HITECH Program Retrospective Analysis Close Out Report

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Table of Contents

Glossary of Acronyms

Acronym	*Meaning*
ACIP	Advisory Committee on Immunization Practices
AHRQ	Agency for Healthcare Research and Quality
AIR	American Institutes for Research
AIU	Adopt, Implement, Upgrade
APD	Advanced Planning Document
API	Application Programing Interface
ARRA	2009 American Recovery and Reinvestment Act
ASPR	Administration for Strategic Preparedness and Response
BI	Business Intelligence
CEHRT	Certified Electronic Health Record Technology
CMS	Centers for Medicare and Medicaid Services
CO	Central Office
CoP	Community of Practice
DMI	Data Modernization Initiative
eCQM	Electronic Clinical Quality Measures
EH	Eligible Hospitals
EHR	Electronic Health Record
EP	Eligible Professionals
FAQ	Frequently Asked Question
FFY	Federal Fiscal Year
FQHC	Federally Qualified Health Center
HIE	Health Information Exchange
HIO	Health Information Organization
HIPAA	Health Information Portability and Accountability Act
HIT	Health Information Technology
HITECH	Health Information Technology for Economic and Clinical Health
HMA	Health Management Associates
HTS	HealthTech Solutions
IAPD	Implementation Advanced Planning Document
MACRA	Medicare Access and CHIP Reauthorization Act

Acronym	*Meaning*
MAPIR	Medical Assistance Provider Incentive Repository
MES	Medicaid Enterprise System
MeT	Medicaid Enterprise Team
MIPS	Merit-based Incentive Program
MMIS	Medicaid Management Information System
MU	Meaningful Use
NACHC	National Association for Community Health Centers
NLR	National Level Repository
ONC	Office of the National Coordinator for HIT
PDMP	Prescription Drug Monitoring Program
PI	Promoting Interoperability
PRAPARE	Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences
PULSE	Patient Unified Lookup System for Emergencies
PY	Program Year
REC	Regional Extension Center
RHC	Rural Health Clinic
RO	Regional Office
SDoH	Social Determinants of Health
SLR	State Level Repository
SMA	State Medicaid Agency
SMHP	State Medicaid HIT Plan
SUPPORT Act	Substance Use–Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act
T-MSIS	Transformed Medicaid Statistical Information System
TA	Technical Assistance
TEFCA	Trusted Exchange Framework and Common Agreement
USCDI	US Core Data for Interoperability

1 – Executive Summary

The Health Information Technology for Economic and Clinical Health (HITECH) provisions included in the 2009 American Recovery and Reinvestment Act (ARRA) set ambitious goals for developing electronic health information as one tool to reform health care delivery and improve health outcomes. The HITECH Act accelerated the industry's adoption of Electronic Health Record (EHR) technology through the Medicare and Medicaid Promoting Interoperability (PI) Programs, formerly the Medicare and Medicaid Electronic EHR Incentive Programs, by providing financial incentives for hospitals and Medicare and Medicaid providers to adopt, implement, upgrade, and meaningfully use certified EHR technology. If not for HITECH, the Health Information Technology (HIT) landscape would not be where it is today.

Over the 12 years of HITECH, the Medicaid PI Program disbursed $7.2 billion in funding to support over 500,000 eligible providers' use of certified EHR technology and $6.6 billion to support more than 13,000 eligible hospitals. A detailed breakdown of funds distributed and provider participation by program year can be found in Table 6 and Table 7.

As HITECH transitioned from stage to stage, there was a shift from a focus on certified EHR adoption and meaningful use to a focus on Health Information Exchange (HIE) and interoperability. By program's end, 49 states and territories were approved to receive HITECH funding for health information exchange, with annual funding for these activities reaching $674 million in 2021. A breakdown of approved HITECH HIE funding by Federal Fiscal Year (FFY) can be found in Figure 6. Participation in health information exchange climbed over this time as well, especially following the 2016 21st Century Cures Act.

Not only did HITECH and the Medicaid PI Program contribute to the increased use of certified EHR technology by providers and hospitals, but it also contributed to the public health infrastructure that has empowered Medicaid providers and hospitals to collect and report data, including during the COVID-19 pandemic. EHR adoption, state immunization registry utilization, and HIE incorporation all enhanced COVID-19 vaccination reporting.

Throughout the life of the program, the Centers for Medicare and Medicaid Services (CMS) and the Medicaid Enterprise Team (MeT), formerly the Medicaid EHR Team, identified program challenges and gaps and provided technical assistance and support to states to address gaps. Although the use of certified EHR technology provided infrastructure for information exchange, it also revealed gaps in communication, some due to vendor challenges and lack of interoperability. The MeT and CMS supported collaboration amongst states, provided clarity around reporting requirements, and shared national trends and best practices.

By reviewing the many accomplishments and lessons learned from the implementation of the HITECH Program, we identified the following recommendations:

What CMS Could Implement in the Future
•Implement a follow-on program to HITECH to address gaps in HIT. •Coordinate with state leadership. •Get off to a good start. •Develop clear program direction, standardization across states, and simplify requirements. •Coordinate with federal partners from program outset. •Plan for sustainability well before program close. •Design data collection to maximize value. •Require audit reporting. •Report data to CMS early.

What Future Contracting/Support Vendors Could Do
•Update CMS-approved outcomes and metrics on the CMS Certification Repository on Github. •Provide outreach to states. •Assist with the transition to Medicaid Enterprise System funding. •Provide guidance and artifacts. •Provide reporting TA.

What CMS Could Do to Facilitate Strong Partnerships with States
•Support and invest in interstate cooperation from program outset. •Provide states with a clear value proposition from program outset.

Recommendations for MES
• Support HIT for providers excluded from the Medicaid PI Program. • Focus efforts on HIT useful to achieving goals.

Potential Funding or Support Ideas for MES
• The Cures Act • CDC's Data Modernization Initiative

2 – Background

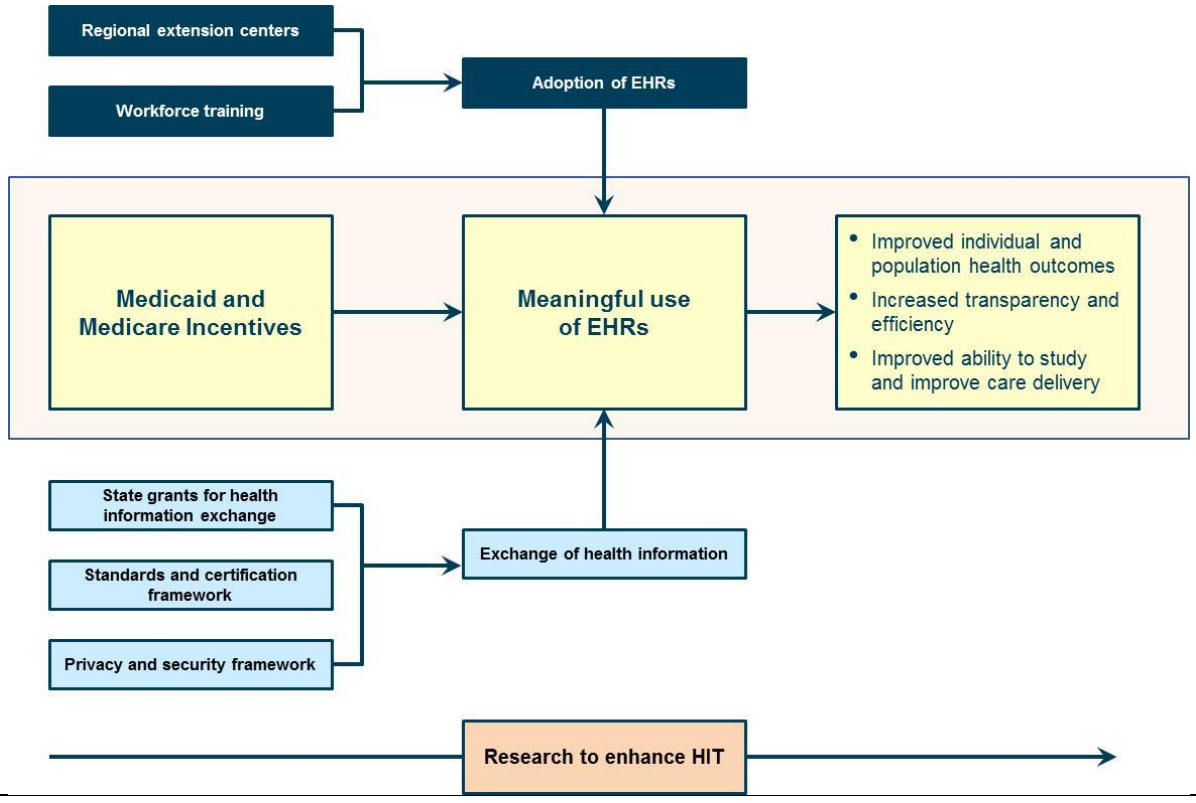
HITECH Program

In 2009, Congress passed the American Recovery and Reinvestment Act (ARRA), which contained provisions collectively known as "HITECH" (Health Information Technology for Economic and Clinical Health). The purpose of ARRA HITECH was ambitious and bold — the

National Coordinator for Health Information Technology noted in 2009, "information is the lifeblood of modern medicine."[1]

ARRA HITECH comprised regional extension centers, workforce training, state grants for health information exchange, standards and certification framework, a privacy and security framework, among other components (Figure 1). The largest component, the Medicare and Medicaid Promoting Interoperability (PI) Programs (originally known as the Medicare and Medicaid EHR Incentive Programs), provided Eligible Hospitals (EHs) and Eligible Professionals (EPs) with financial incentives to purchase, upgrade, and meaningfully use certified Electronic Health Record (EHR) systems. In addition to offering incentives, the Medicaid PI Program was a conduit to some of the other important HITECH programs, such as Regional Extension Centers (RECs) and regional or state HIE.

Figure 1: HITECH Components and Framework for Meaningful Use of EHRs



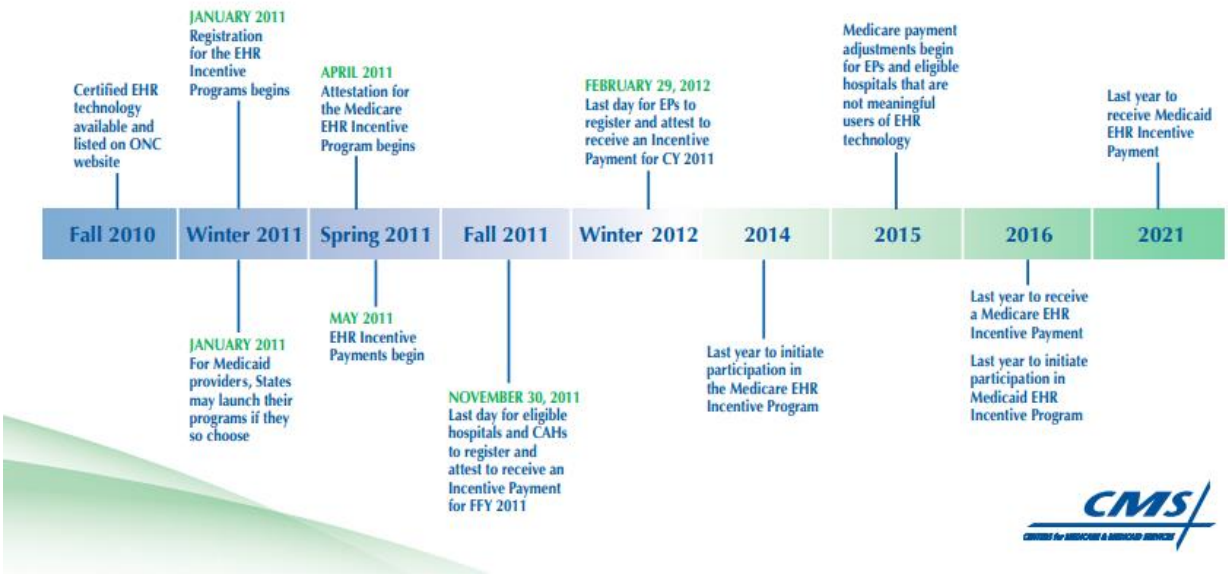
Medicaid Promoting Interoperability Program

The Medicaid Promoting Interoperability Program — separate from the Medicare Promoting Interoperability Program — included a budget of $15 billion to be administered by states to eligible professionals and hospitals as an incentive to adopt, implement, or upgrade (AIU) to a certified EHR system and to achieve meaningful use (MU) of the technology.[2] The Medicaid PI Program was voluntary for states and was administered jointly by State Medicaid Agencies (SMAs) and

[1] Blumenthal, D. Launching HITECH. *N Engl J Med* 2010;362 (5). 382- 385.
[2] Ibid.

