pertaining to eligibility, AIU, and MU. The web form is the mechanism to capture the additional data elements needed by SCDHHS to authorize a Medicaid incentive payment.
This portal also serves as an interface to the NLR. The NLR transfers data via batch file transfer and allows SCDHHS to receive data from the NLR as well submit updates to the NLR with pertinent information regarding EPs, EHSs, and status of their current attestation.

The SLR database maintains basic data elements transferred from the NLR including, but not limited to, Tax Identification Number (TIN), National Provider Identifier (NPI), CMS Certification Number for an EHS, EP type and affiliation. The SLR captures additional pertinent information from the EP/EHS, including patient volume, CQM data, and attestation information.

SCDHHS was part of the Tier 1 testing group, which began testing at the close of October 2010. SCDHHS began accepting provider attestations in the state-developed SLR in January 2011.

4.7.4 National Level Repository (NLR)
The process for an EP or EH registering for the incentive payment begins at the NLR where they enter basic registration data including the following data elements:

- EP/EH Name
- NPI
- Business address
- Phone number
- TIN – to which the incentive payment will be made for EP/EH
- Indicate choice of Medicare or Medicaid incentive (EHSs can receive both incentives)
- State selected to receive incentive from
- CCN for the EHS

Once the data is confirmed by CMS, the NLR sends state-specific data to each state SLR via a batch file transfer.

4.8 PROVIDER ATTESTATION PROCESS

4.8.1 CMS Registration
When a provider visits the SLR website after registering with the CMS Registration and Attestation System, they create an account by providing the NPI, CMS Registration ID, and e-mail address. The NPI and CMS Registration ID are authenticated against data provided from the NLR/SLR file B6 transaction.

If the EP does not complete the CMS registration during the initial visit, the same registration information must be re-submitted upon return to the website (even if no changes are made). If the registration is not re-submitted, the account status with CMS will change to *In Progress or Registration Started/Modified* and will remain in this status until the registration data is re-submitted. This status blocks SCDHHS ability to exchange transactions with CMS needed to work the attestation. A status of *Pending State Validation or Registration Sent to State* in the CMS System indicates a successful registration. The CMS system generates an automated provider confirmation with the CMS Registration ID number.
4.8.2 Logging into the SLR to Begin an Attestation
Upon successful CMS registration and confirmation from SCDHHS, the EP must provide the NPI and CMS Registration ID on the SLR launch page. If the CMS Registration ID is not known, the EP must return to his or her CMS registration to retrieve that ID.

4.8.3 SLR Workflow
The site is designed to make it easy for a provider to stop and restart the attestation process at any time, saving individual completed sections. During attestation, the EP can review the CMS registration information as displayed in the SLR’s “CMS Registration/SC Medicaid Data” screen and confirm its accuracy, including payee information. Following initial provider data review, the EP progresses through the attestation screens to enter required MU data. This includes attesting to meeting measures for the MU objectives and entering Clinical Quality Measures generated by the provider’s CEHRT. The final attestation screen summarizes the attestation data and requires the EP (or the EP’s authorized designee) to affirm that their attestation is true, accurate and complete prior to submitting the attestation for SCDHHS review.

4.8.4 Provider Eligibility Review per Payment Year
For each new payment year, the EP is required to review and confirm the registration data in the NLR and SLR. At any point, the NLR may send data updates to the SLR regarding the EP’s and EH’s registration status (i.e. EP may switch from the Medicaid Incentive Program to the Medicare Program or may choose to receive the incentive from another state).

The HIT Division also reviews eligibility attestation annually and tracks the review date for audit purposes.

4.9 SLR Security

4.9.1 SLR Website
Providers access the SLR via the web at http://www.scdhhs.gov/slr. This proprietary website is secured with Secure Sockets Layer (SSL) encryption. The SCDHHS HIT website at http://www.scdhhs.gov/hit includes a link for providers to access the SLR website and SLR user guides. Once a provider registers with the CMS Registration and Attestation System, the SLR website is the sole site a provider must access to enter data for the South Carolina PI Program.

4.9.2 SLR Access Monitoring
SCDHHS conducts security monitoring and logging of all SLR access requests. An account is automatically locked after three unsuccessful login attempts to protect against unauthorized access. The provider or their designee must then contact the SCDHHS HIT Division to request account unlock.

4.9.3 NLR Interface
South Carolina contracts with Clemson University for the operation, maintenance, and support of the SCDHHS legacy MMIS, Medicaid Eligibility Determination System (MEDS), and Cúram HCR systems. In this role, Clemson uses Connect Direct to securely transmit and receive PHI with the Social Security Administration, Department of Defense, and other federal agencies. The CU file transfer protocol (FTP) site accepts files containing registration data for South Carolina Medicaid providers from the NLR via a...
mainframe to mainframe interface using Connect Direct. Data received into the Clemson FTP site is then imported into the SLR database via the Virtual Private Network (VPN). Incentive payment transactions also pass through the VPN when payments are made through the MMIS.

4.9.4 **SLR Server Infrastructure**

The server hosting the SLR is a part of the SCDHHS technology infrastructure located in a physically secure environment (card access for limited IT staff), and behind redundant firewalls. SCDHHS IT Security Policy requires that all servers be kept up to date with security patches and anti-virus protection.

The SLR server is also subject to intrusion prevention and detection monitoring 24 hours a day, 7 days a week.

4.10 **Provider Communication and Tools**

4.10.1 **Provider Inquiries**

Providers with questions concerning the South Carolina PI Program may either call the HIT Division directly at 803-898-2996 or submit questions to the dedicated email inbox for the program at hitsc@scdhhs.gov where HIT Division staff share the responsibility of addressing provider inquiries.

In response to questions from providers, a series of “Frequently Asked Questions” pages have been developed and published to the HIT website at http://www.scdhhs.gov/hit as another resource for providers.

4.10.2 **Provider Outreach via Email**

As part of the SCDHHS’ provider outreach campaign, SCDHHS strongly encourages providers to enter their email address during CMS system registration (this is an optional field). The SC HIT Division uses email to maintain provider communication, reduce printed paperwork distribution, and to confirm SLR registration. SCDHHS also routinely requests that additional email addresses and contacts be provided in the SLR in case the primary contact is unavailable.

4.10.3 **Coordination with Public Health Registries**

SCDHEC houses and administers South Carolina’s Immunization Registry, Syndromic Surveillance Registry, and Cancer Registry. SCDHEC currently accepts messages in Health Level 7 (HL7) version 2.5.1 format for these registries. Providers in the SC PI Program can attest to their appropriate level of engagement with these registries, if applicable. SCDHEC has not yet declared readiness for Stage 3 for any of its public health registries. SCDHHS is currently working with SCDHEC to facilitate declaration of readiness for Stage 3 for all its registries in the near future.

4.10.3.1 **Immunization Registry**

SCDHEC’s Immunization Registry currently accepts messages to allow providers to meet MU stage 2 designation. SCHIEx currently facilitates health information exchange with the immunization registry.

4.10.3.2 **Cancer Registry**

SCDHEC currently accepts Cancer Registry messages from the following Ambulatory Care eligible provider types:
Urology
Dermatology
Hematology/medical oncology
Radiation oncology
Pediatric oncology
Surgery centers
Gastroenterology

SCDHEC currently accepts Cancer Registry messages for the following Meaningful Use stages:

- Specialized Registry Reporting for Stage 2.
- Specialized Registry Reporting for Modified Stage 2 (through 2017).
- Stage 3 Declaration of Readiness.

As of July 1, 2016, the DHEC South Carolina Central Cancer Registry declared readiness for MU Stage 3. Eligible ambulatory providers who diagnose and/or treat cancer patients were able to attest to Stage 3 measures for implementation beginning January 1, 2017.

4.10.3.3 Syndromic Surveillance Registry:
In South Carolina, Syndromic Surveillance Reporting is used to monitor chief complaint data and identify events of public health concern.

SCDHEC currently accepts Syndromic Surveillance messages from the following provider types:

- EHSs and Critical Access Hospitals (CAHs) (emergency department data, inpatient admissions data).
- EPs in urgent care settings.

In general, urgent care settings refer to facilities outside of primary care offices and emergency rooms that provide immediate medical service in an outpatient setting, require no patient appointment, and have extended operating hours that cover evenings and weekends.

4.10.4 Registry Communications Requirements
SCDHEC currently accepts Syndromic Surveillance messages for the following Meaningful Use stages:

- Beginning June 1, 2017, DHEC began accepting Syndromic Surveillance messages for Stage 3 from EHSs, CAHs and EPs in urgent care settings.

This declaration of readiness was made public on 02/06/2017.

4.10.5 Registry Engagement Stages
Active engagement means that the provider is in the process of moving towards sending "production data" to a public health agency or clinical data registry or is sending production data to a public health agency or clinical data registry.
4.10.5.1 Active Engagement Option 1: Registration Completed
Option 1 identifies that the EP registered to submit data with the PHA or, where applicable, the CDR 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 or CDR 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.

4.10.6 Active Engagement Option 2: Testing and Validation
Option 2 identifies that 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 CDR within 30 days. Failure to respond twice within an EHR reporting period will result in that provider not meeting the measure.

4.10.7 Active Engagement Option 3: Production
This option identifies that the EP has completed testing and validation of the electronic submission and is electronically submitting production data to the PHA or CDR. Production data is data generated through clinical processes involving patient care.

4.11 EP & EH—Global Requirements
An EP is one of the provider types identified in Section 5.12 for participation in the PI Program. An EH is an Inpatient Hospital. All EP and EH must be actively licensed at the time of payment and meet the following global PI Program requirements:

- Verification completed on demographic data (including NPI) and payee data (including TIN).
- Payee (person or entity receiving the incentives) is actively enrolled as a provider in the SC Medicaid Program. Section 5.13 offers additional Medicaid enrollment detail.
- EP/Payee is not sanctioned/excluded in the State or otherwise deemed ineligible to receive payments from the State. Section 5.13.2 offers additional exclusion detail.
- EP is considered Not Hospital-Based for the purposes of the Medicaid PI Program.
- PA practices at a FQHC and/or an RHC that is “PA-led.” Section 5.12.2 offers additional PA eligibility detail.
- EP’s patient volume period does not utilize patient encounters used in the EP’s previous attestation. No duplication of time periods or overlap is allowed.
- EP attesting to patient volume exception for “Pediatrician with reduced Medicaid volume” is enrolled as a pediatrician, is in the CMS registration system as a pediatrician, or as part of his or her routine practice primarily renders services to children, adolescents, and young adults. Section 5.12.3 offers additional detail on this exception.
Where the EP has attested to use of group patient volume as a proxy, the EP’s attestation aligns with other EP attestations from the group, and the attested encounters are reasonable for a group attestation.

EP's attestation to CEHRT products crosswalks correctly to the CMS EHR Certification ID attested by the provider.

EP has attested to a legal/financial commitment to CEHRT that follows the EHR Incentive Program’s requirements for the PY.

### 4.11.1 CMS Registration and Attestation System Registration

Every EP and EH must first register in the CMS Registration and Attestation System before they will be allowed to begin an attestation in the SLR. Basic data elements are collected at the federal level and then passed on to South Carolina’s SLR. The SLR accepts data from the NLR, and transmits data to the NLR, through batch file transfer which may take up to two business days to process. Providers enter additional data elements into the SLR via a web portal.

AIU is no longer an option for providers attesting to the PI Program. The last year a provider could have attested for and received an AIU incentive was Program Year 2016.

A provider must have a recorded incentive payment on file prior to Program Year 2017 to continue participation in the PI Program. The incentive payment could have been received in any state or territory in the United States to qualify. There is no requirement that the provider received an incentive payment from South Carolina to participate in South Carolina’s Program. This requirement is automatically checked when a provider begins an attestation in the SLR and again during the pre-payment process.

Eligible providers new to the SC PI Program must update their state to South Carolina in their CMS registration. Without performing this step first, the SLR will reject the NPI during login-in if there was no recorded incentive payment from South Carolina. The SCDHHS HIT Division has circulated outreach on this to all program contacts.

### 4.11.2 Tail-Period for Attestation Submission

An EP or EH may attest for a payment year's incentives up until March 31 of the calendar year following the program year. For example, EP/ EH may submit an attestation for Program Year 2018 incentives up until March 31, 2019. SCDHHS understands that it has the option to request a tail period extension, subject to CMS approval, to allow providers to attest beyond March 31 for a specific program year incentive.

CMS requires attesting providers to use, at minimum, EHR technology certified to the 2014 Edition. If it is available, attesting providers may use EHR technology certified to the 2015 Edition, or a combination of the two.

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16 The Oncaeid additional functionality to the website for Certified Health IT Product Listing to allow a reverse lookup of products by the CMS EHR Certification ID as a helpful feature for states.
Providers may still attest to modified stage 2 in program years 2017 and 2018; stage 3 is optional in these program years. Stage 3 will not be required until program year 2019. SCDHHS will publish guidance and update PI Program materials as changes occur and communicate these changes through all available communications channels.

CEHRT that has been certified to meet the MU requirements for stage 3, or a combination of 2014 and 2015 CEHRT which meets the ONC’s requirements for stage 3 is needed beginning with MU demonstrations for program year 2019. Providers may attest to stage 3 in program years 2017 and 2018 as a voluntary option but it is not required for demonstrating meaningful use in these years.