CMS, with CMS reviewing and approving state plans and having ultimate responsibility for aspects of program implementation and oversight. Consequently, SMAs and CMS Central Office (CO) and Regional Office (RO) staff worked closely together to implement and enhance the program. States and territories were able to launch Medicaid PI Programs beginning in January 2011, with the final state, Hawaii, joining in September 2013.[3] Figure 2 presents a timeline of the program.

Figure 2: CMS Medicare and Medicaid EHR Incentive Programs Timeline[4]



The Medicaid PI Program was aimed at (1) increasing overall use of certified HIT to improve quality, safety, efficiency, and effectiveness of health care and (2) decreasing the digital divide in the use of certified HIT for certain provider types. Historically, providers serving a relatively large portion of Medicaid beneficiaries and the uninsured have been less able to afford EHRs or invest the resources required to learn how to use them to improve care compared with providers serving relatively large portions of Medicare beneficiaries or the commercially insured. The Medicaid PI Program sought to reduce this digital divide by ensuring that Medicaid providers and SMAs have the certified HIT they need to reform the Medicaid system. Additionally, through the successive stages of MU, the program was designed to ensure that Medicaid providers are using EHRs in the ways most likely to improve the quality and efficiency of care.

Beyond incentivizing individual hospitals and eligible professionals, the Medicaid PI Program supported state-level investments in HIT. States have been updating their State Medicaid HIT Plans (SMHPs) as they have moved through the AIU and MU phases of the Medicaid PI Program

[3] Ibid. 3.
[4] https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/EHRIncentProgtimeline508V1.pdf

and continue to work on HIE with various federal efforts.[5,6] Even beyond the life of the HITECH program, Medicaid will play an increasingly important role in HIE, particularly given SMAs' responsibilities as major health care purchasers. Therefore, this Medicaid PI Program activity was critical for achieving the long-term payoffs and benefits of HITECH, namely the use of data at the provider level to improve health care delivery, and at the Medicaid systems level to support payment and delivery reforms that ultimately improve the quality and efficiency of health care and the health of Medicaid beneficiaries.

Eligibility

Eligible Professionals (EPs) in the Medicaid PI Program included physicians (including doctors of optometry and pediatricians), dentists, certified nurse midwives, physician assistants practicing at Federally Qualified Health Centers (FQHCs) or Rural Health Clinics (RHCs), and nurse practitioners.[7] EPs were required to have a Medicaid patient volume at or above 30 percent (at or above 20 percent for pediatricians) or practice in an FQHC or RHC with a needy individual patient volume at or above 30 percent.[8] After registration, EPs were eligible for incentive payments up to $21,250 in year one and $8,500 per year in years two through six, with a maximum incentive payment of $63,750 over six years.[9] Though some professionals were eligible to participate in both the Medicare and Medicaid PI programs, most chose to participate in the Medicaid PI program because it offered higher total incentive payments and the Medicare PI Program included penalties while the Medicaid PI Program did not. Acute care hospitals with at least 10 percent Medicaid patient volume and children's hospitals were also eligible for the program and their payments were determined by formula.

In the first year of the Medicaid PI Program (2011), providers were determined eligible to receive incentive payments for adopting, implementing, or upgrading certified EHR technology. To be eligible to receive incentive payments after their first year of incentive program participation, providers were required to demonstrate meaningful use by documenting that they were using certified EHR technology to capture and share data, advance clinical processes, and improve outcomes.[10]

Meaningful Use

The conceptual motivation behind meaningful use (MU) assumes that use of EHR technology facilitates fast, easy, and complete sharing of patient medical information between providers,

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[5] Office of the National Coordinator. 2014. "A 10-year Vision to Achieve Interoperable Health IT Infrastructure." Washington, DC. Available at https://www.healthit.gov/sites/default/files/ONC10yearInteroperabilityConceptPaper.pdf; Office of the National Coordinator. 2014."Draft Interoperability Roadmap" Washington, DC: Available at https://www.healthit.gov/policyresearchers-implementers/draft-interoperability-roadmap.

[6] Centers for Medicare & Medicaid Services. 2015. "State Innovation Models Initiative: Model Test Awards Round Two." CMS.gov. Available at http://cmswnmgteam.polldaddy.com/s/was-thishelpful?iframe=http%3A%2F%2Finnovation.cms.gov%2Finitiatives%2FState-Innovations-Model-Testing-Round-Two%2F&ft=1.

[7] Ibid. 3.

[8] Ibid. 3.

[9] Ibid. 3.

[10] Medicaid EHR Team. 2014. "Fundamentals of Health Information Systems, Electronic Health Records, and the Medicaid EHR Incentive Program." Training Module 1, November.

regardless of where patients receive care. Such comprehensive clinical information exchange is considered by CMS and ONC to be essential for five (5) patient-driven domains:

1. Improving quality, safety, and efficiency
2. Engaging patients and families
3. Improving care coordination
4. Improving public and population health
5. Ensuring privacy and security for personal health information.

Meaningful use in the Medicaid PI Program was implemented in a phased approach over a series of three (3) stages. Stage 1 required demonstrating data capture and sharing, including: capturing health information in a standardized electronic format, using that information to track key clinical conditions, communicating that information with other providers to ensure care coordination, and reporting public health information and quality measures. Stage 2 required demonstrating advanced clinical processes, while Stage 3 required demonstrating improved outcomes.[11]

Initial requirements for an EP to receive an MU incentive payment in the Medicaid PI Program meaningful use incentive payments included attesting that they had met the required threshold for 15 MU core measures and for their choice of 5 out of 10 additional optional MU menu measures.[12] Each measure had its own threshold (a rate at which an EHR capability is used) that providers were required to meet in order to demonstrate meaningful use of that measure.[13] Program requirements for MU incentive payments changed over time as the program progressed from Stage 1 to Stage 3.[14]

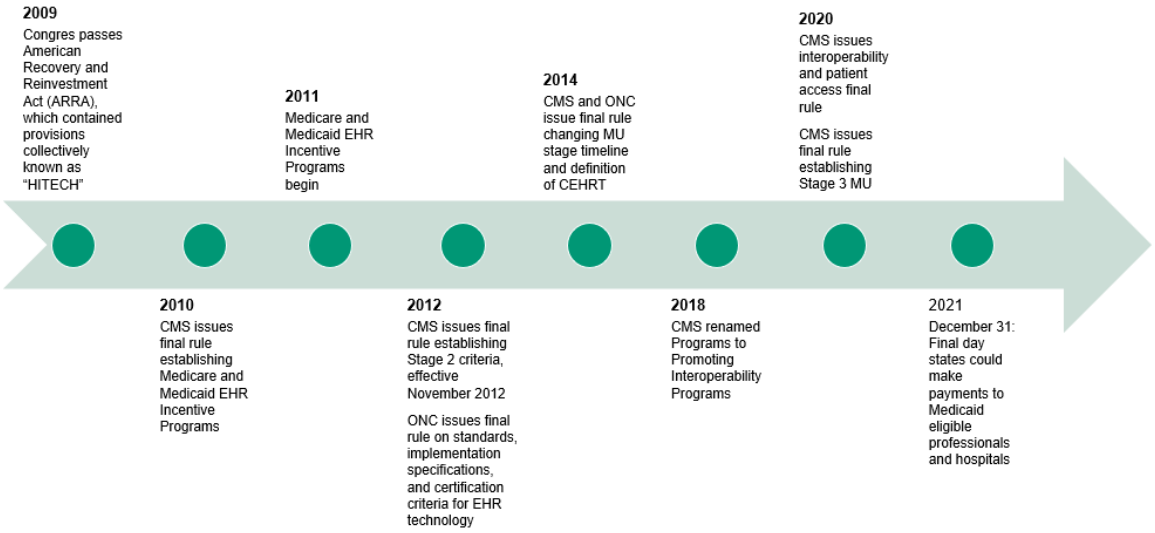
Program Evolution

The Medicaid PI Program evolved over time with the release of final rules and rule changes to reflect shifting priorities of CMS and ONC, the changing health IT landscape, and lessons learned from program implementation (Figure 3).[15] For EPs and EHs, the final rules establishing and modifying the requirements for meaningful use facilitated the advancement of health IT from adoption, implementation, or upgrading of an EHR at the beginning of the program to demonstrating increasingly meaningful use of HIT by program's end. At the same time, the

[11] "Meaningful Use Definition and Meaningful Use Objectives of EHRs | Providers & Professionals | HealthIT.gov." 2016. Accessed December 19. https://www.healthit.gov/providers-professionals/meaningful-use-definition-objectives.
[12] Some providers are eligible to attest to an exclusion from specific meaningful use measures rather than being required to meet the measure threshold. Exclusions are exemptions specified by CMS and are typically based on a provider's measure-related service volume.
[13] Blumenthal, David, and Marilyn Tavenner. 2010. "The 'Meaningful Use' Regulation for Electronic Health Records." New England Journal of Medicine 363 (6):501–4. https://doi.org/10.1056/NEJMp1006114.
[14] "Requirements for Previous Years of the EHR Incentive Programs." 2016. December 13. https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/RequirementsforPreviousYears.html.
[15] "Requirements for Previous Years of the EHR Incentive Programs." 2016. December 13. https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/RequirementsforPreviousYears.html.

program did more than provide financial incentives for EHR use by supporting State Medicaid HIT Plans and investing in HIE infrastructure within states.[16]

Figure 3: Evolution of the Medicaid PI Program



[16] Wachino, Vikki. 2016. February 29. "RE: Availability of HITECH Administrative Matching Funds to Help Professionals and Hospitals Eligible for Medicaid EHR Incentive Payments Connect to Other Medicaid Providers." SMD#16-003. https://www.medicaid.gov/federal-policy-guidance/downloads/smd16003.pdf

Table 1: Key Regulations and Guidance for HITECH

Date	Final Rule
2010	CMS issues final rule establishing Medicare and Medicaid EHR Incentive Programs, beginning in 2011[17]
2012	CMS issues final rule establishing Stage 2 criteria, effective November 2012[18]
2012	ONC issues final rule on standards, implementation specifications, and certification criteria for EHR technology[19]
2015	CMS issues final rule establishing Stage 3 in 2017 and beyond and modified Stage 2 to ease reporting requirements and align with other CMS programs.
2018	CMS renamed Programs to Promoting Interoperability Programs[20]
2020	CMS issues interoperability and patient access final rule[21]
2020	CMS issues final rule establishing Stage 3 MU in 2017[22]

Note: This table is not comprehensive and does not include State Medicaid director letters or other forms of guidance.

Medicaid Enterprise Team (MeT)

CMS contracted with the Urban Institute and its subcontracted partners, HealthTech Solutions (HTS), Health Management Associates (HMA), Briljent, and American Institutes for Research (AIR) to provide technical assistance, training, and program analysis support to CMS and state Medicaid agencies in the implementation, monitoring, and oversight of HITECH. Collectively referred to as the Medicaid Enterprise Team (MeT, formerly the Medicaid EHR Team), the MeT worked in partnership with CMS over the course of four (4) contracts,[23] from October 2010 through December 2022. Over the course of 12 years, the MeT was responsible for the tasks and deliverables listed in Table 2. The details of the MeT's work, along with lessons learned for each task, are described in 4 – MeT Program Activities and Lessons Learned.

Table 2: MeT Tasks and Deliverables

Task	Deliverables
Develop/Update HITECH Training Modules	• Develop new training programs • Update training modules • Support CMS with APD implementation

[17] https://www.govinfo.gov/content/pkg/FR-2010-07-28/pdf/2010-17207.pdf
[18] https://www.govinfo.gov/content/pkg/FR-2012-09-04/pdf/2012-21050.pdf
[19] https://www.govinfo.gov/content/pkg/FR-2012-09-04/pdf/2012-20982.pdf
[20] https://www.cms.gov/regulations-and-guidance/legislation/ehrincentiveprograms
[21] https://www.federalregister.gov/documents/2020/05/01/2020-05050/medicare-and-medicaid-programs-patient-protection-and-affordable-care-act-interoperability-and
[22] https://www.federalregister.gov/documents/2015/10/16/2015-25595/medicare-and-medicaid-programs-electronic-health-record-incentive-program-stage-3-and-modifications
[23] HHSM-500-2010-000241: October 2010 – December 2013; HHSM-500-2010-00024I-HHSM-500-T0006: January 2014 – December 2018; 47QRAA18D003Z 75FCMC19F0016: January 2019 – December 2021; 47QRAA18D003Z/75FCMC22F0018: January 2022 – December 2022.