4.12 EP Types
EPs for the South Carolina Promoting Interoperability Program include the following provider types:

- Physicians (including MD, DO, and Optometrists)
- Dentists
- Certified nurse midwives
- Advanced Practice Nurses (APRNs) - must have received an incentive payment from another state as these providers were not previously eligible prior to program year 2017
- Clinical Nurse Specialists (CNS) - must have received an incentive payment from another state as these providers were not previously eligible prior to program year 2017
- Nurse Practitioners (NPs)
- Physician Assistants (PAs) – must meet specific criteria identified in Section 15.3.1

4.12.1 PA Eligibility Conditions
South Carolina allows PAs practicing in a PA-led FQHC or a PA-led RHC to participate in the PI Program under specific conditions. **PA-led is determined by location only.** For an individual location to be considered PA-led, one or more of the following criteria must apply:

- PA is the clinical or medical director at a clinical site of practice;
- PA is the owner of an RHC; and
- PA is the “primary provider” in a clinical site of practice. A “primary provider” must meet at least one of the following criteria:
  - When there is a part-time physician and a full-time PA, the PA will be considered as the primary provider. This must be substantiated through an auditable data source.
  - When there are multiple providers, at least 1-PA needs to have more encounters during the Eligibility Reporting Period than the physician(s). This encounter data will be determined using the Eligibility Reporting Period and encounters will be assigned based on the rendering NPI.

The HIT Division will require auditable documentation to determine if the requirements are met at the individual location.

4.12.2 APRN and CN Eligibility Conditions
For the purposes of the PI Program, SCDHHS includes APRNs and CNSs as nurse practitioners. The South Carolina Medicaid State Plan specifically provides that these provider types are treated the same.
4.12.3 Pediatric Physician Eligibility Conditions
Physicians attesting to the patient volume exception specifically for pediatricians with a reduced Medicaid patient volume threshold must meet the following requirements:

- Physician enrolled in SC Medicaid with a provider type 20 (physician).
- Physician enrolled in SC Medicaid with a pediatric subspecialty code 40, 41, 42, 68, or 49.

If a provider is unsure if enrolled as a pediatrician with the South Carolina Medicaid program, they may contact SCDHHS provider enrollment for verification. The HIT Division may also use licensure data supplied by the state South Carolina Labor Licensing and Regulation’s licensing board to confirm this designation. SCDHHS staff verify that the provider is a pediatrician during pre-payment review to validate that they qualify to use the reduced patient volume requirement.

4.12.4 Optometrist Eligibility Conditions
For purposes of the Promoting Interoperability Program, SCDHHS includes optometrists as physicians. The South Carolina Medicaid State Plan specifically provides that the term “physicians’ services” includes services of the type which an optometrist is legally authorized to perform.

4.13 PROVIDER MEDICAID ENROLLMENT REQUIREMENTS

4.13.1 SC Medicaid Requirements
One of the primary requirements to apply for an EHR incentive payment is to be an enrolled Medicaid provider. Incentive payments will only be made to providers who are properly licensed and enrolled. SCDHHS requires EPs and EHs to be enrolled in the South Carolina Medicaid Program to receive incentive payments. A provider must meet all the following enrollment and screening requirements to participate in the SC Medicaid program:

- Be licensed by the appropriate licensing body, certified by the standard-setting agency, and/or other pre-contractual approval processes established by SCDHHS.
- Continuously meet South Carolina licensure and/or certification requirements of their respective professions or boards to qualify for and maintain Medicaid enrollment.
- Comply with all federal and state laws and regulations currently in effect as well as all policies, procedures, and standards required by the Medicaid program.
- If eligible, obtain a National Provider Identifier (NPI) and share it with South Carolina Medicaid.
- Receive official notification of enrollment in the SC Medicaid program.

IHS providers are required to be licensed for SCDHHS Medicaid enrollment.

The Medicaid Claims Control System (MCCS) contractor manages provider enrollment and disenrollment for the South Carolina Medicaid program. MCCS maintains a proprietary system to verify all information collected and track provider enrollment. During enrollment, providers are also checked against the Office of the Inspector General (OIG) exclusion list and South Carolina specific exclusion lists. Providers enrolling in Medicaid must also complete a Disclosure of Ownership and Control Interest Statement. All names listed in the disclosure form are checked against the exclusion lists.

SCDHHS does not credential FFS providers. However, to ensure that providers are licensed, SCDHHS verifies licensure and status with the applicable state licensure board or the authorized approving entity.
such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). If SCDHHS is unable to verify a license through the standard process, the provider is required to submit a copy of the current, valid license.

### 4.13.2 Federal and State Database Exclusion Search
Federal and state database checks are conducted to confirm the identity and determine exclusion status for all the following:

- Providers, to include medical professionals and any other eligible professionals.
- Any person with an ownership or control interest.
- An agency or managing employee of the provider.

SCDHHS utilizes the following databases to verify the identity and determine the exclusion status of any individual or entity referenced above:

- Social Security Administration’s Death Master File
- National Plan and Provider Enumeration System (NPPES)
- Health and Human Services (HHS) OIG’s List of Excluded Individuals/Entities (LEIE)
- System for Award Management (SAM)
- SCDHHS Excluded Provider Listing
- Termination for Cause (formerly MCSIS)
- Any other databases as prescribed by CMS and/or SCDHHS

### 4.13.3 Managed Care Providers
For purposes of treating Medicaid patients, it is not required for managed care providers who do not participate in the fee-for-service (FFS) Medicaid program to enroll with South Carolina Medicaid. However, a provider must be enrolled in the South Carolina Medicaid program to participate in the SC PI Program.

South Carolina managed care plans initially credential providers upon enrollment with the managed care plan and then re-credential providers every three years. A provider must be licensed in accordance with the South Carolina Department of Labor, Licensing and Regulation (LLR) to enroll with a managed care plan.

### 4.13.4 SC Dept of LLR Licensure
Providers must be licensed by the South Carolina LLR to enroll with the South Carolina Medicaid program. The LLR publishes requirements by provider types that must be met to be licensed through the SC Department of Labor, Licensing, and Regulation. The sections below identify the licensure requirements and scope of practices defined under State law for SC PI Program EP provider types.

#### 4.13.4.1 Physician
- Submit a completed application to the South Carolina Department of LLR.
- Education requirements:
  - Graduated from a medical school located in the US or Canada that is accredited by the Liaison Committee on Medical Education; or
Graduated from a school of osteopathic medicine located in the US or Canada that is accredited by the Commission on Osteopathic College Accreditation; or

Graduated from a medical school located outside the US or Canada that possesses a permanent Standard Certificate from the Education Commission on Foreign Medical Graduates.

**Post-Graduate training requirements:**

- Graduates of approved medical or osteopathic schools located in the US or Canada must document the completion of a minimum of one year of postgraduate medical residency training approved by the board.
- Graduates of medical schools outside of the US or Canada must document a minimum of three years of progressive postgraduate medical residency in the US.
- Graduates who have completed at least two and one-half years of progressive postgraduate medical residency training in the program in which they are currently enrolled may be issued a temporary license upon certification from the program of their good standing and expected satisfactory completion.
- The board may accept a full-time academic appointment at the rank of assistant professor or greater in a medical or osteopathic school in the United States as a substitute for and instead of postgraduate medical residency training.

**Examination requirements:**

- All parts of the National Board of Medical Examiners Examination in approved sequence.
- All parts of the National Board of Osteopathic Medical Examiners Examination.
- Federation Licensing Exam (FLEX).
- United States Medical Licensing Examination (USMLE).
- Medical Council of Canada Qualifying Examination (MCCQE) in approved sequence.
- Comprehensive Osteopathic Medical Licensing Examination (COMLEX-USA).
- Written state examination of another state medical, osteopathic, or composite board prior to 1976 and current certification by a specialty board recognized by the American Board of Medical Specialties.
- Combinations of the FLEX, National Board of Medical Examiners, and USMLE acceptable to the Composite Committee of the USMLE and approved by the board. These combinations may be accepted only if taken before 1999.
- Special Purpose Examination or the Composite Osteopathic Variable Purpose Examination.

**4.13.4.2 Optometrist**

- Submit a completed Application for Examination and Licensure in Optometry to the S.C. Board of Examiners in Optometry.
- Graduated from a Council on Optometric Education accredited school and receive an O.D. degree.
- Complete and pass the S.C. Board of Examiners in Optometry Jurisprudence Examination.
- Licensure by Credentials Requirements:
o National Board of Examiners in Optometry (NBEO) scores showing passage of Part I, Part II, Part III, and the Treatment and Management of Ocular Disease Examination (TMOD).

o Verification of licensure from all states in which the Optometrist has ever held a license to practice optometry, including documentation of military service.

o Licensure by Endorsement Requirements.

o Currently hold an active and unrestricted license to practice optometry in another jurisdiction that includes authorization by law to treat glaucoma.

- Actively practice optometry at the therapeutic level for the past 12 or 24 months out of the 36 months immediately preceding this application.

- Verification of licensure from all states in which the Optometrist has ever held a license to practice optometry, including military service. TPA licensure must also be report on current practice state’s verification.

- Optometry school transcript from optometry school.

- Submit proof of passage of a practical examination that was required for licensure in another state.

- If applicable, have the National Board of Examiners in Optometry (NBEO) report examination scores directly to the Board office.

4.13.4.3 Dentist

- Submit a completed application to the South Carolina Department of LLR.

- Graduated from a dental program accredited by the American Dental Association (ADA).

- Successful completion of a Board-approved clinical dental licensure examination.

- Successful completion of the National Board Examination.

- Successful completion of the South Carolina jurisprudence examination.

- Personal interview with the Board, if requested.

- Applicants that have disciplinary action or malpractice case(s), pending or closed, will be considered for licensure on a case-by-case basis after receipt of all required materials.

- Must have a good moral character.

4.13.4.4 Certified Nurse Midwife

- Submit a completed application to the South Carolina Department of LLR.

- Verification of original state licensing examination.

- Competency Requirement (must complete at least one item from list below):
  o Completion of contact hours from a continuing education provider recognized by the Board.
  o Maintenance of certification or re-certification by a national certifying body.
  o Completion of an academic program of study in nursing or a national field.
  o Verification of competency and the number of hours practiced as evidenced by employer certification on a form approved by the Board.

- Legal Aspects in Nursing Courses- The State Board of Nursing for South Carolina will accept completion of a legal aspects in nursing course from a list of providers.
4.13.4.5 Nurse Practitioner
- Submit a completed application to the South Carolina Department of LLR.
- Verification of original state licensing examination.
- Competency Requirement (must complete at least one item from list below):
  - Completion of contact hours from a continuing education provider recognized by the Board.
  - Maintenance of certification or re-certification by a national certifying body.
  - Completion of an academic program of study in nursing or a national field.
  - Verification of competency and the number of hours practiced as evidenced by employer certification on a form approved by the Board.
- Legal Aspects in Nursing Courses- The State Board of Nursing for South Carolina will accept completion of a legal aspects in nursing course from a list of providers.

4.13.4.6 Physician Assistant (PA)
- Submit a completed application to the South Carolina Department of LLR.
- Complete educational program for PAs approved by the Commission on Accredited Allied Health Education Program.
- Successful completion of the NCCPA certifying examination and documentation that the individual possesses a current and active NCCPA Certificate.
- Certified that the applicant is mentally and physically able to engage safely in practice as a PA.
- No licensure, certificate, or registration as a PA under current discipline, revocation, suspension, probation, or investigation.
- Good moral character.
- Appear before a Board member or designee with the supervising physician and all original diplomas and certificates.
- Successful completion of an examination on the statutes and regulations regarding PA practices and supervision.
- Verification of out of state Licensure.
- Criminal Background Check

4.13.5 Hospital-based Status
To qualify as an Eligible Professional under the Medicaid EHR Incentive Program, a provider may not be "hospital-based." This is defined as any provider who furnishes 90% or more of covered professional Medicaid services in a hospital setting (inpatient, Place of Service (POS) 21; or emergency room, Place of Service (POS) 23) in the year preceding the payment year. The statutory definition of a hospital-based EP stipulates that to be considered a hospital-based EP, the EP must provide “substantially all” covered professional services in a hospital setting. “Services” does not mean “encounters” as defined for the EHR Incentive Program.

SCDHHS reserves the right to validate a provider's hospital-based status attestation along with other attestations through post payment audits. The HIT Division will validate a provider's hospital-based status by examining Medicaid fee-for-service and encounter claims by servicing provider for all visits, all
hospital visits, and all emergency room visits from the previous calendar year to determine if the provider's claims activity indicates hospital-based status. The report is produced by calendar year using the following criteria:

- Date of Service = 01/01/2017 to 12/31/2017 (DOS from previous CY; changes based on PY).
- Servicing Provider Type Fee for service and encounter claims included.
- Voids and deleted lines removed.
- Inpatient hospital and emergency room place of services identified using POS codes of “21” and “23”.
- Percentage calculation of total POS 21 and 23 services compared with services not performed in those locations.

The report includes the following fields:

- Provider ID, NPI, Provider Name
- Provider Type, Primary Specialty
- Total All Visits
- Total hospital inpatient and ER visits
- Total record count
- Total IP and ER record count
- % IP/ER visits compared to total visits
- % IP/ER record count

The HIT Division utilizes SCDHHS Medicaid claims data to make the determination of whether a provider should be considered hospital based. The HIT Division performs validation on all participants in the PI Program during pre-payment verification. The hospital-based status is checked for each program year. A previous failed validation determination does not exclude the provider from participating in future program years. A provider who was hospital-based for a previous program year, may be found not-hospital based for the current program year due to the opportunity for this status to change.

If 90% or more of a provider’s total claims for the entire calendar year were in a POS 21 or 23, the provider would be determined to be hospital-based but may qualify based upon one of the following exceptions for certain EPs:

- An EP who meets the definition of hospital-based EP specified in § 495.4 but who can demonstrate that the EP funds the acquisition, implementation, and maintenance of Certified EHR Technology, including supporting hardware and interfaces needed for MU without reimbursement from an EH or CAH, and uses such Certified EHR Technology in the inpatient or emergency department of a hospital (instead of the hospital's Certified EHR Technology), may be determined to be a nonhospital-based EP.

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17 Requirements for EPs seeking to reverse a hospital-based determination under § 495.4
4.13.6 Patient Volume Requirement

EPs may choose one (or more) clinical sites of practice to calculate their patient volume if patient volume is included from at least one site/location where the provider is adopting, implementing, or is equipped with CEHRT. The SLR requires the EP to enter the locations used and whether that location was equipped with CEHRT. The provider cannot progress in the SLR unless this requirement has been attested to.

The patient volume calculation does not need to be across all an EP’s sites of practice. However, at least one of the locations where the EP is adopting, implementing, upgrading, or meaningfully using CEHRT should be included in the patient volume. If an EP practices in two locations, one with certified EHR technology and one without, the EP should include, at minimum, the patient volume at the site that includes the certified EHR technology. When making an individual patient volume calculation (i.e., not using the group/clinic proxy option), an EP may calculate across all practice sites, or just at the one site. Providers should try the patient volume calculation to determine which allowable combination would allow them to achieve the thresholds.

4.13.6.1 Location with Certified EHR Technology

A practice or location is considered equipped with certified EHR technology if the record of the patient encounter that occurs at that practice/location is created and maintained in CEHRT (77 FR 53981). Equipped with CEHRT would include:

- CEHRT could be permanently installed at the practice/location.
- The EP could bring CEHRT to the practice/location on a portable computing device.
- The EP could access CEHRT remotely using computing devices at the practice/location.

Generally eligible professionals who practice at outpatient locations (other than POS 21 and POS 23) equipped with EHR technology certified to the criteria applicable to an inpatient setting would therefore, not be included in the numerator of the EPs calculations, if the location is not equipped with all the capabilities necessary for an EP to satisfy the MU objectives and measures. However, this location would be included in the denominator to determine whether the EP’s outpatient encounters meet the 50% threshold. EPs who practice at locations that host some, but not all, aspects of ambulatory certified EHR technology, must have access to ambulatory certified EHR technology that covers all the functionalities necessary for the eligible professional to meet meaningful use at that location to consider the location equipped. A location that does not provide access to an electronic prescribing module, for example, could not be considered equipped with certified EHR technology.

4.13.7 Patient Volume Threshold Requirement

Beginning with program year 2017, SCDHHS allowed patient volumes to be rounded up by half a percentage point (0.5%). SCDHHS anticipates that the additional allowance will the qualification of practices with patient volumes within 1 percentage point of meeting the requirement. This change effectively makes the individual or group patient volume minimum thresholds 29.5% for providers.
seeking to use Medicaid or Needy patient volume; 19.5% for pediatricians; and 9.5% for hospitals. The SLR has been configured to accept and automatically round the newly allowed amounts up to the following:

- 30% for providers attesting to Medicaid or Needy patient volume who are not pediatricians.
- 20% reduced requirement for pediatricians* attesting to Medicaid or Needy patient volume.
- 10% for EHS.

Medicaid patients, patients enrolled in Medicaid MCOs, and dually-eligible members are included in the calculation to determine that the threshold of patient volume has been met for the Medicaid incentive.

4.13.8 Zero-Based Claims

EPs can include zero-based claims in patient volume calculations if the service was provided to an individual enrolled in Medicaid.

EHs may NOT include zero-based claims in their calculations.

Zero-pay claims may include any of the following:

- Claims denied because the Medicaid beneficiary has maxed out the service limit.
- Claims denied because the services weren’t covered under the State’s Medicaid program.
- Claims paid at $0 because another payer’s payment exceeded the Medicaid payment.
- Claims denied because they were not submitted timely.

Providers must retain auditable documentation to establish that these individuals were enrolled in Medicaid at the time of service in addition to other documentation to adequately support their calculations.

4.13.9 Out-of-State Encounters

SCDHHS allows EPs to include encounters from out-of-state Medicaid recipients when calculating patient volume or MU measures. To calculate patient volume using this option, the EP would add out-of-state Medicaid encounters to in-state Medicaid encounters for the numerator and add out-of-state total patient encounters to in-state total patient encounters for the denominator. As with all other data to which EPs attest, EPs must be able to supply an auditable data source that supports their calculations.

The SLR requires that each provider enter their practice location address information for all locations they practice at and indicate by selection which of those locations contributed to patient volume and/or MU measure data.

4.13.10 Medicaid and Needy Patient Encounters

Needy Patient Volume uses encounters with Needy individuals defined as individuals receiving uncompensated care, or individuals receiving care at no cost or reduced cost based on a sliding scale. Needy individuals can be included in the patient volume calculations for EPs practiced predominantly at FQHCs and RHCs.

Medicaid and Needy encounters can be combined in the numerator, but the provider must be eligible to attest to “needy” patient volume to include needy patient encounters. If the EP selects “needy patient
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4.13.11 Flexibility to Select a Patient Volume Period

SCDHHS elected to allow providers to choose a 90-day patient volume period from either the calendar year preceding the program year they are attesting to; OR from within the twelve months prior to submitting their attestation.

Beginning and end dates for the 90-day patient volume reporting period must fall within the following:

- The 12 months prior to attestation; or
- The calendar year prior to the attestation program year.

The prior calendar year is always the year preceding the program year being attested to. For example, if the program year is 2018, then the prior calendar year is 2017. The SLR is configured to check the date the provider entered for their patient volume start date to make sure it fits the parameters of the two selections. Since the 12 months prior to attestation is a sliding window, providers must be sure they submit their attestation to take advantage of the date they wish to use.

Providers may not reuse patient volume data reported in a paid attestation from a prior program year to attest to a subsequent program year. The SLR prevents this “recycling” of data by automatically checking data from the EP’s paid attestations. If a provider attempts to reuse patient volume data, the SLR will produce an error message and prevent the provider from advancing with their attestation. The provider must then select another patient volume reporting period.

4.13.12 Flexibility to Select Patient Volume Calculation Option

SCDHHS opted to allow EPs to use the two options listed in the final rule. SCDHHS has FFS Medicaid and managed care models, so SCDHHS desired to support providers in the most flexible way for determining patient volume by making both patient volume calculations available.

SCDHHS elected to allow providers to choose a 90-day patient volume period from either the calendar year preceding the program year they are attesting to; OR from within the twelve months prior to submitting their attestation.

4.13.12.1 Option One (Medicaid Patient Volume)

The first option uses all patient encounters attributable to Medicaid (and Needy if applicable) during a 90-day period in either the twelve months prior to the date the of attestation, OR from within the calendar year prior to the program year they are attesting to. Figure 18 illustrates the Option One Patient Volume formula. Please see section 4.13.13 for group patient volume criteria.

Figure 18: Option One Patient Volume Formula:
4.13.12.2 Option Two (Patient Panel)
The second option (managed care option) uses the total Medicaid patients assigned to the EP, with at least one encounter taking place during the calendar year preceding the start of the 90-day period, plus unduplicated Medicaid encounters in the same 90-day period. Figure 19 illustrates the Option Two Patient Volume formula.

Figure 19: Option Two Patient Volume Formula:

Providers’ patient volume attestations are audited through the standard post payment audit process.

4.13.13 Group Proxy Patient Volume
SCDHHS has defined a group practice as a group of healthcare practitioners organized as one legal entity under one TIN.

Per the final rule\textsuperscript{18}, clinics and group practices can opt to use the practice/ clinic’s group Medicaid, or needy patient volume, under three conditions:

1. Clinic or group practice’s patient volume is appropriate as a patient volume methodology calculation for the EP (for example, if an EP only saw Medicare, commercial, or self-pay patients, this is not an appropriate calculation).

2. Auditable data source exists to support the clinic’s patient volume determination.

\textsuperscript{18} Reference [495.306(h)]
3. Practice and EPs used the same methodology in each year (in other words, clinics could not have had some of the EPs using their individual patient volume for patients seen at the clinic, while others used the clinic-level data).

If a clinic or group practice chooses group methodology for the patient volume calculation, an EP in that clinic or group may choose to use the clinic volume as a proxy for their own; or, the EP may choose to attest to his or her own individual patient volume, so long as their individual volume calculation only includes the EP's encounters that were not included in the clinic’s volume calculation. The clinic or group practice is also required to use the entire practice’s patient volume and not limit it in any way.

An EP whose date of hire by a clinic/group fell after the 90-day period selected for the clinic/group patient volume calculation can use the clinic/group patient volume as a proxy for his or her own patient volume without needing to recalculate the volume, if it is appropriate as a patient volume methodology calculation for the EP. For example, a newly hired EP who saw Medicaid patients may utilize the clinic’s calculated Medicaid patient volume as a proxy for his or her own.

Groups/clinics may recalculate group patient volume and use different group volumes and start dates for the same program year under the following condition:

- The group/clinic chooses a patient volume start date from within the 12 months prior to attestation and has providers attest on different dates and therefore, is not able to use the same patient volume start date due to the SLR preventing them from selecting a date that is not within 12 months of that specific provider’s attestation submission.

A newly hired EP may only utilize clinic needy patient volume if the EP met the requirement of having practiced predominantly in an FQHC or RHC:

Providers in FQHCs or RHCs will be required to use cost reports or other auditable records to identify bad debt. The provider is responsible for adjusting the uncompensated care individuals encounter information used in the calculation of the FQHC and RHC EP patient volume calculation to account for bad debts when they file their initial and subsequent patient volume attestations. As with all other attestations, this information is subject to audit.

The Division of Audits uses the MMIS as its primary resource for verifying patient volume. Both random and targeted audits are conducted to verify the patient volume data to which EPs attested.

SCDHHS may use multiple data sources to identify sufficient, appropriate evidence, including but not limited to, the following:

- MMIS
- Provider enrollment files maintained by the MCCS
- MCO database
- SCDHHS Division of Program Integrity State exclusion list, State licensing boards
- ONC Certified Health IT Product List
- Data provided through SCORH
- Data provided through the FQHC association SCPHCA
- Healthcare Cost Report Information System (HCRIS)
4.13.14 Eligibility Criteria for EHs

Hospitals eligible for the incentive program include acute care hospitals, CAHs and children’s hospitals.

An acute care hospital is defined as a health care facility where the average length of patient stay was 25 days or fewer and a has a Medicare Claim Control Number (CCN) with the last four digits in the series from 0001 through 0879 and 1300 through 1399. To validate the average length of stay requirement of 25 days or fewer for the acute care hospitals, SCDHHS’ Bureau of Reimbursement Methodology and Policy utilizes the applicable statistics of worksheet S-3, Part I of the most recently filed South Carolina Medicare/Medicaid cost report.

A children’s hospital is defined as a separately certified children’s hospital with a CCN with the last four digits in the series from 3300 through 3399.

4.13.14.1 Patient Volume

SCDHHS selected the option listed in the final rule and is not proposing any alternative methods to calculate patient volume for EHs. The EH Medicaid patient volume threshold requires that EHs must have had a minimum of 10% (SCDHHS allows rounding up from 9.5%) of all patient encounters attributable to Medicaid during a 90-day period in the most recent fiscal year prior to the year of reporting.

The following formula is used to calculate patient volume:

\[
\text{Total Medicaid patient encounters in any representative, continuous 90-day period in the preceding fiscal year divided by total patient encounters in that same 90-day period.}
\]

For purposes of this formula, the following definitions applied:

- **A representative, continuous 90-day period** is defined as three continuous calendar months chosen by the general acute care hospital that was representative of its normal operations. For example, if the selected period included a short term, one-time temporary Medicaid outreach program to meet the patient volume thresholds, then it would not support the volume calculation. Annual outreach events would still be representative.

- For purposes of calculating the volume, the hospital must have applied the following definitions of Medicaid encounters in its calculation, and include both inpatient and emergency department encounters:
  - A Medicaid encounter means services rendered to an individual per inpatient discharge where:
▪ Medicaid (or a Medicaid demonstration project approved under section 1115 of the Act) paid for all or part 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.
  o A Medicaid encounter means services rendered in an emergency department on any day where:
    ▪ Medicaid (or a Medicaid demonstration project approved under section 1115 of the Act) paid for all or part 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.

Qualifying Title XIX (Medicaid) eligible individuals included both in-state and out-of-state individuals covered/enrolled in the following:

▪ Medicaid fee for service program (includes the MHN enrollees) - South Carolina Solutions is MHN that only serves Medically Complex Children’s Waiver (MCCW) participants.
▪ Medicaid managed care organizations - South Carolina Medicaid MCOs: First Choice by Select Health of South Carolina, Absolute Total Care, BlueChoice HealthPlan Medicaid, Molina Healthcare of SC, and WellCare.
▪ Medicaid prepaid inpatient health plans (PIHPs) - There are no Medicaid PIHPs in South Carolina.
▪ Medicaid prepaid ambulatory health plans (PAHPs) - There are no Medicaid PAHPs in South Carolina.
▪ Medicaid PACE Programs - SCDHHS required the hospitals that contracted with the two PACE Programs operating within the state to provide the number of Medicaid inpatient hospital days served during the applicable hospital fiscal year end reporting period that was used to determine the incentive payments to the qualifying hospitals.
▪ Medicaid with commercial insurance carrier.
▪ Dual eligible (Medicaid/Medicare) individuals (including those individuals with claims where the Medicare paid amount exceeded the Medicaid allowed amount).