Task	Deliverables
Outreach Events and Training Sessions	• Webinars • Conferences • Multi-Regional Meetings • State feedback sessions • SUPPORT Act logistics events
Community of Practice (CoP) Meetings/SMHP Tracker/MES State Officer Questions	• CoPs • 1:1 State Meetings • Regional Collaboratives • SMHP Reviews and SMHP Tracker • RO/MES State Officer Support
Provide Logistical Assistance for CMS All-States Calls and Maintain the Master List of MES Contacts	• All-States calls/master contact list
Update and Manage the National Repository of HITECH Information	• Repository/Dashboard
Medicaid Program (PI) Implementation Toolkit	• Maintain the toolkit • Prepare up to 4 new artifacts
Analytical and Technical Support to CMS	• Analysis and technical support • Update Q and A repository weekly • Issue brief(s) • SUPPORT Act Report to Congress • PDMP Reports • Medicaid Claims Data Analysis Issue brief(s)
Project Management	• Kickoff meetings • Project Management Plans • Biweekly meetings • Quarterly progress reports • Ad hoc meetings and tasks
Ad Hoc Meetings and Associated Tasks	• Ad hoc meetings and tasks

Task	Deliverables
Audit Related Tasks	• Monthly audit status meetings • Review and enhance audit tools semi-annually • Update Audit Toolkit • Provide assistance to States on NLR/SLR issues • Publish audit FAQs semi-annually • Update Audit Toolkit • Quarterly Audit Strategy Matrix updates • Audit Strategy Reviews • Update, maintain, provide data verification, and TA for the Online Annual and Quarterly Reporting Tool • Maintenance of CEHRT look-up solution • Improve Audit Reporting • Enhance Measure-Specific Guidance • Identify providers not returning for MU • Facilitate and provide TA to states around quarterly submission of CEHRT ID #s • Online Annual and Quarterly Reporting Tool
HIE Support and Site Visits	• HIE support • Big Picture / MES Site Visits and Site Visit Framework materials • HIE Tracker • HIE IAPD Reviews • SUPPORT Act IAPD Reviews • emPOWER Reports • Public Health Reporting

Accomplishments

HITECH, including the Medicaid PI Program, had many accomplishments. For example, several studies and issue briefs have documented the increase in EHR use by providers and hospitals in the past decade, concurrent with the implementation of the HITECH Act.[24] Program data, as seen in Table 6 and Table 7 of this report, document that the Medicaid PI Program disbursed $7.2 billion in funding to support over 500,000 eligible providers' use of certified EHR technology and $6.6 billion to support more than 13,000 eligible hospitals. Corresponding to this investment,

[24] DesRoches CM, Charles D, Furukawa MF, et al. Adoption Of Electronic Health Records Grows Rapidly, But Fewer Than Half Of US Hospitals Had At Least A Basic System In 2012. Health Aff (Millwood). July 2013:10.1377/hlthaff.2013.0308. doi:10.1377/hlthaff.2013.0308; Hsiao C-J, Hing E, Socey TC, Cai B. Electronic health record systems and intent to apply for meaningful use incentives among office-based physician practices: United States, 2001–2011. system. 011;18(17.3).

annual participation in the Medicaid PI Program and the share of participants meeting Meaningful Use criteria have grown since its start.[25]

The number of states and territories approved to receive HITECH funding for health information exchange has also notably increased in recent years, reaching 49 states and territories. Annual approved HIE funding increased from $9 million in 2012 to $674 million in 2021, as seen in Figure 6, before declining as the program sunset in 2022. This funding has been used to onboard providers; support public health HIE interfaces such as PDMPs, cancer registries, and immunization registries; invest in HIE infrastructure such as a master patient index, master provider index, and single sign on; support HIE services such as lab reporting, eCQM collection, and direct messaging; and support planning activities. A description of these activities and the number of states and territories participating in each can be found in Table 9.

One CMS leader summarized the impacts of HITECH on the national health IT landscape, noting, "It was transformative. It infused a lot of attention and dollars. It also created a lot of momentum for conversations about standards that had been out there but not as turbo charged. Also, some of the impact was that it created actual deadlines and timeline for when states and the industry had to be ready to deliver." Not only did the dollars disbursed through the program transform use of certified health IT and HIE in the states, but by investing in the field and developing standards and deadlines, the program was able to drive change broadly.

3 – Methods of Information Gathering

Feedback Gathering Over the Course of HITECH

Throughout the HITECH Program, the MeT consistently gathered stakeholder feedback during technical assistance activities. During in-person events, such as multi-regional meetings, participants were asked to rank individual sessions and the overall meeting. All feedback was reviewed and incorporated into improvements for the following year and interim TA activities. During Communities of Practice (CoPs), poll questions were often used for real-time feedback and quick check-ins with the attendees. If state feedback was also gathered during regional collaborative calls or other settings, that was shared with CMS and the MeT members for awareness. CMS and the MeT would then address opportunities for updates and change across the technical assistance offerings. The feedback gathered from state and CMS stakeholders over the course of HITECH informs the lessons learned presented in this report.

Feedback Gathering for this Report

Specifically for this report, MeT compiled a list of key questions to gather stakeholder feedback. These questions covered topics including challenges, milestones, program impact, helpful TA activities, and what respondents would change if HITECH were rolled out again. Questions for state and CMS respondents were designed to gather feedback and perspectives unique to those intimately involved with HITECH. Questions were compiled and reviewed internally before submission to CMS. Once CMS approval was received, the questions were finalized and shared with all potential respondents via email. CMS and the MeT identified key CMS staff and states to

[25] MeT Brief 2, "Where Do Medicaid Providers Stand in Meeting Meaningful Use Criteria? Implications for Quality of Care and MACRA Merit-based Incentive Payment System (MIPS) Readiness." Under CMS review.

contact. The MeT contacted 10 former and/or current CMS staff with deep program involvement and 18 states with requests for participation. These states were chosen due to longevity of staff in the program and ongoing engagement in TA activities, in addition to diversity in geographic location and size. All respondents were given the option to review the questions and have a call with the MeT to discuss their responses or to prepare written responses and email them back to the MeT. Eight (8) CMS responses were received, and 15 states provided written or verbal feedback. The list of questions for CMS and state staff are included in Appendices A and B.

4 – MeT Program Activities and Lessons Learned

The following subsections summarize the key MeT activities conducted over the life course of the Medicaid Promoting Interoperability Program and lessons learned in each area.

Technical Assistance and Training Materials

Throughout the lifetime of HITECH, the MeT and CMS worked closely to facilitate and provide Technical Assistance (TA) and training opportunities for states. The MeT conducted over 800 TA and training events throughout the Program. Below is a summary of opportunities provided to states and CMS:

Table 3: TA and Training Opportunities for States

Technical Assistance and Training	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
All-States Calls	1	16	12	7	9	8	7	3	4	2	2	1		72
Webinars		8	9	14	6	5	4	4	8	6		3	1	68
CoPs		36	48	40	38	29	27	28	28	16	24	26	5	345
RO Calls		31	104	54	41	45	41	19	17					352
Multi-Regional Meetings					4	3	3	3	2	2				17
Other Events*		13	2	1										16
Total	1	104	175	116	98	90	82	57	59	26	26	30	6	**870**

Notes: *Other events include MAPIR Collaborative Meetings, SERCH Collaborative Meetings, or the National Conference. training events declined in 2020 and 2021 due to the HITECH program winding down and COVID-19.

These TA opportunities were well attended, reaching staff from all states and territories. On average, 164 participants attended the multi-regional meetings each year. Over 611 participants attended the regional office collaborative meetings each year they were held. Throughout the 13 years of Communities of Practice, over 50,000 attendees participated in those presentations and discussions.

CMS originally held national Medicaid HITECH Multi-State Conferences in Baltimore, but after 2013, needed to shift its focus from conferences to smaller events. CMS and the MeT created and coordinated the **HITECH Multi-Regional Meetings**. These meetings spanned multiple days and were held at federal buildings around the country, including Philadelphia, San Francisco, and

Denver, that held one of the CMS regional offices. Two to three regions were invited to each city. MeT worked with facility staff to set up conference rooms, arranged hotel rooms at government per diem rates, created meeting agendas and materials, organized state speakers, and created networking activities for state staff. Extensive planning and preparation went into each meeting. These meetings were excellent opportunities for states to share best practices and challenges, as well as communicate to CMS their barriers and needs. There was an opportunity at each meeting for states to meet without CMS and MeT staff for open and honest dialogue about their program activities and requests for CMS. States and CMS often credited these meetings as one of the best ways federal-state partnerships were strengthened, in addition to being an effective way to increase knowledge and awareness of CMS priorities and policy guidelines.

MeT also supported CMS in hosting numerous Regional Collaborative calls. **Regional Collaborative calls** united CMS and state staff from regional clusters to share best practices and challenges regarding the Program. Regional Collaborative calls were another important forum that supported state sharing and collaboration as well as provided an opportunity for states to interact with their CMS State Officers. The Regional Collaborative calls helped state staff members identify strategies and address issues within their states, provided recommended practices, and helped states identify solutions to common problems they were experiencing. From these calls, as well as other communications, MeT compiled states' questions, and drafted proposed answers for reference later.

While CMS had these regional calls to talk to smaller groups of state staff, there was also a need to widely share policy and program updates, federal rules, answers for frequently asked questions, and alert states to upcoming events. The national **All-States Calls** began at the end of 2010 and continued through the entire HITECH program. At peak frequency, these calls were held monthly with states. Staff from all states and territories were invited to participate along with any of their approved contractors. The calls were facilitated by the MeT, but policy and program guidance was delivered by CMS. The MeT would occasionally share technical assistance updates and presented new resources or artifacts created for the states' benefit. Through these calls CMS was able to share key information to all states at one time and provide consistent responses to state questions. Notes and any slides shown during the calls were uploaded to the Medicaid HITECH TA Website for states to access at any time. These calls contributed to the strong communications between states and the CMS Medicaid HITECH Team. In addition to the calls, the MeT managed a large email distribution listserv, called the **All-States Listserv**. Whenever new guidance, artifacts, notices about outreach events, or other relevant information needed to be disseminated to the states, MeT sent out those communications through the All-States Listserv, which was managed on a near-daily basis. A designated inbox was created for the distribution of emails to the listserv and to respond to state questions. Requests to add or remove staff from the listserv were received and the listserv was updated in real-time. CMS was able to request the MeT send out communications at any time throughout each year. Though the original listserv comprised only state Medicaid HITECH staff, it grew to include other Medicaid staff working on MMIS and eligibility efforts and listserv communication became more enterprise focused.

One of the signature components of the HITECH technical assistance provided to states came through the **Communities of Practice**. The CoPs were learning collaboratives created for an ongoing discussion of specific areas of the Medicaid PI Program originally, and eventually

expanded to include other topic areas within HITECH. The original CoPs focused on hospital calculations, financial management, SMHPs, and HIT Implementation Advanced Planning Documents (IAPDs). As states, CMS, and the MeT moved further along in the PI Program and HITECH, CoP topics moved into clinical quality measures, health information exchange, and MES certification. Auditing was the singular CoP topic that has remained throughout the entirety of the Program. The MeT revisited the CoP topics at the start of each contract year with CMS to assess their necessity and which topic areas needed to be modified to address the current needs of the Program and the states.

MeT provided **one-on-one support** to states and CMS staff. The MeT supported CMS in numerous one-on-one calls between CMS and states by helping with questions posed by states, bringing regulatory references when working through challenges with states, taking notes, and tracking follow-up through completion. The MeT also hosted Office Hour sessions between states and the State Officers. As CMS stated in information gathering for this report, the MeT played a vital role and "served in many ways as CMS staff extenders, who provided critical subject matter expertise and support to the CMS team and states on a daily basis."

With CMS direction, review, and oversight, MeT members routinely answered questions from state staff about Program requirements. The MeT maintained a living **Communication Plan** that clearly identified staff and served as a guide for communications. The plan identified and defined team member roles and included a task team directory to provide contact information for all stakeholders directly involved. It guided processes for supporting CMS in answering states' questions and attending state-specific calls with CMS staff to provide more direct, tailored technical assistance to the states and associated CMS staff. CMS and MeT leadership worked collaboratively to ensure effective communication, coordination, and clear technical assistance roles and responsibilities. The Communication Plan was a helpful project management tool throughout the project.