Hospitals annually attest to meeting the volume requirement of ten percent (10% - SCDHHS allows rounding up from 9.5%) in accordance with the methodology outlined above to continue eligibility in the South Carolina Medicaid EHR Incentive Program. Hospitals can change their 90-day consecutive period each year if it was representative of its normal operations.

For FY2011 EH attestations, the SCDHHS employed the following procedures to verify the patient volume encounter data submitted by hospitals:

▪ Hospitals were required to submit the following summary encounter information using allowable inpatient discharges and ER visits as the basis for the three-month (i.e. 90 day) period for both in state and out of state qualifying Medicaid eligibles. Upon notification of an EH submitted attestation, the SCDHHS contacted the EH representative to request completion of the SCDHHS HIT Volume Calculation Worksheet to separately identify the South Carolina Medicaid eligibles from the out of state Medicaid eligibles, and report the encounters by type.
The EH representative was also required to complete the worksheet entitled “HIT Hospital Worksheet” for the SCDHHS to ensure that all discharges reported were included in the Medicaid patient volume calculation. Additional information was requested as needed to validate the EH information with SCDHHS internal data.

- Hospitals were required to submit excerpts from their monthly Board Meeting Minutes or their monthly financial statements to support the total number of inpatient discharges and ER visits incurred during the three-month period used for patient volume qualification as identified in the procedure above. EHS were required to submit this information directly to the SCDHHS HIT Division with the information described in the previous paragraph.

- The SCDHHS determined the number of SC Medicaid eligible encounters (i.e. inpatient discharges and ER visits) by using its MMIS paid claims data and its Medicaid MCO encounter data for the three-month qualification period used by the provider to perform a reasonableness check on that data submitted by Medicaid EHS. If the in-house Medicaid MCO encounter data could not be used to determine the total number of encounters incurred by the hospital for analysis purposes, the SCDHHS sought this information from the applicable Medicaid MCO(s) and reconciled accordingly with the qualifying hospital.

4.13.15 EH Checklist
The Bureau of Reimbursement Methodology and Policy developed a checklist to assist EHS that were seeking incentive payments. This checklist was distributed through the SCHA to EHS and includes the following criteria for hospitals seeking Medicaid PI Program Incentive Payments

- Has your hospital’s fiscal year (HFY) end 2010 Medicare/Medicaid cost report been filed with the SCDHHS?
- Does the total number of discharges reported on your HFY 2010 Medicare/Medicaid cost report (W/S S-3, Part I, Line 1, Columns 14 and 15) include newborn discharges as well as discharges relating to psych or rehab units (if applicable)? If the answer is yes, identify the total number of newborn discharges as well as the total number of psych discharges as well as rehab discharges.

- Has your hospital completed the “Patient Volume” page in the State Level Repository and met the minimum Medicaid Patient Volume requirement of ten percent (10% or 9.5% if rounded up) for a consecutive ninety (90) day period which has been defined as three (3) consecutive calendar months incurred during 2010 FFY?
- If your hospital met the minimum 9.5% (the SLR will automatically round up to 10%) Medicaid patient volume requirement, SCDHHS will need the following information to verify the statistical information used in the determination of your hospital’s Medicaid Patient Volume percentage.

The hospital was required to submit summary encounter information consisting of both inpatient discharges and ER visits as the basis for the three-month (i.e. 90 day) period for both in state and out of state qualifying Medicaid eligibles using the format prescribed under the file named “HIT Volume Calculation.” The summary encounter information should separately identify the South Carolina Medicaid eligibles from the out of state Medicaid eligibles and be reported by type of SC Medicaid eligible from the list below:

- Medicaid Fee for Service Program
- Medicaid MCOs
- Medicaid PIHPs
- Medicaid PAHPs
Medicaid PACE Programs
Medicaid with commercial insurance carrier (only discharges and ER visits where Medicaid paid for all or part of the service)
Dual Eligibles (should include all dual eligible discharges and ER visits billed to Medicaid since Medicaid either paid for all or part of the service via co-payments, cost sharing or up to the Medicaid allowed amount, or for $0 paid claims where Medicaid paid for all or part of the premiums)
Total encounters provided during the three-month period

Medicaid newborn discharges as well as psych and rehab discharges needed to be reported separately from Medicaid acute care discharges. Therefore, the hospital had to complete the file named “HIT Hospital Worksheet” to ensure that all discharges reported could be included in the Medicaid patient volume calculation.

Once the Medicaid patient volume data had been received, the SCDHHS initiated the calculation of the aggregate EHR incentive payment amount for the hospital (if the hospital had met the 10% Medicaid patient volume requirement) and submitted the payment information to the EH for review and attestation purposes.

For Participation Year FY2011 EH attestations, the SCDHHS Bureau of Reimbursement Methodology and Policy prepared an Incentive Payment Calculation Worksheet that displayed all the data for an EH’s aggregate payment calculation and sent that to the EH authorized representative. The worksheet instructed the EH to verify the data and input information to differentiate charity care and bad debt. The EH representative then returned to the EH attestation in the SC SLR, entered the verified data into the aggregate incentive payment calculation fields, and re-submitted the EH attestation. The EH also uploaded documentation that supported the attestation of patient volume.

For Participation Year 2012 and beyond, the SLR offered the functionality such that an EH uploaded the patient volume documentation, and attested to the aggregate incentive data, when first submitting an attestation.

4.13.16 EP and EH Data
The SLR gathers and displays the data elements that are extracted and sent to NLR. Different views are shown depending on whether the user had been designated an EP or an EH; and, in the case of an EP, the decision tree selections of the EP pertaining to patient volume base (Medicaid or needy patient; individual or group volume), and volume calculation option (fee-for-service or panel).

4.13.17 Patient Volume
The patient volume section includes the needed data fields as well as definitions for key terms and some policy guidance. The beginning and the ending dates are gathered so the system can run an automatic check on the date and verify basic data parameters.

4.14 ATTENTION OF ADOPT, IMPLEMENT, UPGRADE (AIU)
EPs and EHs must attest to AIU of certified EHR technology in their first payment year to be eligible for an incentive payment (provided the other eligibility criteria are met).
▪ **ADOP**T**ION** is defined as acquisition, purchase, or secured access to certified EHR technology. This evidence would serve to differentiate between activities that may not result in installation (for example, researching EHRs or interviewing EHR vendors) and actual purchase, acquisition, or installation.

▪ **IMPLEMENTATION** is defined as the provider has installed certified EHR technology or has commenced utilization of certified EHR technology in his or her clinical practice. Implementation activities would include staff training in the certified EHR technology, the data entry of their patients' demographic and administrative data into the EHR or establishing data exchange agreements and relationships between the provider's certified EHR technology and other providers, such as laboratories, pharmacies, or HIEs.

▪ **UPGRADE** is defined as the provider moving from non-certified to certified EHR technology, or expansion of the available functionality of certified EHR technology.

The EP or EH must attest to the AIU of certified EHR technology and retain evidence that demonstrates the EP/EH's legal or financial commitment to the AIU of certified EHR technology prior to the attestation. This evidence would serve to differentiate between activities that may not result in AIU (for example, researching EHRs, interviewing EHR vendors, contract proposals) and an actual commitment to the AIU. Documentation of the legal or financial commitment may include, but is not limited to:

▪ Invoice and receipt for payment
▪ Purchase agreement
▪ License agreement
▪ Binding contract (signed by both parties)

Should the documentation not specify the certified EHR technology product (product name and version), a letter from the certified EHR technology vendor that clarifies the product name and version may be retained along with the documentation as a supplement. However, such a letter will not be regarded as stand-alone evidence of AIU.

**4.15 Medicare Payment Adjustments**

Congress mandated that an EP must be a meaningful user to avoid the payment adjustment; therefore, receiving a Medicaid EHR incentive payment for AIU (adopting, implementing, or upgrading) to certified EHR technology will not exempt an EP from the Medicare payment adjustment.

EP provider types shared between the Medicare EHR Incentive Program and the PI Program include Doctor of Medicine or Osteopathy, Doctor of Optometry, and Doctor of Dental Surgery or dental medicine. These EP types, even if registered in the Medicaid EHR Incentive Program, must demonstrate MU under one of the EHR Incentive Programs to avoid a Medicare payment adjustment. Medicaid EP who do not furnish covered professional services under Medicare are not subject to these downward payment adjustments.

If the time interval for approving the MU attestation and communicating approval to CMS results in CMS initially making Medicare payment adjustments, the adjustments will have to be corrected by CMS later.
4.16 **HARDSHIP EXCEPTIONS**
EPs may apply to CMS for hardship exceptions to avoid the payment adjustments. CMS will only grant hardship exceptions under specific circumstances and only if CMS determines that the EP has demonstrated that those circumstances pose a significant barrier to achieving MU.

4.17 **MEANINGFUL USE**

4.17.1 **Attestation of Meaningful Use**
In their first year of participation in the Medicaid EHR incentive program, at minimum, Medicaid providers must attest to AIU. Medicaid providers who met the Stage 1 meaningful use criteria were able to attest to meaningful use in the SLR beginning early 2012. Dually eligible hospitals must meet meaningful use for the Medicare EHR Incentive Program in their first year of participation. SCDHHS launched a provider education campaign on meaningful use attestation in early 2012 to ensure providers are educated and informed of any upcoming changes to the attestation process. SCDHHS will continue to update its SLR guides to include step-by-step guidance on the meaningful use attestation process.

SCDHHS is modeling its meaningful use attestation module in the SLR after the CMS Registration and Attestation System. EPs and EHs will attest to each measure in the SLR by entering numerator, denominator, and exclusion information. The format of the SLR site will allow for each measure to be displayed individually on a page. If a provider meets the exclusion criteria for a specific measure, the provider will be able to attest to meeting the exclusion criteria in the SLR.

Once an EP or EH completes the meaningful use attestation, the user will be directed to a summary screen of all attestation information. Each measure will have a “pass” or “fail” indicator based upon the information entered. In leveraging the format that CMS uses for Medicare meaningful attestations, SCDHHS hopes to provide a clear and user-friendly process. Providers who switch from the Medicare Incentive Program to the Medicaid Incentive Program will have the benefit of using similar systems to attest to meaningful use.

Beginning with Program Year 2017, providers must attest to each of the following eight statements to submit a meaningful use attestation:

1. Acknowledges the requirement to cooperate in good faith with ONC direct review of your health information technology certified under the ONC Health IT Certification Program if a request to assist in ONC direct review is received.

2. If requested, you will or have cooperated in good faith with ONC direct review of his or her 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 EP in the field.

3. Did not knowingly and willfully act (such as to disable functionality) to limit or restrict the compatibility or interoperability of certified EHR technology.
4. 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, connected in accordance with applicable law.

5. 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, compliant with all standards applicable to the exchange of information, including the standards, implementation specifications, and certification criteria adopted at 45 CFR part 170.

6. 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, implemented in a manner that allowed for timely access by patients to their electronic health information.

7. 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, 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.

8. Will or have 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.

The statements below are optional and are NOT required for meaningful use demonstration. Attesting to statements #9 and #10 is not required to receive an incentive payment.

9. Acknowledges the option to cooperate in good faith with ONC-ACB surveillance of his or her health information technology certified under the ONC Health IT Certification Program if a request to assist in ONC-ACB surveillance is received.

10. If requested, will or have cooperated in good faith with ONC-ACB surveillance of his or her 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 capabilities as implemented and used by the EP in the field.

Meaningful use attestations will be verified through a mix of pre- and post-payment activities. SCDHHS will work with DHEC and ORS to verify public health measures. As SCDHHS identifies other means of pre-payment verification, they will be included in the pre-payment verification activities. All other aspects of meaningful use attestations will be verified post-payment via audits.
4.17.2 CEHRT Location Patient Encounter Threshold

To demonstrate meaningful use, EPs who practice in multiple locations will need at least 50 percent of their patient encounters during the provider selected meaningful use reporting period to take place at locations with certified EHR technology. An EP who does not conduct at least 50 percent of their patient encounters in any one practice/location would have to meet the 50 percent threshold through a combination of practices/locations equipped with CEHRT. Eligible professionals who meet this requirement need to calculate their meaningful use data using only patient encounters at locations with certified EHR technology. South Carolina collects information about meaningful users' practice locations to validate this requirement in an audit.

A practice or location is considered equipped with certified EHR technology if the record of the patient encounter that occurs at that practice/location is created and maintained in CEHRT\(^\text{19}\) equipped with certified EHR technology meeting any of the following criteria:

- CEHRT is permanently installed at the practice/location.
- The EP brings CEHRT to the practice/location on a portable computing device.
- The EP accesses CEHRT remotely using computing devices at the practice/location.

Once an eligible professional has determined which locations are equipped with certified EHR technology and confirmed that at least 50 percent of their patient encounters occurred at those locations, the eligible professional can then calculate meaningful use measures across those locations.

This policy is applicable for all practice settings including long term care. Eligible professionals can add the numerators and denominators calculated by each certified EHR system to arrive at an accurate total for the numerator and denominator of the measure.

The EP must calculate their meaningful use measures across all areas with CEHRT. If an eligible professional is unable to obtain MU data from a given location, the eligible professional is still required to include patients seen during the MU reporting period at that location in the denominator of MU objectives. However, without meaningful use data available, the eligible professional will not be able to include actions taken for those patients in the numerator of MU objectives. If the eligible professional is still able to meet all the measures after including patients seen in the denominator of measures, then meaningful use can be successfully demonstrated.

4.17.3 State-Specific Requirement for Meaningful Use

The final rule on the EHR Incentive Program gives states the opportunity to require any of the four-menu set public health measures as a core requirement. SCDHHS and DHEC met and agreed to require the MU measure on immunization reporting as a core requirement for the South Carolina PI Program. This Stage 1 measure requires EPs and EHs to attest to the following:

\(^{19}\) Reference 77 FR 53981
- Performed at least one test of certified EHR technology’s capacity to submit electronic data to immunization registries and follow up submission if the test is successful (unless none of the immunization registries to which the EP, EH or CAH submits such information have the capacity to receive information electronically).