Through the **Medicaid HITECH Technical Assistance (TA) Website**, states had access to a plethora of HITECH and Medicaid PI Program focused resources and guidance. This repository served as a foundational tool for states, CMS, and the MeT to use throughout the Program. The website was password protected to ensure that only the right staff had access and only state staff were requesting access for their contractors. The site was divided into sections to allow easy access to CMS communications, CoP materials, relevant state information, trainings, and an incredibly extensive resource library. The Resource Library was organized by topics such as SMHPs, HIE, and National Level Repository (NLR) Documentation. Each topic had its own webpage with pertinent information and resources. Presentations from Multi-Regional Meetings, contact information for the HIT leads in every state, and a calendar of events are just a sampling of the materials made available for states on the website. The MeT and CMS were also able to use the website as an internal document repository for materials shared between the two teams. User accounts for these teams had parameters in place allowing access to restricted sections of the website.

MeT created an asynchronous training series available to all states. These 15 **computer-based training modules** could be accessed through the website and helped numerous staff with their beginner and advanced subject matter knowledge. Topics of the trainings included staff responsibilities, meaningful use, clinical quality measures, program integrity, health information

exchange, and Certified EHR Technology (CEHRT). One of the modules included a Spanish version of the Medicaid PI Program fundamentals. All training modules included a knowledge check to test retention of key information. 508 compliant versions of all training modules were created and made available on the website.

Staff turnover was a consistent challenge throughout the HITECH Program and will need to be a consideration in any federal program implementation. To facilitate the onboarding of new staff, the MeT created **101 and 201 Trainings** that they then conducted virtually and in person during multi-regional meetings. The 101 Training was created in a Jeopardy-style format for a creative questions and answers discussion on various topics around the PI Program and HITECH overall. Question categories covered subjects such as meaningful use, resources, and eligibility. This training was targeted for new staff or those who wanted a basic refresher on the Program. The 201 Training was designed to be more advanced for staff who had been in the Program longer or who had mastered the basics. It went further into certain subjects and was conducted in more of a traditional presentation style. The slides and notes from both trainings were made available to states via the website. A standardized onboarding process for State Program staff and CMS Oversight staff benefited and supported consistent implementations of programs and systems.

The MeT also held up to 10 topical **webinars** each year. These were for those subjects that didn't need the ongoing collaboration of the CoPs but benefitted from more time for discussion than the CMS All-States Calls. Every year, one of those webinars was focused on the annual data reporting tool so states would know what to expect and if there were updates made to the tool from the previous year. The 101 and 201 Trainings were also offered as virtual webinars so states who did not attend the multi-regional meetings would have access to the trainings. Singular, one-time webinar topics have included eligible hospital audits, capitalizing gains, eCQM advanced user group, and new SMA staff orientations.

The MeT developed tools that identified methods and criteria for states' use to ensure provider compliance with requirements through all stages of the Program. The MeT developed and enhanced **tools and resources** that states needed, particularly providing support and focus to states and CMS around major milestones of the Program's implementation, Meaningful Use stage changes, State Medicaid Director Letters, and program sunset. The MeT compiled and updated **State Synopsis documents** with information from CMS as well from the states. State Synopsis documents included information such as: IAPD approval date, SMHP approval date, HIE tracker fields, list of issues to CMS, State Level Repository (SLR) vendor, audit vendor and state contacts/staff. State Synopsis documents were helpful tools for CMS and provided CMS an at-a-glance view of state participation in the Program.

The MeT assisted CMS in the **State Medicaid Health Information Technology Plan review** process and developed, enhanced, and maintained the SMHP Tracker with the overall state Medicaid strategic planning process in mind. To support CMS in their review and approval of SMHPs, the MeT reviewed state submitted SMHPs and provided a summary of how the state addressed different components that were requested for inclusion in the SMHP Companion Guide. After review of the SMHP, the MeT populated state-specific information into the SMHP Tracker. The SMHP Tracker included data elements along several dimensions and provided a detailed view for CMS with the source of each element provided. The SMHP Tracker allowed CMS to quickly identify certain information about the states' health IT landscape, and to

understand whether the states were compliant with federal regulation regarding timing of their annual SMHP updates. The MeT produced summary views and other distillations of the SMHP Tracker data and produced comparative analyses of progress that provided information in graphical and tabular forms. The MeT also included a page on the Medicaid HITECH TA website with links to SMHPs posted on states' websites, to serve as a resource for states. This is another example of how the website and the MeT provided a forum for state collaboration and sharing.

Technical assistance and training to states around different technologies and practices supported states' ability to secure enhanced federal funding and implement the program. The MeT developed numerous toolkits and training materials to support states' understanding of the requirements and technologies that could be procured to support meeting those requirements. The MeT developed an **eCQM and Provider Directory Toolkit** in 2017, which served as an introductory conceptual guide for state Medicaid agencies. The eCQM and Provider Directory Toolkit helped states understand more about eCQM and Provider Directory systems, particularly if they were considering developing or procuring these solutions. The Toolkit presented lessons learned, sample use cases, and other relevant documents to orient states to the concepts associated with eCQM and Provider Directory solutions.

Technical Assistance and Training Materials Lessons Learned

Through the Technical Assistance and Training Materials work, the MeT identified the following Lessons Learned:

- Technical assistance and training to states around different technologies and practices supported states' ability to secure enhanced federal funding and execute the program. The MeT developed numerous toolkits and training materials to support states' understanding of the requirements and technologies that could be procured to support meeting those requirements.
- Interacting onsite with states reinforced a collaborative working relationship between states and CMS. Organization of CMS teams by geography supported the ability to foster the collaborative working relationship.
- State collaboration promoted consistency, efficiency, and cost savings. A centralized secure Website Repository, Multi-Regional Meetings, All States Calls, All States Listservs, Communities of Practice, and Topic Webinars all provided avenues for states to gain a national perspective and learn from their peers.
- A standardized onboarding process for State Program staff and CMS Oversight staff benefitted and supported consistency in programs and systems, even when turnover rates were high. MeT staffing consistency brought continuity to the TA and helped to bridge changes in staffing at the state and federal level.
- The timing of new Federal Regulations had a significant impact on the implementation of required updates at the state level. Checklists, tip sheets, and other aids supported states in their ability to quickly pivot and timely apply federal regulations.
- Directly from the state responses collected for the purposes of this report, overall, states found the CoPs and Regional Collaborative calls to be the most helpful technical assistance. After that, the onsite multi-regional meetings and the Medicaid HITECH TA website were other helpful TA resources for states throughout the program. In addition to

the TA provided by the MeT, states also called out that meetings with their State Officer were another mode of TA that was helpful.

- Outreach to states and outreach to providers was critical to increasing program participation. There was a surge of providers around 2015-2016 which showed that the program had value with numbers surging at the last point they could join the program and that providers were made aware of the program end date.
- Providing a variety of Technical Assistance approaches to states helped meet complex program needs.

Analysis and Technical Support

During the initial years of the program, the MeT developed the Medicaid EHR Incentive Program **Implementation Toolkit**. The Implementation Toolkit was designed to be a manageable but comprehensive set of practical information and materials to aid SMAs in the successful development, implementation, and oversight and monitoring of the Medicaid PI Program. The content consisted of "artifacts" and TA tools developed by the MeT to meet the unique needs of SMAs and CMS in implementing the program. The Program Implementation Toolkit incorporated materials from other credible sources such as AHRQ and ONC. As the program continued, the MeT completed an overall website enhancement, based on feedback from users on the progress of the program, that included restructuring the former Program Implementation Toolkit into the existing Resource Library. The MeT developed the website in such a way that making updates to adapt over time was manageable and not disruptive.

The MeT provided technical support for numerous ad hoc projects. The MeT developed, updated a **Question-and-Answer Repository**, and posted it for CMS staff weekly. The document provided a means for CMS to view the state submitted questions and the MeT proposed responses. For this task, the MeT received questions from states and, after researching and documenting sources for the proposed responses, provided proposed responses to the CMS State Officer. The MeT did not always receive notification that a response was shared back with the state who submitted the question. A lesson learned specific to this task is to ensure in the future that CMS State Officers close the loop to ensure the answer provided to the state(s) are accurately captured for future reference. This will further support consistency across states.

Having a general **repository for information sharing** helped with navigating the Program for both CMS as well as the states and territories. Over the past 10 years, many states and territories have experienced staffing turnover at a high rate, having a centralized location for information sharing was a critical success as it allowed program continuity and made staffing transitions easier. States and territories benefitted from having multiple channels of technical assistance. The tip sheets, Auditing Communities of Practice, Auditing appendices, All States Calls, Regional Meetings, and notes posted from most events provided a reference guide for program adoption and implementation as well as program sunset best practices and reporting. The platform also presented an opportunity for multi-state collaboration. It provided an opportunity for states and territories to see how other states were operating, what the states found most successful, and helped gain a better understanding of program requirements.

As the program evolved and moved into later program stages, SMAs had different, previously unidentified needs for information and resources to assist them with the ongoing operation of their programs. Additionally, SMAs sought guidance to help them leverage data collected via the

program to help achieve broader Medicaid program objectives, such as quality and measurement improvements for the Medicaid population and provider payment and delivery reforms to improve the quality, safety, and efficiency of care. Based on the changes in the Program, the MeT continuously assessed existing artifacts and determined whether content updates were needed as well proposed development of new artifacts to support states.

Over the years, the MeT developed numerous new artifacts and provided analysis and technical support to meet states where they were in the program and deliver quality, evidence-based information where possible. Some examples of ad hoc project tasks are briefly described as follows:

Table 4: Ad-Hoc Project Tasks

Ad hoc Task	Analysis and Technical Support Provided
SUPPORT Act	• Supported multi-state events on site with CMS, convened states to share best practices, supported CMS/CDC meetings, and reviewed SUPPORT Act APDs for PDMPs • Assisted to develop a Congressional Report by conducting and providing analysis on CMS and CDC relevant reports, cross referencing existing research, conducting state interviews, and reviewing waivers and quality metrics • Compiled and delivered a Section 5042 Annual Reporting Tip Sheet to provide an overview of submission guidelines, reporting periods and requirements, and other resources for states
Patient Unified Lookup System for Emergencies (PULSE)	• Analyzed and provided technical support for the Sequoia Project and CA Emergency Medical Services Authority (EMSA) on PULSE • Worked with ONC to inform states how the PULSE system could benefit their emergency services • Presented information on PULSE during an HIE CoP in December 2018
Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE)	• Worked with the National Association for Community Health Centers (NACHC) to analyze the PRAPARE tool and determine how it could benefit Medicaid • Produced a technical artifact on the PRAPARE tool for states which described the value added by integrating medical data with SDoH, potential sources of funding for SDoH projects, a high-level roadmap for states, help to further support collaboration among SMAs, FQHCs, providers, and other applicable entities to include SDoH assessments in EHRs and improve health outcomes • Provided technical support and guidance related to public health reporting and registry and electronic lab reporting, and helped states to scale up to utilize PRAPARE Tool for Medicaid
emPOWER	• Supported alongside CMS and ASPR to launch a pilot with FL, NV, and VA to add Medicaid data (with open API and HIE integration where possible) to the emPOWER program • Facilitated training calls on the "HHS emPOWER Analytical Framework and Data Tool-Kit" which enabled pilot states to understand how to implement the framework and generate state Medicaid datasets using data from MMIS

Ad hoc Task	Analysis and Technical Support Provided
	• Assisted CMS in providing TA to states seeking 90/10 funding, identified state readiness for generating Medicaid specific emPOWER datasets, captured state lessons learned that could improve the Tool-Kit, and provided guidance and technical support to Medicaid funded HIEs on the use of the emPOWER program

Data Analysis, including Briefs and Articles – In addition to the EHR inventive payments and technical assistance provided to the states and territories, the HITECH Program produced a wealth of data. The MeT provided **data analysis** support to document program progress and analyze program impacts. Historically, major barriers existed to obtaining timely data to analyze program implementation progress, performance, and trends over time, including (a) the vast amount of information in paper or text-heavy documents with unstructured formats and fields; (b) information in diverse databases and locations that was not easily shared; and (c) the challenge of keeping the data up to date and turning them into useful reports and information. MeT worked closely with CMS to overcome these obstacles and to provide the kind of program analytics that enables states, territories, and CMS to turn raw program data into useful information for ongoing program implementation, monitoring, and improvement purposes.

Examples of **analytic work** completed as part of the program included:

- Assessing which providers that attested to AIU progressed to Stage 1 MU and how to assist providers in moving to subsequent stages of the program;
- Reviewing state reporting and attestation processes to identify best practices and challenges, and providing recommendations to CMS on how the program could be improved;
- Gathering and updating critical program implementation and performance data through a dashboard and making them available to CMS in a variety of formats;
- Developing an analytic model using available Medicare claims data to compare cost, patient volume, and service utilization among PI Program participants and nonparticipants and providing states with TA to adapt the model for analysis of their own Medicaid data;
- Creating written products described in Table 5 as well as ongoing analysis of the relationship between state PDMP characteristics and opioid outcomes among Medicaid beneficiaries using T-MSIS prescription claims data.

Table 5: Key Findings from Written Data Analysis Products

Written Product	Key Findings
Provider Participation in the Medicaid EHR Incentive Program, 2011 to 2014	• Annual provider participation in the Medicaid PI Program varied across states but grew nationwide from 2011 to 2013 • Annual participation decreased in 2014, which may be attributable to the shift in attestation requirements from AIU to meaningful use • While most annual program participants are physicians, the percentage of participating non-physician providers increased between 2011 and 2014, particularly because of an increase in nurse practitioner participants

Written Product	Key Findings
Where Do Medicaid Providers Stand in Meeting Meaningful Use Criteria? Implications for Quality of Care and MACRA Merit-based Incentive Payment System (MIPS) Readiness	• The most commonly chosen optional EHR functions reported to demonstrate meaningful use in the Medicaid PI Program were using patient lists, patient-specific education resources, and medication reconciliation; the least commonly demonstrated were use of patient reminders, patient electronic access, transition of care summary, and syndromic surveillance data submission • Participating providers achieving meaningful use in the Medicaid PI Program appear ready to report three MIPS measures that align with core measures they have already reported to receive their Medicaid PI Program payment. However, providers did not generally choose to report the meaningful use optional menu measures that are aligned with MIPS measures
How are states' Medicaid agencies fostering health information exchange?	• The number of states seeking funding from CMS to foster health information exchange between Medicaid providers steadily increased since 2012, when the first three states (North Carolina, Rhode Island, and Utah) started receiving these funds to the time of writing, when 38 states and territories were receiving funds, and another 7 had requests under review at CMS • "Onboarding" (or connecting) providers to HIEs is the single most popular activity supported with these funds (in 32 states)
Physicians Demonstrating Meaningful Use of EHR Technology in 2015 Differed in Characteristics from Other Physicians	• In 2015, 37.8% of Medicare providers demonstrated meaningful use through the Medicare PI Program, while 36.0% never participated in either PI Program • Meaningful users were more likely to be female and practice in an urban setting; their patients were more likely to be non-Hispanic white, less likely to be dually eligible, and had lower risk scores
Meaningful Use of EHRs Is Associated with Accelerated Diffusion of Updated Pneumonia Vaccine Recommendations	• After controlling for differences in provider and patient characteristics, continuous participation in the Medicare PI Program was associated with an increase in the share of Medicare beneficiaries receiving pneumonia vaccinations around the time of the ACIP recommendation change • Meaningful use of EHR technology may have accelerated the diffusion of updated pneumonia vaccine recommendations into medical practice

Written Product	Key Findings
What Types of Providers and Patients benefitted from the Medicaid PI Program? Evidence from 2016 Medicaid Claims Data in Two States	• Medicaid providers in New Mexico and Wisconsin who participated in the Medicaid PI Program were more likely to be office-based, primary care physicians and had larger Medicaid patient panels and fewer office visits per patient, compared to non-participating providers • Participating providers served many traditional Medicaid beneficiaries, including a disproportionate share of Hispanic and Black patients and low-income children, underscoring the importance of policy opportunities to support their continued use of CEHRT to foster the delivery of efficient and high-quality care to Medicaid beneficiaries and to ensure that the benefits of health IT are reaching CMS priority populations
Provider Participation in the Medicaid PI Program and pediatric Preventive Care Receipt: Evidence from 2016 Medicaid Claims Data in New Mexico	• Medicaid-covered children in New Mexico with providers participating in the Medicaid PI program had slightly higher rates of preventive care visits in 2016 compared to those whose provider did not participate in the Medicaid PI program; this pattern held for rural, Hispanic/Latinx, and American Indian/Alaska Native children • Differences were biggest among rural children, where children ages 5-11 with a participating provider were 30% more likely to receive a preventive care visit than those whose provider did not participate

Analysis and Technical Support Lessons Learned

Through the ad hoc project tasks, MeT identified the following lessons learned:

- From emPOWER, we learned communication between stakeholders is necessary for success. As states participated in the Medicaid emPOWER pilot it was evident that the partnership from both Medicaid and Public Health Agencies was critical. Additionally, consultation of the states' HIPAA privacy officer was also valuable when determining processes and best practices for requesting and sharing patient level data.
- From emPOWER, we learned outreach was critical to educating states on the benefits and importance of the emPOWER initiative and assisting them with implementing the emPOWER initiative within their state.
- It is important that in the future CMS State Officers close the loop to ensure the answer provided to the state(s) questions from CMS are accurately captured for future reference. This will further support consistency across states.
- From PRAPARE, stakeholders unanimously agreed that capturing SDoH is a critical component of "Whole Person Care." They echoed national research that in some cases SDoH can be as important to have as medical health data, especially for the Medicaid population. Stakeholders shared that some EHR vendors' SDoH assessment questions and responses lack consistency with other vendor SDoH assessments. For example, one SDoH assessment may ask homelessness experience in past 12 months, while another may ask in past six months. Standardization of responses collected would be ideal for aggregation purposes.

- From PRAPARE, we learned that statewide consent and data use agreements between providers help facilitate SDoH efforts. States should consider a guidance document that creates a consistent policy on HIPAA and privacy and security issues. Some social service agencies need resources to update their technical infrastructure to enable them to collect SDoH data, and to connect to HIE(s)/HIO(s). The report also captured that it is important for workflow purposes that users can access SDoH assessments in their EHRs via a single sign-on, so that they do not have to sign-in to a separate system. In addition to entering SDoH data in EHRs, referring individuals to appropriate community-based services and having the outcome reported back to the health care provider may be a worthwhile long-term goal.
- From PULSE, we learned that a long-term sustainable funding strategy is critical for PULSE. Early coordination and partnership among federal and state agencies is needed to leverage as many funding sources as possible.
- From PULSE, we learned integration with HIE/HIOs, PDMPs, and immunization registries would provide more complete medical histories. There is a need for data to be pulled quickly with the most relevant data to the specific emergency to be presented first (i.e., allergies, medications, immunizations, etc.).
- From PULSE, we learned having systems that connect to all healthcare networks (i.e., eHealth Exchange, CareQuality, CommonWell, etc.) will help ensure standardization of data as PULSE is expanded statewide. States should consider how their health system networks connect and whether those connections are standardized.

Through the **written data analysis** work, the MeT identified the following lessons learned:

- It is important to collect data in user-friendly formats, rather than unstructured fields or text documents, and to promote usability and support timely analysis.
- There is great value in being able to link program data to outside sources. For example, MeT was able to link NLR data to Transformed Medicaid Statistical Information System (T-MSIS) data, thereby allowing for analysis of Medicaid claims by provider participation status in the Medicaid PI Program.
- The usefulness of program data can be increased by defining data reporting requirements based on 1) what information will be most useful to produce timely reports on, that can be used to improve program implementation and performance, and 2) by updating data reporting requirements to meet changing program needs over time.
- Engaging with states and territories about what data would be useful to them can strengthen data analysis.
- Working with T-MSIS data is resource intensive. It is important to allocate adequate time for data access and data cleaning, and to be prepared for differences in data quality across states and data elements.
- It is difficult to design an analysis that can identify causal impacts for the Medicaid PI Program because there was not a clear comparison group similar to those who participated but who did not benefit from the program. For future programs, integrating an evaluation component into program design and implementation can help support program evaluation.

Audit and Oversight Support

Audit Tools and Resources for States – the MeT led and coordinated audit tasks for CMS since September 2012. The MeT created, reviewed, and enhanced HITECH **auditing tools** which identified methods states could use to ensure provider compliance with the requirements of the program. The MeT recognized the importance of the audit and **oversight tasks** for CMS and states and developed the Medicaid PI Program **Audit Toolkit**. The Audit Toolkit served as an integral component of the Medicaid HITECH TA website providing technical assistance and subject matter expertise on all audit related matters. The Audit Toolkit also served as a roadmap for how states could govern their programs and was utilized by key Medicaid PI Program staff from states and territories, as well as by CMS and the MeT.

The MeT developed **measure-specific guidance for all Program Years' Meaningful Use** objectives which was incorporated throughout the Audit Toolkit appendices. The measure-specific guidance defined the objective and measures, listed possible data sources that could be used to support meeting the objective or measure, and defined the audit procedures to follow when validating the objective's measure had been satisfied. Measure specific guidance was created to provide an in-depth analysis of each of the objectives a provider must attest to meet Meaningful Use.

The Audit Toolkit broke each objective down by the following criteria: risk rating and rationale, objective description, and auditing procedures. Each objective's measure(s) contained an associated risk of high, medium, or low. A rationale was provided which defined the objective or measure and explained why this specific function must be performed as a requirement of meeting Meaningful Use. The auditing procedures then provided step-by-step instructions to follow while performing the audit. Using the tool ensured the states were given a thorough explanation of the auditing procedure and that information was distributed in a clear, concise manner, ensuring states gained a better understanding regarding what supporting documentation could be requested for a post payment audit.

The MeT reviewed and revised the Audit Toolkit semi-annually to provide specific, detailed descriptions of the documentation necessary to audit each Meaningful Use objective/measure for all Program Years and all three stages of the program. Information in the Toolkit included CEHRT listings, screenshots, and reports the state could request from the provider to verify the attested objective/measure and applicable exclusions during an audit. As states gained further Meaningful Use audit experience, the MeT incorporated state lessons learned into the semi-annual Audit Toolkit updates; including, how to achieve auditing efficiencies, and revisions necessary for new stages of Meaningful Use and other rulemaking or policy changes that impacted the Medicaid Promoting Interoperability Program. With CMS direction, review, and oversight, MeT members also routinely answered questions from state staff about Medicaid PI Program auditing requirements. In 2019, the MeT placed further emphasis on supporting states to ensure all auditing tasks were completed before September 30, 2023, the last date for which HITECH funding is available for auditing activities.

As HITECH progressed, the website was enhanced to create a more user-friendly interface. The MeT focused on enhancing all TA activities by developing and deploying TA artifacts — guides, tip sheets, templates, and checklists — designed to help SMAs administer and implement their Medicaid PI Programs. The creation of the Auditing page in the Resource Library provided a

central location for information sharing, making it easier for the states as well as CMS to access information needed to implement and manage auditing components of their programs. The Audit Toolkit ensured information was distributed in an equitable way so that policies and procedures could be applied consistently across states and territories. It also ensured regulatory guidance and updates were available to SMAs timely and in accordance with regulatory and sub-regulatory guidance.

The MeT's development of the Audit Toolkit helped improve state audit plans and procedures. As the PI program progressed through different stages of MU, auditing different program years and different stages at the same time become increasingly more complicated. States benefitted from having an easily accessible platform which allowed access to tools to effectively run their auditing programs. The **Audit Toolkit** also improved the quality of state submitted audit strategies. By leveraging the CMS specifications sheets, Audit Toolkit appendices, Audit FAQs and other Audit Tools, states were equipped to make appropriate programmatic updates to their audit strategies timely. States thereby generally did not have to submit multiple versions of the audit strategy to address changes in one Federal Regulation due to insufficient or missing information.

Improve Audit Reporting – CMS requested that states submit results of audit and appeals to the NLR. The MeT observed, through the process of reviewing the states' audit strategies, that there was confusion in several states regarding the difference in reporting the results of the post-payment audit and appeals to the CMS NLR, and the quarterly and annual HITECH reporting that states were required to complete for the PI Program. The MeT and CMS conducted research and were able to determine which states had not been reporting audits and appeals to the NLR. The MeT created a Tip Sheet, hosted CoPs, and drafted email language for CMS State Officers to share with the states who were not adhering to the CMS Audit **Reporting requirements**. The MeT and CMS worked with states to determine which reporting option was best for them and assisted where needed with getting the process in place. The MeT assisted CMS in educating states on the reporting options available. This support to improve Audit Reporting was done through CoPs, technical assistance, Auditing Toolkit Appendices, FAQs, and Tip Sheets.

States who started **reporting audits** to CMS early in the program were able to utilize the data in the NLR to reconcile audits and appeals, to create trend analysis reports, and to utilize data from reported audits to assist with creating risk categories for future program year audits. The collective data in the NLR from the states allowed CMS to determine common audit findings, risks, and concerns which could be leveraged for future CMS guidance and best practices.

For future CMS programs involving auditing, CMS should consider including **reporting audits** to CMS in the regulations. If regulation is not an option, at a minimum CMS should involve contractors in the data analysis early in the program to assist with tracking reporting, identifying gaps, providing technical assistance, and creating resources to support states in their audit reporting. If the analysis of states reporting audits and appeals to CMS had been done in an earlier program year, states may not have backlogs and CMS would have more data to inform decision making.