Two significant factors contributed to SCDHHS’ decision to include this MU measure as a state-specific requirement:

- **Immunization Registry Readiness:** The immunization registry which is currently maintained by SCDHEC consists of both CARES, the history and analytics repository for registry, and IIS, the SCDHEC HL-7 Enabled IIS providing the messaging infrastructure. IIS meets the requirements of the CDC Implementation Guide for Immunizations Data Transactions, Version 2.2. It can process the standard transactions VXQ, VXR, VXX, and VXU.

- **State Law to Establish Statewide Immunization Registry:** H*4446 was passed on June 1, 2010 and requires SCDHEC to establish a statewide immunization registry, to require health care providers to report the administration of immunizations to the department, and to provide civil penalties for violators. Appendix D: H4446 to Establish Statewide Immunization Registry includes the full statute text.

SCDHHS expects that the SC requirement for providers to report the administration of immunizations to SCDHEC will be reasonable to achieve as the provider meets the required MU criteria.

SCDHHS, SCDHEC, and other stakeholders will collaborate on developing a communication plan to inform providers on this additional state-specific MU measure. SCDHHS will ensure providers are informed in advance of all decisions relating to the South Carolina PI Program.

**4.17.4 Meaningful Use Reporting Period**

The EHR Reporting Period, sometimes referred to as the Meaningful Use Reporting Period, is the minimum 90-day reporting timeframe that the provider selects to report their MU activities which occurred during the program year they are attesting to. For example, a provider would need to select an MU reporting period from calendar year 2018 when attesting to program year 2018. The beginning and end date must fall within the calendar year. This period can be different from the provider’s patient volume period.

**4.17.5 Clinical Quality Measures (CQMs)**

CQMs are tools that help measure and track the quality of health care services that EPs, EHs, and CAHs provide. Measuring and reporting CQMs helps to ensure that the health care system is delivering effective, safe, efficient, patient-centered, equitable, and timely care. CQMs measure many aspects of patient care, including:

- Patient and Family Engagement
- Patient Safety
- Care Coordination
- Population/Public Health
- Efficient Use of Healthcare Resources
- Clinical Process/Effectiveness
EPs attesting for any MU stage are required to report 6 of 53 CQMs. EPs are required to select and report data for the CQMs that best apply to their scope of practice and/or unique patient population.

Practice locations may choose to implement different Public Health Reporting measures and/or report on different CQMs. The eligible professional should combine data for measures and CQMs across locations where possible, and report on measures and CQMs from the location with the greatest number of patient encounters when other locations chose different measures and/or CQMs. Providers should maintain documentation of the specific location(s) used for the CQM reporting.

Providers will not be required to submit electronic CQMs (known as eCQMs) because SCDHHS does not currently provide the capability to do so. Providers must continue to input their CQM data manually into the SLR attestation to meet the requirement. SCDHHS is currently working with its stakeholders to identify a solution that will lessen the provider burden to submit MU data and leverage opportunities to collect other quality measures. The state will utilize contract staff to make the necessary adjustments to the SLR as data collection and attestation modifications are identified.

### 4.17.6 CQM Reporting

For 2012, SCDHHS accepted attestations for clinical quality measures in the SLR via the meaningful use attestation module. For future years of clinical quality measures, SCDHHS will be developing a more detailed plan to collect clinical quality measures.

The SCDHHS Medicaid DSS stored the clinical quality measure components (i.e. numerator, denominator, exceptions) as submitted by providers. SCDHHS engaged its contractor, Thomson Reuters, to develop a solution for clinical quality reporting. This submission utilized a standard format agreed to by suppliers of certified EHRs or a format supplied by SCDHHS. The retention of these summary measures in the DSS facilitated the development of a quality measures baseline, forming a basis for comparison with future progress.

Thomson Reuters combined clinical data with administrative and eligibility data in the DSS. This approach provided SCDHHS with enhanced capabilities for program management and population analytics including the following operational and analytic capabilities:

- Report on clinical data quality as EPs and EHs connected to the HIE.
- Track the relationship between the quality of care and the cost of care.
- Experiment with emerging clinical quality measures.
- Identify data quality and program integrity issues by analytically linking clinical data to administrative data.
- Enable analysis of Accountable Care Organizations/Programs.
- Identify trends in population health.
- Support patient-centric analytics (risk stratification, health assessment, episodic analysis).
- Perform ad hoc analyses in support of emerging issues & questions.
- Quickly trigger early patient interventions indicated by clinical data.
4.17.7 CQM Reporting Period
For Program Years 2017, the final rule was changed to allow all EPs to report CQMs for a 90-day period. After program year 2017, all EPs and EHs participating in the SC PI Program will need to report CQM data for the entire program year as part of their attestation.

Table 8 below identifies the CQM reporting requirements for program years 2017 and 2018. Although the requirements are different for reporting CQM data via attestation and electronically, South Carolina does not currently support electronic reporting of CQM data. As a result, eligible providers and hospitals must adhere to the Attestation requirements.

### Table 8: Clinical Quality Measures Reporting Requirements

![Table 8](image-url)

4.18 Incentive Payment Calculation and Processing

4.18.1 Conditions for Payment
SCDHHS began issuing incentive payments in March 2011 to providers that met the program requirements. Prior to SCDHHS making a payment to an EP or EH, the following conditions must be met:

- At minimum, the provider must have adopted, implemented, or upgraded to certified EHR technology for payment year 1. Beginning in program year 2018, a provider must successfully meet MU measures for the applicable stage, depending on the program participation year.
- Provider must not appear on the OIG or South Carolina sanctions list.
- Provider must not have already received a payment from South Carolina or another state in the current program year.
- Both the Provider and the Payee must be actively enrolled in South Carolina Medicaid at the time of attestation.
- Beginning with program year 2017, a provider must have a recorded incentive payment on file which was not recouped or returned to begin an attestation.

When a provider is under suspicion of fraud, the application is pended until further information is available concerning their standing as a Medicaid provider. If the fraud investigation results in no findings, the provider application can be processed for payment (assuming all other eligibility criteria are satisfied). If the provider is proven guilty and excluded from Medicaid program participation, the provider will also be excluded from participation in the SC PI Program until the exclusion expires.
4.18.2 Incentive Payments
With the passage of the ARRA of 2009, CMS implemented incentive payments to EPs and EHS participating in Medicare and Medicaid programs that are meaningful users of certified Electronic Health Record technology.

The incentive payments are not a reimbursement. They are intended to encourage EP and EHS to adopt, implement, or upgrade to certified EHR technology and use it in a progressively more advanced meaningful manner in patient care.

The last year to begin participation in the Medicaid EHR incentive programs was PY 2016.

4.18.2.1 EHR Incentive Payment Legislation
CMS published a final rule in October 2015, the Electronic Health Record Incentive Program – Stage 3 and Modifications to MU in 2015 through 2017, specifying criteria for Stage 3 and Modifications to MU in 2015-2017 for the EHR Incentive Programs.

CMS finalized the Medicare Quality Payment Program in October 2016. In November 2016, CMS finalized updated payment rates and policy changes in the Hospital Outpatient Prospective Payment System (OPPS) and Ambulatory Surgical Center (ASC) Payment System for CY 2017. This legislation included modifications to the EHR Medicaid Incentive program that impacted the reporting periods for PY 2017 eligible providers and now allows for a MU reporting period of 90 days for program years 2017 and 2018.

4.18.3 Incentive Payment Amounts
An EP may receive Medicaid EHR incentive payments over 6 payment years up to a maximum of $63,750 combined total payment. Medicaid EHR incentive payments do not need to be consecutive and therefore, an EP can skip years, although this is not advised if an EP is wishing to maximize their incentive payout. No EP may begin the program after 2016.

The incentive amounts based on EP type and year of participation are as follows:

- **Payment Year 1**: $21,250 ($14,167 for Pediatricians qualifying with reduced Medicaid volume\(^{20}\)).
- **Payment Years 2-6**: $8,500 per year ($5,667 for Pediatricians qualifying with reduced Medicaid volume).

Under no circumstance may a provider participate for more than six participation years or receive more than $63,750 in EHR incentive payments. The SLR schema communicates with the NLR to ensure that a provider may not receive more than an $8500 payment for participation years 2-6. A manual check is performed by SCDHHS staff during the pre-payment process to ensure that the provider is receiving the correct incentive amount and has not exceeded six participation years. Incentive Payments will be made to the designated entity as established by the EP/EP assignee through the CMS Registration Website. Both the provider and payee must be actively enrolled in S.C. Medicaid to receive an incentive payment.

---

\(^{20}\) Pediatricians who can meet the 30% (29.5 rounded up also qualifies) can claim the higher incentive payment amounts.
In the past, Medicaid agencies were required to verify that an EP demonstrated “net allowable costs, contributions from other sources, and a 15% provider contribution to participate in the Medicaid EHR Incentive Program. However, as detailed in the State Medicaid Director’s Letter dated April 8, 2011, the Medicare and Medicaid Extenders Act of 2010 now provides that an EP has met this responsibility, if the incentive payment is not more than 85% of the Net Average Allowable Costs (NAAC). This amount equals $21,250 for payment year one. The documentation requirement for EP to demonstrate 15% of the NAAC contribution is eliminated.

4.18.4 Issuance of Incentive Funds to EPs and EHs
The SCDHHS HIT Division issues incentive funds by way of electronic credit adjustments processed by the legacy MMIS system. Each user that creates adjustments in the system has a unique ID for tracking purposes, and incentives are tracked with new fund codes. Payments are made via electronic funds transfer (EFT).

As providers are determined eligible to receive payments, their incentive payments are incorporated into the weekly payment schedule within 45 days of receipt of the transaction from the CMS NLR that denotes the provider’s account as locked for payment (the D16Response). The HIT Division notifies the provider of the payment via email. The SLR submits provider payment data to the NLR. No incentive payments are disbursed through Medicaid managed care plans.

Payments under the Medicare and Medicaid EHR Incentive Programs are treated like all other income. The incentive payment process does not supersede any state or federal laws requiring wage garnishment or debt recoupment. If there is a legal basis for the state or federal government to net or recoup debts, such authority will apply to incentive payments, just as it applies to all other income.

SCDHHS will suspend all Medicaid payments to a provider after the agency, in conjunction with the Medicaid Fraud Control Unit, determines there is a credible allegation of fraud. In situations where SCDHHS determines there is a credible allegation of fraud against a provider who otherwise has met EHR eligibility requirements, any pending EHR incentive payments is withheld in accordance with agency policy.

4.18.5 Auditable Documentation Retention
EPs and EHs are required to retain auditable documentation to support all aspects of their attestation for a period of no less than six (6) years from the date they submitted their attestation. Documentation must be retained for each program year attested to and should be readily accessible in the event of request by SCDHHS.

Documentation must be produced at any point in time at the request of SCDHHS, during this six-year period. Failure to produce documentation as requested may result in denial of incentive payment or recoupment of one or more program year attestation incentive payments.

4.18.6 Ability to Upload Additional Documentation to the SLR
EPs and EHs are encouraged to upload all documentation to support their attestation to the SLR at the time of attestation. EPs and EHs are also encouraged to back up all applicable data to support their attestation on other sources in the event of a request by SCDHHS.
4.18.7 Incentive Payments to EHs
SCDHHS will calculate each hospital’s aggregate EHR incentive amount on the federal fiscal year to align with hospitals participating in the Medicare EHR incentive program. Each payment year will equate to the federal fiscal year. For purposes of administrative simplicity, CMS requires the Medicaid agency to use data on the hospital discharges from the hospital fiscal year that ends during the FFY prior to the fiscal year that serves as the first payment year in the determination of the Medicaid Share amount.

4.18.7.1 Incentive Payment Data Sources
SCDHHS will use auditable data sources to calculate the Medicaid aggregate EHR hospital incentive amounts. Auditable data sources include:

- Provider’s Medicare/Medicaid cost reports.
- Payment and Utilization information from MMIS {or other automated claims processing systems or information retrieval (IR) systems}.
- Hospital financial statements and accounting records.

The following primary source documents will be used in the determination of the following components the Medicaid Share of the aggregate EHR Incentive Payment for EHs:

<table>
<thead>
<tr>
<th>Component</th>
<th>Primary Source Document</th>
<th>Secondary Source Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Annual Growth Rate of Discharges</td>
<td>Applicable HFY Medicare/Medicaid Cost Reports (2552-96, W/S S-3,Pt I, Col. 15, Ln 12)</td>
<td>Hospital Generated Data from its accounting and billing systems</td>
</tr>
<tr>
<td>Estimated Medicaid I/P Bed Days</td>
<td>Applicable HFY Medicare/Medicaid Cost Reports (2552-96, W/S S-3,Pt I, Col 5, Lines 1 and 6-10)</td>
<td>Hospital Generated Data from its accounting and billing systems and Summary Management and Administrative Reporting System (MARS) Reports generated via MMIS</td>
</tr>
<tr>
<td>Estimated Medicaid MCO I/P Bed Days</td>
<td>Applicable HFY Medicare/Medicaid Cost Report (2552-96, W/S S-3,Pt I, Col 5, Ln 2) and hospital supplied data on PACE I/P days from contracting hospitals’ accounting and billing systems</td>
<td>Medicaid MCO encounter data and Medicaid MCO Generated Data from hospital accounting and billing systems</td>
</tr>
<tr>
<td>Estimated Total I/P Bed Days</td>
<td>Applicable HFY Medicare/Medicaid Cost Report (2552-96, W/S S-3,Pt I, Col 6, Lines 1, 2, and 6-10)</td>
<td>Hospital Generated Data from its accounting and billing systems</td>
</tr>
<tr>
<td>Estimated Total Hospital Charges</td>
<td>Applicable HFY Medicare/Medicaid Cost Report (2552-96, W/S C, Pt I, Col 8, Ln 101)</td>
<td>Hospital Generated Data from its accounting and billing systems</td>
</tr>
<tr>
<td>Charity Care Charges</td>
<td>Applicable HFY Medicare/Medicaid Cost Report (2552-96, W/S S-10, Col 1, Ln 30) adjusted for Bad Debts</td>
<td>Hospital Generated Data from its accounting and billing systems</td>
</tr>
</tbody>
</table>
SCDHHS supplies each contracting hospital with a Summary MARS MN listing of inpatient and outpatient hospital charges and payments used by the hospital in its preparation of the annual fiscal year-end cost report. As part of the SCDHHS Medicaid inpatient and outpatient cost-to-charge ratio determination, SCDHHS reconciles Medicaid routine and ancillary charges as well as Medicaid inpatient days to the providers cost report. MMIS data normally supersedes all data sources unless the provider provides supporting documentation to support the use of its own data.

4.18.7.2 Incentive Payment Calculation

The aggregate EHR incentive amount is equal to the sum over four years of the base amount of $2 million each year plus the discharge related amount defined as $200 for the 1,150th through the 23,000th discharge for the first payment year.

For subsequent payment years, the SCDHHS will assume discharges increase by the provider’s average annual rate of growth for the most recent three years for which data are available per year (the provider’s cost reporting fiscal year-end). 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 – 1
- Year Two - .75
- Year Three - .5
- Year Four - .25

The “Medicaid Share”, which is applied against the aggregate EHR incentive amount, is the percentage of a hospital’s inpatient non-charity care days that are attributable to Medicaid inpatients. The Medicaid inpatient days will include both in-state and out-of-state Medicaid days for the following individuals/enrollees:

- Medicaid fee for service program (includes the MHN enrollees in South Carolina Solutions that only serves MCCW participants).
- Medicaid MCOs: First Choice by Select Health of South Carolina, Absolute Total Care, BlueChoice HealthPlan Medicaid, Molina Healthcare of SC, and WellCare.
- Medicaid PACE Programs.
  - SCDHHS will require the hospitals that contract with the two PACE Programs operating within the state to provide the number of Medicaid inpatient hospital days served during the applicable hospital fiscal year end reporting period that will be used to determine the incentive payments to the qualifying hospitals.
- Medicaid with commercial insurance carrier (only include Medicaid days where Medicaid paid all or part of the claim).

The formula is as follows:

\[
\text{Estimated Medicaid inpatient bed days} + \text{Estimated Medicaid MCO inpatient bed days}
\]
The Medicaid agency will not include inpatient days attributable to individuals with respect to whom payment may be made under Medicare Part A or under Medicare Part C (Medicare Advantage Plans). Therefore, no dual eligible days will be included in the numerator of this formula.

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

Only those days that would count as inpatient bed days for Medicare purposes under section 1886(n)(2)(D) of the Act will be allowed in this calculation.

- In the event there is insufficient data that would allow the Bureau to estimate the inpatient bed days attributable to Medicaid managed care patients, the statute directs that such figure is deemed to equal zero.
- In the event there is insufficient data that would allow the Bureau to estimate the percentage of inpatient bed days that are not charity care, that is $\frac{\text{estimated total charges} - \text{charity care charges}}{\text{estimated total charges}}$, the statute directs that such figure to be deemed to equal one.

4.18.7.3 EH Incentive Payment Remittance Process

An EH must continue to meet the requirements for eligibility for the incentive and submit an attestation via the SC Medicaid SLR each payment year. SCDHHS will pay out the aggregate payment amount over three payment years as the EH continues to meet program requirements using the following proportions:

- Payment Year 1: 50%
- Payment Year 2: 40%
- Payment Year 3: 10%

In any given year, no payments can be made to hospitals after 2016 unless the provider has been paid a payment in the previous year. Hospitals receiving a Medicaid incentive payment must receive payments on a consecutive annual basis after the year 2016. Prior to 2016, Medicaid incentive payments to hospitals can be made on a non-consecutive annual basis.

Prior to issuing payment to the EH, the SCDHHS HIT Division will verify that the EH has not received a payment from another state or already received a payment from South Carolina for that payment year. The HIT Division will initiate an electronic credit adjustment that will be processed by the legacy MMIS system. Each user that creates adjustments in the system will have a unique ID for tracking purposes, and incentives will be tracked with new fund codes.

Payments will be made via EFT. As providers are determined eligible to receive payments, their incentive payments will be incorporated into the weekly payment schedule within 45 days of the transaction from the CMS NLR that denotes the provider’s account as locked for payment (the D16Response). The HIT Division notifies the provider of the payment via e-mail. The SLR will submit payment data to the NLR.
Payments under the Medicare and Medicaid EHR Incentive Programs are treated like all other income. The incentive payment process does not supersede any state or federal laws requiring wage garnishment or debt recoupment. If there is a legal basis for the state or federal government to net or recoup debts, such authority will apply to incentive payments, just as it applies to all other income.

### 4.18.8 Incentive Payment Reassignments to Employers

EPs have the option of reassigning their incentive payment to an entity with which there is a contractual arrangement allowing the employer or entity to bill and receive payment for the EP’s covered professional services. Incentive payments can only be reassigned to a single TIN.

SCDHHS will require providers to enter payment reassignment data into the SLR as South Carolina’s MMIS does not house data related to employee-employer relationships.

### 4.18.9 Recouping Incentive Payments Based on Debts and Wage Garnishment

SCDHHS maintains a list to hold provider checks that require a legal basis to withhold monies. Payment may be withheld for reasons including, but not limited to, suspicion of fraud, state and federal withholding, hospital advances, and failure to submit cost reports.

SCDHHS is required to recoup public debts. Any provider who meets the requirements to receive an incentive payment from the SC PI Program who has an outstanding public debt will have his/her incentive payment reduced to account for the debt.

SCDHHS also maintains a record of providers with an outstanding debit balance. If a provider has an outstanding debit, the incentive payment will be reduced to account for the outstanding debit balance.

### 4.18.10 Denials and Appeals

The SCDHHS Division of Appeals and Hearings has a process for appeals filed by Medicaid providers and members when payments or benefits have been denied. No additional processing time or provider notice time is needed as the policies and procedures for the existing process require no modifications to encompass EPs and EHs who appeal the following:

- Denied incentive payments.
- Incorrect incentive payment amounts.
- Program eligibility determinations (e.g., patient volume, hospital-based EPs).
- Demonstration of adopting, implementing, and upgrading.
- Demonstration of meaningful use.

Information concerning the appeals process is available in the SC PI Program provider handbook. EPs and EHs may submit “timely” appeals to the Division of Appeals and Hearings with relevant support documentation. “Timely” is defined as a provider filing an appeal within 30 days of notification of

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21 South Carolina Regulations at Chapter 126, Article 1, Sub-article 3
determination of eligibility (pertains to program eligibility, demonstration of adopt/implement/upgrade, and demonstration of MU) or incentive payment receipt.

SCDHHS’ notification letters will reference the regulations for appeals. A program manager for the Division of Appeals and Hearings will review the appeal request, and the EP/EH will be notified, and a hearing may be scheduled. The HIT Division will compile documentation for the hearing, and any appeal requests will be tracked in the appeals and hearing system maintained by the Division of Appeals and Hearings.

The current SCDHHS appeals process allows for settlement negotiations prior to any hearing. SCDHHS anticipates that these settlement negotiations will be useful for situations where providers are not clear about the requirements for program participation such as EP and EH types, volume requirements, etc.
5. SECTION D: SOUTH CAROLINA AUDIT STRATEGIES

The Division of Audits, along with the divisions of Program Integrity and Surveillance and Utilization Review (SUR) are responsible for ensuring Medicaid and other funds are used effectively and in compliance with federal and state regulations.

Existing processes utilized for the Medicaid program were expanded to include audits specific to the SC Promoting Interoperability Program. The detailed audit process and procedures are maintained in a separate confidential document external to the SMHP, known as the SCDHHS Promoting Interoperability Audit Plan. Audit procedures, including data sources, report specifications, and methodology are kept in a secure location accessible only to state personnel conducting audits, SCDHHS HIT Director, CMS, and other authorized regulatory entities. This document is subject to review and approval by CMS.
6. SECTION E: SOUTH CAROLINA HIT ROADMAP

6.1 HIT PLAN – LOOKING FORWARD
SCDHHS looks forward to continuing the South Carolina PI Program. This program is and will continue to be a tremendous aid to providers in South Carolina. SCDHHS expects that the program will evolve over time, and as such, this SMHP will be treated as a “living” document and receive regular annual updates and to comply with 42 CFR § 495, Subpart D. SCDHHS will seek out new and innovative ways to encourage and collaborate with providers and stakeholders on methods for meeting MU goals each year.

Above all, it remains SCDHHS’ goal to assist providers in becoming meaningful users of certified EHR technology and encourage the adoption and use of HIT and HIE throughout South Carolina.

6.2 PROVIDER EHR ADOPTION RATE
SCDHHS has added additional positions to the HIT Implementation Advanced Planning Document (IAPD) annual update to increase outreach efforts by providing in-person consultation regarding MU, CEHRT, and CQMs. SCDHHS anticipates that this in-person consultation at the provider practice locations will facilitate a more open dialogue and will illuminate providers’ misconceptions about the PI Program and allow for opportunities to inform providers about alternate methods of meeting some of the MU measures which they had not previously considered.

Expectations for this goal are that providers will engage with HIE and perform MU activities, even though all the providers within the practice are not all eligible to receive incentive payments.

SCDHHS also anticipates that public health registries will be capable of meeting stage 2 &3 and that this milestone will allow more providers to submit data.

The baseline EHR adoption rates were supplied by the detailed 2009 environmental scan. The projected growth in adoption rates was based on the percentages of providers who had purchased EHR systems but not begun implementation and those providers who had begun actively planning to purchase EHR systems.

The South Carolina Hospital Association anticipated that at least 10 hospitals would be ready to apply in early 2011 for the incentive program and expected another 15-20 for late 2011. A follow-up scan was conducted in 2011, which assessed the change in HIT adoption rates, especially to certified EHR technology, and providers’ interest and understanding in HIT. Projected adoption rates were adjusted as necessary and SCDHHS projected funding needs for the CMS 37 based on these adoption rates.

Professional organizations also supplemented SCDHHS data with their readiness and predictions. Over time, SCDHHS identified the adoption rates and improved forecasting its funding needs. As program year 2016 is the last year for adopting EHR technology, SCDHHS will focus on encouraging the continued use of CEHRT to meet MU objectives during program year 2017 and future program years.
Table 10 illustrates the projected Promoting Interoperability Program participation rates for program years 2017-2021.

*Table 10: Projected Number of Providers Participating in the Program for PY2017 to PY2021. Note: PY2017 data is actual.*

<table>
<thead>
<tr>
<th>Provider Type</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician</td>
<td>483</td>
<td>1247</td>
<td>1247</td>
<td>1292</td>
<td>1179</td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td>137</td>
<td>590</td>
<td>593</td>
<td>548</td>
<td>470</td>
</tr>
<tr>
<td>Dentist</td>
<td>8</td>
<td>83</td>
<td>83</td>
<td>90</td>
<td>83</td>
</tr>
<tr>
<td>Certified Nurse Midwife</td>
<td>10</td>
<td>43</td>
<td>40</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Physician Assistant</td>
<td>0</td>
<td>23</td>
<td>23</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Doctor of Optometry</td>
<td>4</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>642</strong></td>
<td><strong>2,000</strong></td>
<td><strong>2,000</strong></td>
<td><strong>2,000</strong></td>
<td><strong>1,800</strong></td>
</tr>
</tbody>
</table>
Table 11 identifies the actual rates for AIU and MU by program year.

**Table 11: Actual AIU and MU Participation by Program Year**

<table>
<thead>
<tr>
<th>Program Year</th>
<th>AIU</th>
<th>MU</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>978</td>
<td>0</td>
</tr>
<tr>
<td>2012</td>
<td>591</td>
<td>303</td>
</tr>
<tr>
<td>2013</td>
<td>396</td>
<td>620</td>
</tr>
<tr>
<td>2014</td>
<td>177</td>
<td>564</td>
</tr>
<tr>
<td>2015</td>
<td>211</td>
<td>750</td>
</tr>
<tr>
<td>2016</td>
<td>249</td>
<td>797</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2602</strong></td>
<td><strong>3034</strong></td>
</tr>
</tbody>
</table>

Table 12 identifies actual number of AIU payments by program year and eligible provider type.

**Table 12: Actual Number of AIU Payments by Program Year (PY) and Eligible Provider Type**

<table>
<thead>
<tr>
<th>Provider Type</th>
<th>PY 2011</th>
<th>PY 2012</th>
<th>PY 2013</th>
<th>PY 2014</th>
<th>PY 2015</th>
<th>PY 2016</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician</td>
<td>745</td>
<td>398</td>
<td>256</td>
<td>80</td>
<td>87</td>
<td>93</td>
<td>1659</td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td>153</td>
<td>90</td>
<td>102</td>
<td>64</td>
<td>82</td>
<td>95</td>
<td>586</td>
</tr>
<tr>
<td>Dentist</td>
<td>84</td>
<td>88</td>
<td>32</td>
<td>27</td>
<td>33</td>
<td>50</td>
<td>292</td>
</tr>
<tr>
<td>Certified Nurse Midwife</td>
<td>11</td>
<td>11</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>36</td>
</tr>
<tr>
<td>Physician Assistant</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Optometrist</td>
<td></td>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>978</td>
<td>591</td>
<td>396</td>
<td>177</td>
<td>211</td>
<td>249</td>
<td>2,602</td>
</tr>
</tbody>
</table>
Table 13 identifies the actual number of MU payments by program year and eligible provider type.