NLR/SLR Support – CMS used the **NLR** for the collection and reporting of payments and auditing data for the Medicaid PI Program. Having access to the NLR allowed states to generate reports to confirm PI incentive payments and allowed for reconciliation of payments. States could generate reports to track and reconcile audits and appeals. To access this information, state

representatives needed to go through the approval process which could be challenging and time consuming. The MeT was able to assist CMS and states to obtain access to the NLR. The MeT created CoPs, Audit Toolkit Appendices, and templates guiding states through the connection, submission, and reporting processes.

States, CMS, and the MeT were able to generate **Business Intelligence (BI) reports** to assist with review of state EP and EH payments, audits and appeals reported to CMS, trend analysis on state and provider participation, gaps in reporting audits and overall program participation. The MeT generated reports for states that had challenges. The MeT reviewed BI reports to determine which states reported audits and appeals to the **NLR** and assess where there were gaps. As requested by CMS, the MeT proposed plans to address some of the gaps and ensure more complete information was uploaded to the NLR. The MeT was also able to utilize BI reports to share data with states during CoPs and within the Audit Toolkit. One key lesson learned was realizing these reports should have been generated and utilized earlier in the program. Data from these reports confirmed that there was confusion around reporting audits and appeals to CMS. Had this information been analyzed sooner, states would have stayed on track with reporting and would not have had to spend as much time catching up with their reporting. Additionally, the data in the NLR would have been more accurate if states had been reporting audits sooner.

States developed or procured **State Level Repositories (SLRs)** to allow EPs and EHs to submit attestations to receive a PI incentive payment. It was the states' responsibility to ensure an SLR was available that met the program requirements, allowed EPs and EHs to participate in the PI program, collected and stored attestation documentation, and assisted with validating EPs and EHs met the requirements of the PI Program. Not every state's SLR included the same functionality. CMS and the MeT worked with states to ensure the SLRs were supporting the Medicaid PI program appropriately.

For auditing purposes, most SLRs assisted with pre-payment reviews by ensuring certain reporting requirements were met before EPs or EHs submitted an attestation. From a post-payment audit perspective, many SLRs stored supporting documentation that the state's audit team used for audit reviews. This was especially beneficial when states were behind in their audit reviews and collecting documents from previous program years. States that were proactive in collecting data in their SLRs from the beginning found the post-payment audit process easier and quicker.

As HITECH progressed, new CMS regulations were introduced which required states to update their SLRs to meet the new requirements. The MeT provided summaries, tip sheets, and FAQs on adhering to the new regulations. One of the challenges the states encountered was trying to update their **SLRs** to meet the requirements of the new regulations in a short time frame. Due to the timeframe for adherence to CMS Final Rules, states were expected to update their SLRs to remain compliant quickly. Sometimes delays to timing of states opening attestation periods for EPs and EHs occurred. The MeT worked with CMS to provide support and technical assistance to states and territories regarding updating their SLRs to remain in compliance with federal requirements.

As many states designed, developed, and implemented SLRs utilizing HITECH funding, CMS encouraged **reuse** of these systems. The MeT hosted CoPs, developed SLR reuse guidance, and worked with CMS to encourage states to reuse their SLRs. Several states have been able to

repurpose their SLR for new incentive programs; therefore, leveraging the HITECH funding they originally received to support their SLR.

One significant success of the program regarding SLRs was the formation of a 14-state collaborative that created an SLR with core functionality the 14 states could utilize while also allowing for customization to meet each state's specific needs. This MAPIR (Medical Assistance Provider Incentive Repository) collaborative not only saved money by only funding the core functionality once for all state participants, but also created a support system to ensure SLR requirements were being met. The MeT and CMS were able to promote this concept to other states and provide support through CoPs, tip sheets, and technical assistance to ensure the collaborative was appropriately updating MAPIR.

Review Audit Strategies and Maintain Audit Strategy Matrix – The MeT developed an Audit Strategy Matrix maintained matrix by inputting states' data that was received via state-submitted audit strategies. The MeT reviewed the state-submitted audit strategies and provided an analysis document to CMS for their review and assisted in determining if the submitted audit strategy provided adequate information with the auditing techniques and procedures to be in compliance with federal regulations and ensure payments were made appropriately.

The Audit Strategy Matrix consisted of an aggregate summary of state audit strategy elements and was designed for internal CMS use. This matrix outlined states' detailed audit approaches and provided CMS with a top-down view of state audits that allowed tracking of elements relative to alignment with the PI Program end dates. The MeT continued incorporating key information from newly approved state audit strategies into the Audit Strategy Matrix by extracting this information from existing state audit strategy documents. The MeT provided CMS with a quarterly update to the Audit Strategy Matrix.

These quarterly matrices incorporated the data from the audit strategies and provided a current cumulative summary, which could be used by CMS for monitoring and management of state audit strategy documents, to help ensure continuing compliance with federal regulations. The MeT suggested modifications and additions to criteria as necessary and, per CMS approval, was able to further enhance the usability and functionality of the "top-down view" (i.e., summary statistics) of states' audit strategies.

The MeT analyzed the data elements included in the Audit Strategy Matrix and was able to determine trends and find gaps in state audit programs. Recommendations were provided to CMS audit leads and then shared with CMS State Officers to discuss with states and territories. The information in the Audit Strategy Matrix allowed the MeT and CMS to make recommendations to states to better improve their audit strategies.

Auditing FAQs – With CMS direction, review, and oversight, the MeT members have routinely researched and provided responses to questions from state staff regarding the Medicaid PI Program programmatic and auditing requirements. This research throughout the program along with development of the other auditing tools has provided the MeT with an in-depth knowledge of state Medicaid PI Program audit processes. The MeT developed and updated Audit FAQs on a semi-annual basis and shared with states, the MeT worked with CMS to identify and prioritize the questions that would benefit the states. Prior to each semi-annual update to Audits FAQs, the

MeT reviewed all of the FAQs on the Medicaid TA website at that time to validate accuracy and consistency.

The FAQs were developed from the states' questions posed on forums such as the HITECH Auditing CoP (or other CoPs), during RO calls, training sessions, site visits, and questions submitted directly to their designated CMS liaison. As best practices and lessons learned were identified, the MeT expanded the Audit FAQs. The MeT's participation in the CoPs and frequent discussions with the states empowered the MeT to suggest new FAQs based on questions that were being asked by the states. The FAQs provided a repository of common issues/challenges faced by the states and proved to be an effective way to distribute information in a manner that supported the information be applied consistently. Storing the FAQs in a web format was helpful as it allowed all pertinent data to be stored in a centralized location. It was also beneficial as the states were able to filter to suit their needs. In order to allow states to download the Auditing FAQs but not be able to edit them, the MeT created a password-protected spreadsheet that contained all the FAQs posted to the Medicaid TA website. This will allow states to have access to the Auditing FAQs after the Medicaid TA website is decommissioned.

Site Visits – Additionally, the MeT supported CMS by providing subject matter expertise on periodic Traditional Site Visits. The purpose of these visits was to review states' progress with their Medicaid PI Program, ensure the state was meeting requirements of the associated federal regulations, provide technical assistance to the states in best practices to benefit the program, and to provide the state with a national perspective by providing feedback on how the state was operated at the state level as well as how it compared to other states on the national level.

The Traditional Site Visit framework materials helped standardize the process of performance visits to the state Medicaid agencies (SMA). It included CMS' HIT business objectives and requirements based on advances in Health IT. The framework was used as guidance when preparing for and conducting the site visit. The development and use of this framework minimized variation and promoted quality visits through consistent implementation of processes within CMS. The Traditional Site Visit framework had three (3) major objectives:

1. To assist and provide in-depth technical assistance to states in implementing their program including identification of areas of improvement and best practices;
2. To provide CMS with a better perspective on how the program is being operated in a state; and
3. To provide a written process that will both streamline and standardize the framework used by CMS in reviewing the states' HIT efforts.

The Traditional Site Visits were successful due to the outreach and coordination efforts performed prior to the visit. The site visits presented an opportunity to strengthen and further cultivate the relationship between CMS, the MeT, and State Medicaid Leaders. They allowed CMS to work collaboratively with the states in efforts to gain a better understanding of existing barriers and challenges they faced, understand how their programs operated firsthand, understand how geography impacts provider participation and adoption, and the MeT provided in-depth analysis of each state's Medicaid program. Working with state staff one-on-one not only allowed the sharing of ideas but provided the opportunity to find innovative solutions to existing challenges.

The MeT maintained a **site visit tracker** to track previous recommendations made to states and territories at site visits conducted across the U.S. The site visit tracker helped to support consistency and became a valuable resource.

Strategies for Providers Not Returning for MU – Over the years, the MeT interviewed several states to determine the obstacles and barriers preventing providers from continuing to apply for Meaningful Use payments, to inform a deliverable for CMS to share with states on Strategies for Providers Not Returning for MU. The MeT compiled an action plan discussing the potential challenge that states and providers may face with incorporating 2015 CEHRT, Stage 3, and potentially MIPS, as well as discussed possible solutions to address these challenges. MeT identified common themes related to challenges that may have prevented providers from annually seeking MU payments. These themes included barriers at both the state and provider levels: MU staff turnover within the state and provider practices; lack of resources/skill set for data analytics, EHR training, upgrades, and support; lack of outreach and communication; and MACRA/MIPS (program alignment). There were many commonalties and strategies identified among states that had increased participation beyond AIU. The commonalities included partnership with other health care entities/programs; outreach and communication; continued engagement with CMS; end-user support and user-friendly attestation tools; and appropriate staffing levels. Through analysis over the years and identification of common barriers as well as successful strategies for increasing participation in the Medicaid PI Program, the MeT developed a generalized action plan to assist states with considerations around maximizing Medicaid PI Program participation.

Audit and Oversight Support Lessons Learned

Through the Audit and Oversight and Support Work, the MeT identified the following lessons learned:

- States who started reporting audits to CMS early in the program were able to utilize the data in the NLR to reconcile audits and appeals, to create trend analysis reports, and to utilize data from reported audits to assist with creating risk categories for future program year audits. The collective data in the NLR from the states allowed CMS to determine common audit findings, risks, and concerns which could be leveraged for future CMS guidance and best practices.
- Having access to the NLR allowed states to generate reports to confirm PI incentive payments and allowed for tracking and reconciliation of payments. States that were proactive in collecting data in their SLR from the beginning found the post-payment audit process easier and quicker.
- The MeT analyzed the data elements included in the Audit Strategy Matrix and was able to determine trends and find gaps in state audit programs. Recommendations were able to be provided to CMS audit leads and then shared with CMS State Officers to discuss with states and territories. The information in the Audit Strategy Matrix allowed the MeT and CMS to make recommendations to states to better improve their audit strategies.
- The Traditional Site Visit framework materials helped standardize the process of performance visits to the state Medicaid agencies (SMA).
- The Audit Toolkit ensured states were equipped with current, consistent, program updates in a digestible format that was approved by CMS. This supported timely auditing of providers and compliance with federal regulations.

- Having a CMS-Approved Audit Strategy became an important tool for ensuring consistency when there were staffing changes. The audit strategy also served as a resource for states to lean on to support their determinations in any appeals following failed audits.
- Auditing FAQs not only allowed states to find answers to the most common questions, but the FAQs provided consistency with responses.

Annual and Quarterly Reporting

Per federal regulation, states participating in the Medicaid PI Program were expected to submit annual and quarterly reports to CMS. The HITECH quarterly reports contained information specific to each state's program such as program implementation dates, outreach activities, and information regarding total amounts paid, audited, and recouped for all providers. The HITECH annual reports were designed to capture aggregate EP attestation data for each program year the state participated in the PI Program and issued payments to EPs. Both the HITECH quarterly and annual reports were originally submitted to CMS via Excel spreadsheets that were uploaded by the state to designated folders on the Medicaid HITECH TA website. The MeT served as subject matter experts for both the quarterly and annual reporting requirements and provided support and guidance to the states submitting these reports, as well as conducted analysis and data cleanup once the reports were submitted.

In 2015 the MeT improved the process by developing standardized, streamlined annual and quarterly reporting processes and online tools to enhance the quality of the state-submitted data. The online tools were housed on the Medicaid HITECH TA website. The MeT focused on the most common issues found in previously submitted reports and met regularly with CMS leadership to discuss ways to improve the processes. Once the online Quarterly and Annual Data Reporting Tool was developed, the MeT facilitated a pilot of the new online reporting tools with five (5) volunteer states before the tools went live on the Medicaid HITECH TA site. The focus of the pilot was to allow states to test the new online tools and provide feedback to the MeT regarding the functionality and usability of each tool from the states' perspective. The MeT then updated the tool based on feedback from this pilot, before making the tools available to all states on the Medicaid HITECH TA site. The MeT incorporated user-centered design into the development process. Through collaboration and open communication with CMS and states, the MeT was able to create online reporting tools that collected quality program data for CMS in a more efficient, easy to use format for states.

From 2016 through 2021 the MeT updated the online Quarterly and Annual Data Reporting Tool annually based on new program regulations and reporting requirements released by CMS, as well as feedback regarding the functionality of the tool and reporting process received from states. During this time, **the MeT provided technical assistance to states during the report submission period and data correction process**. The MeT provided technical assistance to states via the Medicaid HITECH TA site in several ways, including announcements posted on the home page reminding states of upcoming submission deadlines, as well as tip sheets informing states of reporting requirements and processes. **By making these resources available via the Medicaid HITECH TA site, states were able to gain a better understanding of reporting requirements and better prepare.**

The MeT presented on HITECH Annual and Quarterly Reporting at HITECH Multi-Regional Meetings and hosted and facilitated a yearly webinar designed to inform states of any new updates to the annual reporting tool and train them on use. This annual webinar gave states an opportunity to ask questions regarding the tool and the reporting process. Throughout the reporting period, states had opportunities to request one-on-one technical assistance regarding the online reporting tools. The MeT facilitated numerous one-on-one TA sessions with states over the years.

Once report deadlines passed, **the MeT, with the assistance of CMS State Officers, followed up with states** that did not submit a report to remind them the report needed to be submitted, as well as offered assistance with the data entry and submission process needed. The MeT reviewed and analyzed the data submitted, noting possible issues with the data, and worked closely with each state to ensure that relative reports were corrected. **This one-on-one communication with states improved the quality of data collected.**

The MeT and CMS **compiled and analyzed** the data, for all program years, submitted by all states and territories, and created a report. This report was made accessible to all states and CMS via the Medicaid HITECH TA website. The report provided states with premade tables and graphs that allowed for comparison of data across the nation, by Medicaid PI Program objective or measure and by topic from the beginning to end of the PI Program. The report included raw data, which allowed states to conduct their own analysis and develop trend reports.

The ability to view data in comparison to other states and national averages **provided states the opportunity to analyze aspects of their own Medicaid PI Programs,** such as provider participation through the different stages, determine if additional outreach was needed for specific objectives to help providers meet threshold requirements, etc. This report provided CMS **aggregate data that could be used to determine which objectives and measures were being met by most providers and which objectives and measures providers were struggling to meet**. The insight into how providers were attesting to individual objectives and measures was available to be considered by CMS during future rule-making, when determining if adjustments to thresholds were needed and to determine what would be the most beneficial outreach to states and providers in the future, allowing for better understanding of the Medicaid PI Program and continued provider participation.

Table 6 below shows each Program Year's incentive payments from the beginning to the end of the Medicaid EHR Incentive/Promoting Interoperability Program. The calculated payments shown below include adjustments or reductions made to the initial payments received by each provider type. Table 7 below shows the number of EPs and EHs who participated (received an initial payment) in the program across all Program Years. Table 6 and Table 7 below show an increase in participation and incentive payment amounts issued to EPs in Program Year 2016, the last year to begin participation in the program. A conclusion could be drawn that this is a demonstration of the importance and effectiveness of CMS, the MeT, and state efforts in increasing EP participation, and reengaging them in the program through communications and outreach.

More than $7 billion issued to EPs and over $6 billion issued to EHs provided funding necessary for professionals and hospitals to obtain and maintain EHR systems and laid the groundwork for HIE to support Medicaid.

Table 6: Payment Amounts for EPs and EHs by Program Year

Program Year	EP Payment Amount ($)	EH Payment Amount ($)
2011	1,042,645,955.68	1,731,901,902.98
2012	1,184,966,707.74	1,806,814,539.31
2013	1,086,414,038.29	1,610,358,863.14
2014	885,037,558.97	807,307,018.83
2015	915,465,451.67	369,646,039.59
2016	1,094,692,764.20	213,968,320.89
2017	400,815,580.24	65,452,328.63
2018	312,263,837.08	21,584,383.19
2019	106,070,309.69	3,137,457.14
2020	99,324,151.06	
2021	67,871,983.68	
Total	**7,195,568,338.30**	**6,630,170,853.70**

Table 7: Participation Counts for EPs and EHs by Program Year

Program Year	EP Count	EH Count
2011	49,875	2,033
2012	68,768	2,717
2013	78,239	3,441
2014	70,065	2,769
2015	73,171	1,363
2016	84,193	757
2017	47,629	316
2018	37,024	155
2019	12,551	18
2020	11,752	
2021	8,022	
Total	**541,289**	**13,569**

Annual and Quarterly Reporting Lessons Learned

Through the Annual and Quarterly Reporting work, the MeT identified the following lessons learned:

- Report provided CMS aggregate data that could be used to determine which objectives and measures were being met by most providers and which objectives and measures providers were struggling to meet.
    - For example, Stage 3 objectives and measures were optional in Program Year (PY) 2017 and 2018. Data from the annual reports showed significantly fewer EPs attesting and being paid for Stage 3 in 2017 and 2018, possibly indicating that many providers were having trouble meeting Stage 3 requirements.
    - Meaningful Use measures with high exclusion percentages could possibly indicate providers being unable to meet the measure threshold and a potential need for additional provider outreach or change in measure threshold.
- Data quality checks and clean up as well as one-on-one TA to states regarding the reporting process and definitions improved quality of the data.
- Annual and Quarterly state-reported data can be used for financial accounting and reconciliation with other data sources. Having access to the data and access to modes of TA to reach all states allowed CMS to use the data to show momentum. It provided CMS an opportunity to review and compare to Medicare data.
- Collaboration between the MeT, CMS, and States in the development of the online Quarterly and Annual Data Reporting Tool allowed for higher quality data to be collected in a more efficient, easy to use format for states.
- States accessed the national view of all states' reported data to conduct analysis of how their state compared to inform their program.

HIE Support

CMS's guidance described how HITECH funding was available to support SMAs' HIE goals and projects. The MeT provided technical assistance through listserv messages, All-State Calls and Communities of Practice about the requirements to leverage this funding for HIE-related initiatives. In addition to these activities, the MeT assisted CMS by providing a synopsis of states' HIE funding requests, developing, and maintaining a workbook to track (by state) approved HIE projects, as well as including a state's HIE-related projects in big picture site visit agendas and discussions. The MeT participated in calls with CMS and states where outcomes and metrics were discussed relative to transitioning funding from HITECH to MES. CMS shared approved HIE outcomes and metrics with the MeT for entry and categorization within the CMS Certification Repository on GitHub.

The MeT worked with CMS to develop the framework for a new type of site visit that began in 2017 and focused on big-picture health IT priorities, initiatives, and collaboration with other systems and programs. The MeT assisted CMS in conducting the visits by providing support onsite and behind the scenes. While onsite, the MeT and CMS identified opportunities that leveraged adoption of interoperability standards and connectivity between eligible professionals and Medicaid professionals not eligible for EHR incentives, planned for the sustainment of priority health IT elements supported by HITECH funding beyond the program end date, and engaged

key leadership and stakeholders in their efforts to align health IT strategic initiatives. State and CMS collaboration onsite proved to be beneficial to both CMS and states.

Below is a summary of IAPD review support, HIE Tracker and big-picture activities.

- **IAPD Review Support:** To support CMS efforts to review and approve IAPD requests that included HIE-focused projects, the MeT provided a synopsis of a state's APD which included a summary of budget, projects, cost allocation, benchmarks, sustainability plan, as well as potential issues that the state may need to address. The review allowed for CMS to proactively address issues with states to ensure that the request included necessary elements, compare to previous requests, and eliminate projects that did not align with requirements.
- **HIE Tracker:** Once CMS approved a state's APD it would be shared with the MeT to extract key information for inclusion in an excel workbook titled the HIE tracker. The types of information expanded over time, but the basis was the core elements of the HIE IAPD which included, HIE activities, Benchmarks, Fair Share, Sustainability Plan, and State Contacts. The tracker also included approval dates which were available from the CMS IAPD approval letters. The extracted information was included in separate tabs within the workbook and were organized by state or territory. The tracker's table of contents (Table 8) summarizes how the information was organized:

Table 8: HIE Tracker Table of Contents

HIE Tracker		
Table of Contents		
General		
1A	Dashboard A - General	Click here
1B	Dashboard B - Activites	Click here
1C	Dashboard C - Fair Share	Click here
1D	Dashboard D - Sustainability	Click here
1 E	Reserved Dashboard	Click here
2	CMS State Leads	Click here
3	HIE IAPD Approvals	Click here
4	CMS-State Communications Log	Click here
Functional		
5A.	State HIE IAPD Activities	Click here
5B.	Benchmarks	Click here
5C.	PDMP Activities	Click here
6	State Organizational Approaches	Click here
7	Onboarding	Click here
8	Public Health	Click here
Financial		
9	Fair Share	Click here
10	Sustainability	Click here
11	Reserved for Financials	Click here
Reference		
12	State Contacts	Click here
13	CMS HIE Guidance	Click here
14	HIE Presentations	Click here
15	Definitions	Click here
16	Data Sources	Click here
16B	Activities Details for Presentations	Click here

The tracker was housed in 'CMS Only' tab of the Medicaid HITECH TA website. Although the main tracker was only available to CMS on the portal, information from the tracker was made available for broader consumption via the State HIE IAPD Activities page of the portal outlined in Table 9 as well as on Medicaid.gov's HIE page presented in Figures 4 and 5.

As gathered from the tracker, states and territories received HITECH funding for a variety of HIE-focused projects that are summarized in Table 9:

Table 9: Summary of HITECH Funded HIE Focused Projects Table

Approved HIE IAPD Activities	Summary of Projects	Number of States and Territories Participating
Onboarding Providers	Includes any activities related to getting providers connected to and using the services of the HIE	49
Public Health	References all public health specific interfaces including cancer registries, immunization registries, syndromic surveillance, Prescription Drug Monitoring Program, etc.	49
HIE Infrastructure	Covers the infrastructure like Service Access Layer, Trust Broker HSP, Master Facility Index, Master Clinician Index, Single Sign-On, Community record, NwHIN Gateway, etc.	49
HIE Services	References the services provided include Lab Reporting, eCQMs collection, Direct messaging, Query Based Exchanges, Event Notifications, etc.	49
Planning	References to higher level planning activities (broad scope)	49