Table 13: Actual Number of Meaningful Use Payments by Program Year and Eligible Provider Type

<table>
<thead>
<tr>
<th>Provider Type</th>
<th>PY 2011</th>
<th>PY 2012</th>
<th>PY 2013</th>
<th>PY 2014</th>
<th>PY 2015</th>
<th>PY 2016</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician</td>
<td>0</td>
<td>251</td>
<td>499</td>
<td>450</td>
<td>579</td>
<td>808</td>
<td>2,385</td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td>0</td>
<td>43</td>
<td>103</td>
<td>103</td>
<td>151</td>
<td>175</td>
<td>575</td>
</tr>
<tr>
<td>Certified Nurse Midwife</td>
<td>0</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>12</td>
<td>9</td>
<td>45</td>
</tr>
<tr>
<td>Physician Assistant</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Dentist</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Optometrist</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0</td>
<td><strong>303</strong></td>
<td><strong>620</strong></td>
<td><strong>564</strong></td>
<td><strong>750</strong></td>
<td><strong>797</strong></td>
<td><strong>3034</strong></td>
</tr>
</tbody>
</table>

Table 14 identifies actual EH participation rates and total payments by program year.

Table 14: Actual EH Participation and Total Payments by EH Speciality and Program Year

<table>
<thead>
<tr>
<th>Hospital Type</th>
<th>Specialty</th>
<th>No. Participating</th>
<th>Total Payments Year 1</th>
<th>Total Payments Year 2</th>
<th>Total Payments Year 3</th>
<th>Total All Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Care</td>
<td>General Hospital</td>
<td>45</td>
<td>$33,079,461</td>
<td>$26,248,809</td>
<td>$4,448,998</td>
<td>$65,777,269</td>
</tr>
<tr>
<td></td>
<td>Critical Access</td>
<td>1</td>
<td>$384,615</td>
<td>$307,692</td>
<td>$78,923</td>
<td>$769,231</td>
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<td></td>
<td>Rehabilitation Unit</td>
<td>3</td>
<td>$2,236,803</td>
<td>$1,789,442</td>
<td>$447,361</td>
<td>$4,473,606</td>
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<tr>
<td></td>
<td>Skilled Nursing Facility</td>
<td>5</td>
<td>$3,265,793</td>
<td>$2,611,972</td>
<td>$484,715</td>
<td>$6,362,480</td>
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<tr>
<td></td>
<td>Swing-Bed Approved</td>
<td>3</td>
<td>$1,422,768</td>
<td>$1,138,215</td>
<td>$284,554</td>
<td>$2,845,537</td>
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<tr>
<td></td>
<td>Children's Hospital</td>
<td>2</td>
<td>$2,444,906</td>
<td>$1,955,925</td>
<td>$488,981</td>
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<tr>
<td></td>
<td>Short Term</td>
<td>1</td>
<td>$1,024,287</td>
<td>$919,430</td>
<td>$204,857</td>
<td>$2,049,574</td>
</tr>
<tr>
<td></td>
<td>Children's</td>
<td>1</td>
<td>$942,623</td>
<td>$754,099</td>
<td>$188,525</td>
<td>$1,885,247</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>61</strong></td>
<td><strong>$44,801,257</strong></td>
<td><strong>$36,625,584</strong></td>
<td><strong>$8,624,915</strong></td>
<td><strong>$89,051,756</strong></td>
</tr>
</tbody>
</table>
South Carolina SMHP 2016-2021

6.3 **Program Documentation**
SCDHHS plans to streamline the attestation and data submission processes for the South Carolina PI Program as more providers register for the program. As a result, SCDHHS will review and adjust its program and the SMHP to reflect changes annually, or more frequently as necessary.

SCDHHS also engaged other stakeholders as necessary including other state agencies, hospital associations, and other professional provider organizations to ensure that the program appropriately addressed stakeholder needs as much as possible.

6.4 **Annual Benchmarks**
SCDHHS established specific annual benchmarks to measure progress towards meeting each of the SC HIT Roadmap goals, as follows:

- HIT Division administration will participate in State HIT Summits, Healthcare Information and Management Systems Society (HIMSS) Conference, CMS Regional Meeting(s); ONC promoting interoperability forums; Communities of Practice (CoP), and the Medicaid Enterprise Systems Conference (MESC) conference, as is practical.
- HIT Division staff will travel to providers’ sites of practice to engage providers starting in Q4 2018.
- Facilitate annual meetings with SCHIEx, SCDHEC, and other stakeholders to discuss progress and needs.
- Evaluate 100% of provider email addresses bi-monthly to determine inactive email accounts and contact practices by phone and letter for new contact information.
- Annually develop SLR user guide for each program year.
- Bi-annual analysis of all providers who have received a Medicaid EHR incentive payment in the nation to determine which providers are active in SC Medicaid and establish communication with them to encourage them to continue their participation in the PI Program.
- Annually update and submit the SMHP to CMS.
- Annually update and submit the audit strategy to CMS.
- Annually update and submit the HIT IAPD to CMS.
- Annually update the SMHP Addendums for the SLR to CMS.
- Annually and quarterly submit data to CMS via the Medicaid HITECHTA website.

6.5 **Audit Goals — Looking Forward**
SCDHHS will review and update the SMHP audit strategy annually, as appropriate, to reflect legislative changes, prior audit results, and identify focused areas for audit. The annual review activity includes evaluating existing resources and projecting future needs, performing a gap analysis between “As Is” and “To Be”, and attending auditing Community of Practice seminars and meetings. SCDHHS will continue to foster an environment supporting continued close collaboration between pre and post payment auditing functions.

Specific long-range audit goals include the following annual benchmarks:

- 120 MU audits
- 30 AIU audits
- 5 EH audits
- 100% pre-payment review/validation of attestations received for each program year
- Respond to provider communications within two business days
- Check the B6/B7 queues daily
## Appendix A: Glossary of Terms & Acronyms

<table>
<thead>
<tr>
<th>Acronym/Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACI</td>
<td>Advancing Care Information</td>
</tr>
<tr>
<td>ADT</td>
<td>Admission, Discharge, or Transfer</td>
</tr>
<tr>
<td>AHEC</td>
<td>(SC) Area Health Education Consortium</td>
</tr>
<tr>
<td>AHIMA</td>
<td>American Health Information Management Association</td>
</tr>
<tr>
<td>AIU</td>
<td>Adopt, Implement, or Upgrade</td>
</tr>
<tr>
<td>AMIA</td>
<td>American Medical Informatics Association</td>
</tr>
<tr>
<td>API</td>
<td>Application Programming Interface</td>
</tr>
<tr>
<td>APRN</td>
<td>Advanced Practice Nurse</td>
</tr>
<tr>
<td>ARRA</td>
<td>American Recovery and Reinvestment Act of 2009</td>
</tr>
<tr>
<td>BTOP</td>
<td>Broadband Technology Opportunities Program</td>
</tr>
<tr>
<td>CAH</td>
<td>Critical Access Hospitals</td>
</tr>
<tr>
<td>CCD</td>
<td>Continuity of Care Documentation</td>
</tr>
<tr>
<td>CCHIT</td>
<td>Certification Commission for Health Information Technology</td>
</tr>
<tr>
<td>CCME</td>
<td>Carolina Center for Medical Excellence</td>
</tr>
<tr>
<td>CCN</td>
<td>(Medicare) Claim Control Number</td>
</tr>
<tr>
<td>CDS</td>
<td>Clinical Decision Support</td>
</tr>
<tr>
<td>CEHRT</td>
<td>Certified Electronic Health Record Technology</td>
</tr>
<tr>
<td>CHIP</td>
<td>Children’s Health Insurance Program</td>
</tr>
<tr>
<td>CHIPRA</td>
<td>Children’s Health Insurance Reauthorization Act of 2009</td>
</tr>
<tr>
<td>CITIA-SC</td>
<td>Center for Information Technology Implementation Assistance - South Carolina</td>
</tr>
<tr>
<td>CMS</td>
<td>Centers for Medicare and Medicaid Services</td>
</tr>
<tr>
<td>CNS</td>
<td>Clinical Nurse Specialist</td>
</tr>
<tr>
<td>CoP</td>
<td>Communities of Practice</td>
</tr>
<tr>
<td>ACRONYM/Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>CPOE</td>
<td>Computerized Provider Order Entry</td>
</tr>
<tr>
<td>CPRS</td>
<td>Computerized Patient Record System (used by VHA)</td>
</tr>
<tr>
<td>CQM</td>
<td>Clinical Quality Measures</td>
</tr>
<tr>
<td>CU</td>
<td>Clemson University</td>
</tr>
<tr>
<td>CY</td>
<td>Calendar Year (Period from January 1 to December 31)</td>
</tr>
<tr>
<td>DSS</td>
<td>Decision Support System</td>
</tr>
<tr>
<td>EFT</td>
<td>Electronic Fund Transfer</td>
</tr>
<tr>
<td>EH</td>
<td>Eligible Hospitals</td>
</tr>
<tr>
<td>EHR</td>
<td>Electronic Health Record</td>
</tr>
<tr>
<td>EP</td>
<td>Eligible Professionals</td>
</tr>
<tr>
<td>EPHR</td>
<td>Electronic Personal Health Record</td>
</tr>
<tr>
<td>FCC</td>
<td>Federal Communications Commission</td>
</tr>
<tr>
<td>FFS</td>
<td>Fee For Service</td>
</tr>
<tr>
<td>FFY</td>
<td>Federal Fiscal Year (Period from October 1 to September 30)</td>
</tr>
<tr>
<td>FQHC</td>
<td>Federally Qualified Health Center</td>
</tr>
<tr>
<td>FTP</td>
<td>File Transfer Protocol</td>
</tr>
<tr>
<td>HCRIS</td>
<td>Healthcare Cost Report Information System</td>
</tr>
<tr>
<td>HEDIS</td>
<td>Healthcare Effectiveness Data and Information Set</td>
</tr>
<tr>
<td>HIE</td>
<td>Health Information Exchange</td>
</tr>
<tr>
<td>HIPPA</td>
<td>Health Insurance Payment and Portability Act</td>
</tr>
<tr>
<td>HIT</td>
<td>Health Information Technology</td>
</tr>
<tr>
<td>HITECH</td>
<td>Health Information Technology for Economic &amp; Clinical Health of 2009</td>
</tr>
<tr>
<td>HRSA</td>
<td>Health Resources &amp; Services Administration</td>
</tr>
<tr>
<td>HSSC</td>
<td>Health Sciences South Carolina</td>
</tr>
<tr>
<td>IAPD</td>
<td>Implementation Advanced Planning Document</td>
</tr>
<tr>
<td>IAPDU</td>
<td>Implementation Advanced Planning Document Update</td>
</tr>
<tr>
<td>ACRONYM/TERM</td>
<td>DEFINITION</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
</tr>
<tr>
<td>IFS</td>
<td>Institute for Families in Society</td>
</tr>
<tr>
<td>IGC</td>
<td>Interim Governance Committee</td>
</tr>
<tr>
<td>IHS</td>
<td>Indian Health Services</td>
</tr>
<tr>
<td>Interoperability</td>
<td>The ability of a system or a product to work with other systems or products without special effort on the part of the customer.</td>
</tr>
<tr>
<td>IPPS</td>
<td>Inpatient Prospective Payment System</td>
</tr>
<tr>
<td>IR</td>
<td>Information Retrieval</td>
</tr>
</tbody>
</table>
| ISA          | Individual Service Agreement  
*Clemson contract starting Jan.2012 for development, hosting, & maintenance of SC SLR* |
<p>| LEIE         | List of Excluded Individuals/ Entities (HHS OIG) |
| LLR          | (SC) Department of Labor, Licenses, and Regulation |
| MACRA        | Medicare Access and CHIP Reauthorization Act |
| MARS         | Management and Administrative Reporting System |
| MBES         | Medicaid Budget and Expenditure System |
| MCCS         | Medicaid Claims Control System |
| MCCW         | Medically Complex Children’s Waiver |
| MCO          | Managed Care Organization |
| MES          | Medicaid Enterprise System |
| MeT          | (CMS) Medicaid EHR Team |
| MHN          | Medical Homes Network |
| MIPS         | Medicare Incentive Payment System |
| MITA         | Medicaid Information Technology Architecture |
| MMIS         | Medicaid Management Information System |
| MU           | Meaningful Use |
| NAAC         | National Average Allowable Costs |
| NCQA         | National Committee for Quality Assurance |</p>
<table>
<thead>
<tr>
<th>ACRONYM/Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>NICU</td>
<td>Neonatal Intensive Care Unit</td>
</tr>
<tr>
<td>NLR</td>
<td>National Level Repository</td>
</tr>
<tr>
<td>NP</td>
<td>Nurse Practitioner</td>
</tr>
<tr>
<td>NPPES</td>
<td>National Plan and Provider Enumeration System</td>
</tr>
<tr>
<td>NTIA</td>
<td>National Telecommunications and Information Administration</td>
</tr>
<tr>
<td>OIG</td>
<td>Office of Inspector General</td>
</tr>
<tr>
<td>ONC</td>
<td>(US HHS) Office of National Coordinator</td>
</tr>
<tr>
<td>OPPS</td>
<td>(hospital) Outpatient Prospective Payment System</td>
</tr>
<tr>
<td>ORS</td>
<td>(South Carolina) Office of Research &amp; Statistics</td>
</tr>
<tr>
<td>PA</td>
<td>Physician Assistant</td>
</tr>
<tr>
<td>PACE</td>
<td>Program of All-Inclusive Care for the Elderly</td>
</tr>
<tr>
<td>PAPD</td>
<td>Planning Advance Planning Document</td>
</tr>
<tr>
<td>PCCM</td>
<td>Primary Care Case Management</td>
</tr>
<tr>
<td>PCMH</td>
<td>Patient Centered Medical Home</td>
</tr>
<tr>
<td>PCSC</td>
<td>Palmetto Coordinated System of Care</td>
</tr>
<tr>
<td>PDMP</td>
<td>Prescription Drug Monitoring Program</td>
</tr>
<tr>
<td>PHI</td>
<td>Protected Health Information</td>
</tr>
<tr>
<td>PHSA</td>
<td>Public Health Service Act</td>
</tr>
<tr>
<td>PI</td>
<td>Promoting Interoperability (program)</td>
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<tr>
<td>PSIFI</td>
<td>Palmetto State Integrated Fiber Infrastructure</td>
</tr>
<tr>
<td>PSPN</td>
<td>Palmetto State Provider Network</td>
</tr>
<tr>
<td>PY</td>
<td>Payment Year</td>
</tr>
<tr>
<td>QTIP</td>
<td>Quality through Technology and Innovation in Pediatrics</td>
</tr>
<tr>
<td>RHC</td>
<td>Rural Health Center</td>
</tr>
<tr>
<td>RHIO</td>
<td>Regional Health Information Organization</td>
</tr>
<tr>
<td>RMMIS</td>
<td>Replacement Medicaid Management Information System</td>
</tr>
<tr>
<td>ACRONYM/TERM</td>
<td>DEFINITION</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
</tr>
<tr>
<td>RPMS</td>
<td>Resource &amp; Patient Management System (used by IHS)</td>
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<td>SAM</td>
<td>System for Award Management</td>
</tr>
<tr>
<td>SAMHSA</td>
<td>Substance Abuse &amp; Mental Health Services Administration</td>
</tr>
<tr>
<td>SBIRT</td>
<td>Screening, Brief Intervention, and Referral to Treatment</td>
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<tr>
<td>SC</td>
<td>South Carolina</td>
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<tr>
<td>SCDHEC</td>
<td>South Carolina Department of Health and Environmental Control</td>
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<td>SCDHHS</td>
<td>South Carolina Department of Health and Human Services</td>
</tr>
<tr>
<td>SCHIEx</td>
<td>South Carolina Health Information Exchange</td>
</tr>
<tr>
<td>SCLR</td>
<td>South Carolina Light Rail</td>
</tr>
<tr>
<td>SCORH</td>
<td>South Carolina Office of Rural Health</td>
</tr>
<tr>
<td>SCORxE</td>
<td>South Carolina Offering Prescription Excellence</td>
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<tr>
<td>SCPHCA</td>
<td>South Carolina Primary Health Care Association</td>
</tr>
<tr>
<td>SCRHRC</td>
<td>South Carolina Rural Health Research Center</td>
</tr>
<tr>
<td>SCRIPTS</td>
<td>South Carolina Reporting &amp; Identification Prescription Tracking System</td>
</tr>
<tr>
<td>SFY</td>
<td>State Fiscal Year (Period from July 1 through June 30)</td>
</tr>
<tr>
<td>SLR</td>
<td>(SC Medicaid) State Level Repository</td>
</tr>
<tr>
<td>SMHP</td>
<td>State Medicaid HIT (Health Information Technology) Plan</td>
</tr>
<tr>
<td>TAG</td>
<td>Technical Advisory Group</td>
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<tr>
<td>TIN</td>
<td>Tax Identification Number</td>
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<td>TOC</td>
<td>Transition of Care</td>
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<tr>
<td>USPS</td>
<td>United States Postal Service</td>
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<td>VHA</td>
<td>Veterans’ Health Administration</td>
</tr>
<tr>
<td>VPN</td>
<td>Virtual Private Network</td>
</tr>
</tbody>
</table>

*Implemented Jan. 2011 to receive and analyze data from eligible providers, make incentive payments, and exchange data with the CMS Registration & Attestation System related to the Promoting Interoperability program.*
8. APPENDIX B:  SC GOVERNOR’S EXECUTIVE ORDER 2009-15

EXECUTIVE ORDER NO. 2009-15

WHEREAS, the Congress and President of the United States enacted the American Recovery and Reinvestment Act of 2009 (the Act), which provides for the expenditure of $500 billion in federal funds for infrastructure investment, health care and welfare programs, and other public works;

WHEREAS, the Act includes the Health Information Technology for Economic and Clinical Health Act of 2009 (the HITECH Act) that sets forth a plan for advancing the appropriate use of health information technology to improve quality of care and establish a foundation for health care reform;

WHEREAS, the HITECH Act authorizes the Centers for Medicare and Medicaid Services (CMS) to administer incentives to eligible professionals and hospitals to encourage the use of secure, electronic health records (EHRs);

WHEREAS, to achieve the goal of transforming the health care system through health information technology, three things must first be established:

▪ Clinicians and hospitals must acquire and implement certified EHRs in a way that fully integrates these tools into the care delivery process;
▪ Technical, legal, and financial supports are needed to enable information to flow securely and to support health care and population health; and
▪ A skilled workforce needs to support the adoption of EHRs, information exchange across health care providers and public health authorities, and the redesign of work-flows within health care settings to gain the quality and efficiency benefits of EHRs while maintaining individual privacy and security; and

WHEREAS, health information technology systems are powerful tools that may be used to achieve outstanding quality in health care delivery, resource coordination, cost efficiency, and patient safety in the health care system.

NOW, THEREFORE, I hereby establish the Interim Governance Committee (Committee). The Committee’s purpose is to recommend strategies and policies to successfully implement and sustain a statement Health Information Exchange (HIE).
The Committee shall:

▪ Convene healthcare stakeholders and build trust and consensus among the stakeholders;
▪ Discuss ways to enhance the technical architecture and framework of the statewide HIE to promote meaningful use of electronic health records by providers;
▪ Cooperation with stakeholders to develop appropriate standards for the statement HIE’s privacy, security, and interoperability that aligns with state and federal standards;
▪ Establish mechanisms to provide oversight and accountability to the HIE; and
▪ Advise and assist with the development of proposed enabling legislation to create a permanent governing body.

The Committee consists of the following members or their designees:

(1) President of the South Carolina Hospital Association;
(2) Chief Executive Officer of the South Carolina Office of Rural Health;
(3) President of the South Carolina Medical Association;
(4) Chief Executive Officer of the South Carolina Primary Health Care Association;
(5) President of the South Carolina Pharmacy Association;
(6) Director of the South Carolina Department of Health and Human Services;
(7) Director of the Budget and Control Board’s Office of Research and Statistics;
(8) Commissioner of the Department of Health and Environmental Control;
(9) Chairman of the Board of the Lakelands Rural Health Network;
(10) President and Chief Executive Officer of the Health Sciences South Carolina; and
(11) A consumer.

This Order is effective immediately.
9. APPENDIX C:  2010-2011 APPROPRIATION ACT GENERAL PROVISIONS – PROVISO 89-120

The proviso establishes a fund within the SC Budget Control Board to establish a regional health information exchange center (CITIA-SC).

INFORMATION TECHNOLOGY FOR HEALTH CARE

From the funds appropriated and awarded to the SC Department of Health and Human Services for the Health Information Technology for Economic and Clinical Health Act of 2009, the department shall advance the use of health information technology and health information exchange to improve quality and efficiency of health care and to decrease the costs of health care.

In order to facilitate the qualification of Medicare and/or Medicaid eligible professionals and hospitals for incentive payments for meaningful health information technology (HIT) use, a health care organization participating in the South Carolina Health Information Exchange (SCHIEx) or a Regional Health Information Organization (RHIO) or a hospital system health information exchange (HIE) that participates in SCHIEx may release patient records and medical information, including the results of any laboratory or other tests ordered or requested by an authorized health care provider within the scope of his or her license or practice act, to another health information organization that requests the information via a HIE for treatment purposes with or without express written consent or authorization from the patient.

A health information organization that receives or views this information from a patient’s electronic health record or incorporates this information into the health information organization’s electronic medical record for the patient in providing treatment is considered an authorized person for purposes of 42 C.F.R. 493.2 and the Clinical Laboratory Improvement Amendments.
10. APPENDIX D: H4446 TO ESTABLISH STATEWIDE IMMUNIZATION REGISTRY

AN ACT TO AMEND SECTION 44-29-210, CODE OF LAWS OF SOUTH CAROLINA, 1976, RELATING TO MASS IMMUNIZATION PROJECTS APPROVED BY THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL AND THE PARTICIPATION OF MEDICAL PERSONNEL IN THESE PROJECTS, SO AS TO PROVIDE THAT LICENSED NURSES, RATHER THAN REGISTERED NURSES, ARE INCLUDED IN THE PERSONNEL WHO MAY PARTICIPATE IN THESE PROJECTS AND WHO ARE EXEMPT FROM LIABILITY; AND TO AMEND SECTION 44-29-40, RELATING TO THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL HAVING GENERAL SUPERVISION OVER VACCINATION, SCREENING, AND IMMUNIZATION, SO AS TO REQUIRE THE DEPARTMENT TO ESTABLISH A STATEWIDE IMMUNIZATION REGISTRY, TO REQUIRE HEALTH CARE PROVIDERS TO REPORT THE ADMINISTRATION OF IMMUNIZATIONS TO THE DEPARTMENT, AND TO PROVIDE CIVIL PENALTIES FOR VIOLATIONS.

Be it enacted by the General Assembly of the State of South Carolina:

Medical personnel authorized to participate in mass immunization projects are exempt from liability

SECTION 1. Section 44-29-210 of the 1976 Code is amended to read:

"Section 44-29-210. (A) If the Board of the Department of Health and Environmental Control or the Director of the Department of Health and Environmental Control approves in writing a mass immunization project to be administered in any part of this State in cooperation with an official or volunteer medical or health agency, any authorized employee of the agency, any physician who does not receive compensation for his services in the project, and any licensed nurse who participates in the project, except as provided in subsection (B), is not liable to any person for illness, reaction, or adverse effect arising from or out of the use of any drug or vaccine administered in the project by the employee, physician, or nurse. Neither the board nor the director may approve the project unless either finds that the project conforms to good medical and public health practice.

For purposes of this section, a person is considered to be an authorized employee of an official or volunteer medical or health agency if he has received the necessary training for and approval of the department for participation in the project.

(B) Nothing in this section exempts any physician, licensed nurse, or authorized public health employee participating in any mass immunization project from liability for gross negligence, and the provisions of this section do not exempt any drug manufacturer from any liability for any drug or vaccine used in the project."

Immunization registry to be established

SECTION 2. Section 44-29-40 of the 1976 Code is amended to read:

"Section 44-29-40. (A) The Department of Health and Environmental Control shall have general direction and supervision of vaccination, screening, and immunization in this State. The Department of Health and Environmental Control has the authority to promulgate regulations concerning vaccination, screening, and immunization requirements."
(B) The department shall establish a statewide immunization registry and shall promulgate regulations for the implementation and operation of the registry. All health care providers shall report to the department the administration of any immunization in a manner and including such data as specified by the department. The department may make immunization information available to persons and organizations in accordance with state and federal disclosure and reporting laws. The department may seek enforcement of this section and issue civil penalties in accordance with Section 44-1-150."

SECTION 3. This act takes effect upon approval by the Governor.

Ratified the 25th day of May 2010.

Became law without the signature of the Governor -- 6/1/2010.
## Appendix E: Health Information Technology (HIT) Websites

<table>
<thead>
<tr>
<th>Website Name</th>
<th>Website Host</th>
<th>Hyperlink</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.C. Medicaid Promoting Interoperability Program Website</td>
<td>SCDHHS</td>
<td><a href="http://www.scdhhs.gov/hit">http://www.scdhhs.gov/hit</a></td>
</tr>
<tr>
<td>South Carolina Health Information Exchange</td>
<td>SCHIEx</td>
<td><a href="http://schiex.org/">http://schiex.org/</a></td>
</tr>
<tr>
<td>SCHA Using Health Information Technology</td>
<td>SC Hospital Association</td>
<td><a href="https://www.scha.org/using-health-information-technology">https://www.scha.org/using-health-information-technology</a></td>
</tr>
<tr>
<td>CITIA - SC</td>
<td>Health Sciences South Carolina</td>
<td><a href="https://www.healthsciencessc.org/initiative/citia-sc/240">https://www.healthsciencessc.org/initiative/citia-sc/240</a></td>
</tr>
<tr>
<td>Health IT.gov</td>
<td>ONC</td>
<td><a href="https://www.healthit.gov/">https://www.healthit.gov/</a></td>
</tr>
<tr>
<td>SLR Log in Page</td>
<td>SCDHHS HIT Division</td>
<td><a href="http://www.scdhhs.gov/slr">www.scdhhs.gov/slr</a></td>
</tr>
</tbody>
</table>
12. **APPENDIX F: HRSA GRANT ACTIVITIES IN SOUTH CAROLINA**

The detailed South Carolina HRSA grant information for the period from 2011 through June 15, 2018 is available in the embedded spreadsheet below.

*Click on icon to open spreadsheet 1*