Figure 4: Medicaid Funding Requests

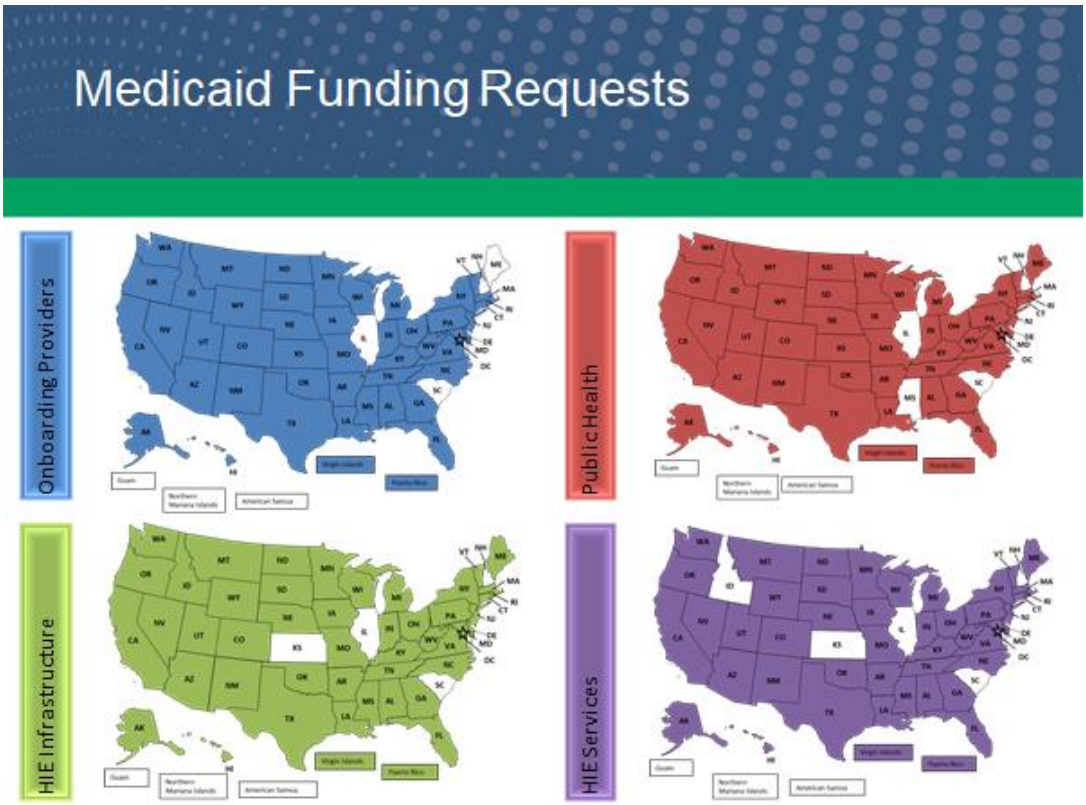
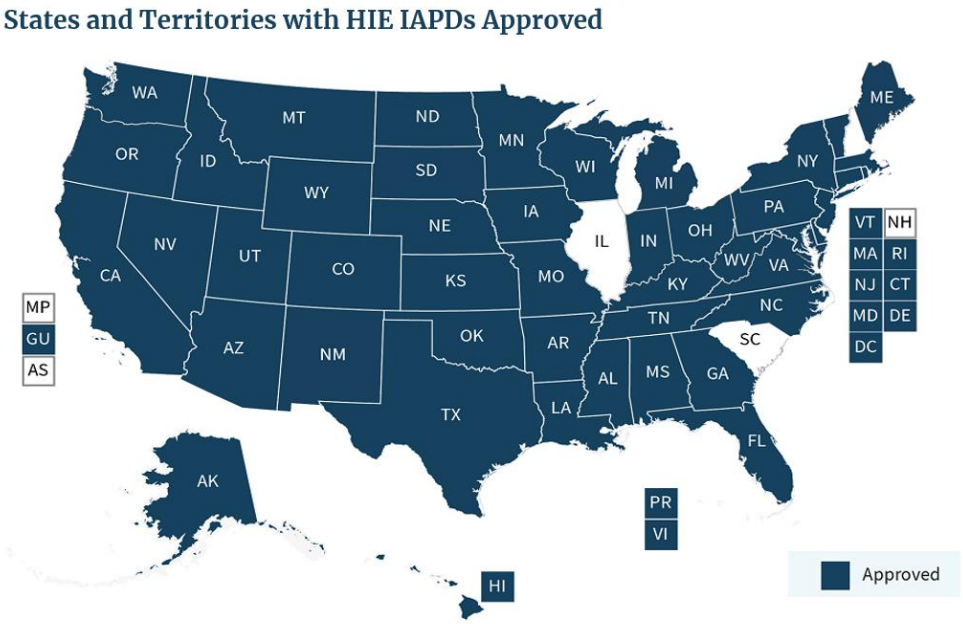
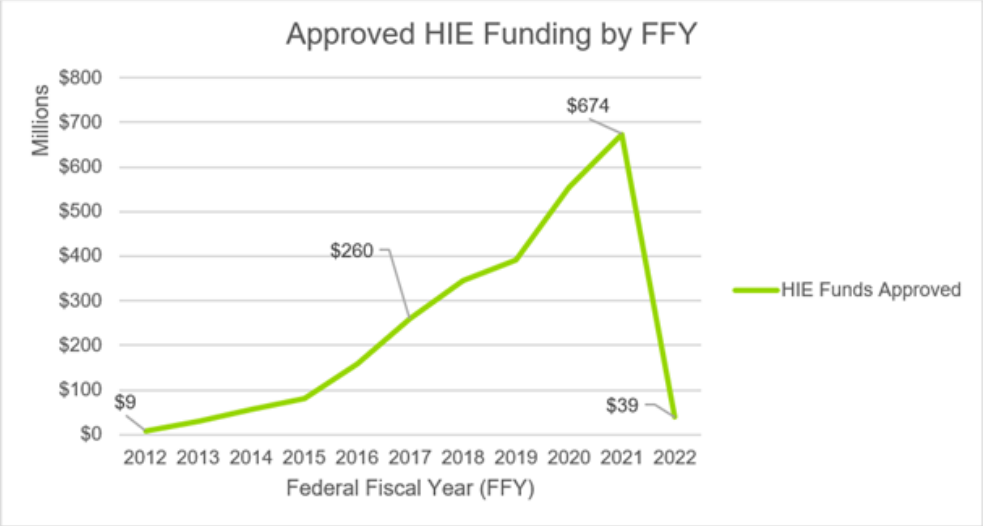


Figure 5: States and Territories with HIE IAPDs Approved



The MeT also tracked the amount of funds that CMS approved for HIE related to the program beginning in FFY 12 and ending in FFY 22. Figure 6 highlights how much was approved across the program's duration.

Figure 6: Total HIE HITECH IAPD Funding by FFY



- Big Picture Site Visit: As noted previously, the big picture site visits began in 2017. Prior to that, CMS held site visits that were focused on the operational aspects of the HITECH program in different states. Between 2013 and 2017 CMS held 33 of the HITECH-oriented site visits. To better understand a state's HIT and HIE related goals, progress in achieving the goals and to offer more tailored technical assistance, CMS held seven big picture site visits. Information from a state's SMHP, IAPDs and the HIE tracker, assisted in the development of detailed agendas as well as helping to identify attendees to discuss HIE topics. In addition, if applicable, the site visits allowed for discussions around integrating HIE and other HIT initiatives into the state's MES. With the onset of the pandemic the last big picture site visit was held in New York.

HIE Support Successes and Lessons Learned

Through the HIE Support work, the MeT identified the following successes and lessons learned:

HIE Support Successes:

- **Broad Participation** – Over 50 states and territories benefitted from enhanced federal funding to initiate HIE-related projects.
- **Alignment of Goals** – The funding was available to support a variety of projects that aligned with both the state Medicaid HIT and HIE goals as well as being able to support eligible hospitals' and eligible professionals' ability to meet Meaningful Use requirements.
- **Collaborative Effort** – States shared their experiences with implementing their HIE projects in a variety of CMS facilitated settings such as communities of practice and multi-regional meetings. This sharing of information fostered collaboration between states.
- **Pathway for Sustainability** – HITECH funding supported development of existing HIEs and helped launch many new exchanges/networks across the country. A major lesson

learned was that interoperability was vastly immature – both on the EHR side as well as HIE. This first generation was only a test bed with much trial and error, it revealed many opportunities which eventually led to the Cures Act. The Cures Act has raised the bar for the next generation of interoperability and challenges the IT industry to get it right; HITECH opened the door. The MeT HIE Support team, through work to support states and CMS State Officers, observed this evolution, which still continues.

- **Electronic Public Health Reporting** – One of the key lessons learned during the stages of Meaningful Use was the impact of electronic public health reporting, especially when facilitated via the HIE as data intermediary. Electronic public health reporting results in more timely, accurate and usable data for quicker decision-making for public health and better prepared states for the pandemic. This is a central intersection of Medicaid and public health, given that public health's mission also targets vulnerable populations.
- **Focus on Outcomes** – Toward the end of the HITECH program CMS encouraged states requesting HIE funding to include in their IAPD funding requests potential outcomes associated with HIE projects. This activity prepared states to identify outcomes that would be required in future MES certification funding requests. A listing of HIE outcomes by state is publicly available,[26] allowing states to reuse outcomes and associated metrics for post HITECH HIE projects that benefit Medicaid.

HIE Support Lessons Learned:

- **Questions and Answers** – When the initial and subsequent guidance was released related to HIE funding through HITECH, SMAs had many questions. Documenting the questions and answers was a critical task to help ensure that responses contained consistent guidance. The documentation of questions and answers also allowed for the identification of themes and trends that supported the development of targeted technical assistance and communications to help mitigate misunderstandings about the funding opportunity.
- **Targeted TA** – Using the questions as well as additional guidance, targeted communications were developed in the form of communities of practice, artifacts, and content for all-state calls and emails.
- **Documentation Review** – Initial review of HIE APD funding requests for the purpose of providing a synopsis offered states more immediate feedback on HIE funding requests and could eliminate potential inconsistency with guidance. The tracking of the funding requests via the HIE tracker allowed a better understanding of initiatives states thought were important to fund and develop. This also offered a gauge of the funding levels that might be necessary for certain types of projects.
- **Presentation of Results and Outcomes** – The development of public-facing documentation on the TA portal and Medicaid.gov allowed for states to see what others were doing and fostered collaboration/discussion between states.

Table 10 documents state achievements in EHR adoption and HIE participation among both Eligible Professionals and Eligible Hospitals, from the beginning of the Medicaid EHR Incentive

[26] https://cmsgov.github.io/CMCS-DSG-DSS-Certification/Outcomes%20and%20Metrics/Health%20Information%20Exchange%20(HIE)/

Program to the end of the Medicaid Promoting Interoperability Program in 2021. The information shown in the table below was gathered from the state's HITECH final environmental scan or State Medicaid HIT Plan (SMHP) that was submitted to CMS. Blank cells indicate that no information was provided on this topic in the final environmental scan and/or SMHP that was submitted.

Table 10: State Achievements in EHR Adoption and HIE Participation

State	Provider	Program Participation	Beginning of Program	End of Program
Alaska	EP	EHR Adoption	32%	99.28%
		HIE Participation	2 clinics	59.29%
	EH	EHR Adoption	42%	100%
		HIE Participation	1 hospital	100%
Georgia	EP	EHR Adoption	47%	100%
		HIE Participation		~15,016 connected to GaHIN with a QBE HIE connection
	EH	EHR Adoption	80%	100%
		HIE Participation		100% large hospitals/health systems contribute to GaHIN
Iowa	EP	EHR Adoption	46%	98%
		HIE Participation	2014 responses to health information exchange connections include: • 34% of providers have no plans to exchange health information • 11% connected to IHIN • 17% will connect within 1 year • 16% will connect within 2-3 years	Majority of respondents to 2018 survey are not connected to IHIN or any HIE

State	Provider	Program Participation	Beginning of Program	End of Program
	EH	EHR Adoption	11%	98%
		HIE Participation	2014 responses to health information exchange connections include: • 34% of providers have no plans to exchange health information • 11% connected to IHIN • 17% will connect within 1 year • 16% will connect within 2-3 years	Majority of respondents to 2018 survey are not connected to IHIN or any HIE
Louisiana	EP	EHR Adoption	40%	93%
		HIE Participation		• 12% connected or in process of connecting to LaHIE • 11% connected or in process of connecting to LHIN
	EH	EHR Adoption	40%	100%
		HIE Participation		• 12% connected or in process of connecting to LaHIE • 11% connected or in process of connecting to LHIN
North Dakota	EP	EHR Adoption	47%	95.83%
		HIE Participation	0%	87%
	EH	EHR Adoption	37.8%	100%
		HIE Participation	0%	• 96.55% of critical access hospitals participate in NDHIN • 83.33% of acute care hospitals participate in NDHIN

State	Provider	Program Participation	Beginning of Program	End of Program
				• 100% of outpatient hospitals participate in NDHIN

5 – Lessons Learned Provided by State and Federal Stakeholders in 2022

Through analyzing responses from states and CMS leadership, the MeT identified lessons learned across aspects of the HITECH program. While CMS provided insights on how lessons learned from HITECH can inform future MES, state feedback primarily focused on a retrospective of the HITECH program.

Milestones and Accomplishments

CMS leadership identified the sheer size of the financial investment made by HITECH as an accomplishment, noting its importance to building health IT infrastructure, investing in the economy, and providing federal support to states. Relationship development was also highlighted as a key accomplishment of the program, with leadership describing strong partnerships between states and territories and federal staff at CMS, the successful collaboration between Medicare and Medicaid within CMS, and the opportunity to create a national — and virtual — team.

Considering the program itself, CMS leadership described accomplishments ranging from getting all states and territories to launch the optional Medicaid PI Program to increasing the number of Medicaid clinical providers using EHRs in their practices. They noted improvements in program implementation over time, demonstrated by the reduction in the number of audited providers by state over time, as well as the milestone of a successful transition from Stage 1 to Stage 2 Meaningful Use. At the state level, many emphasized the importance of allowing for 90/10 funding for HIE and the success of building out HIE infrastructure in most states — improving the public health infrastructure.

State staff noted significant milestones in the payments to providers, development and enhancement of HIT infrastructure, and work centered around HIEs and outreach. Adoption rates rose across the country with EHs and EPs achieving one of the key goals of the program. Being able to improve state systems and technology to allow for greater participation was mutually beneficial for the state and providers. One state acknowledged their ability to implement a dental technical assistance outreach program that allowed for greater participation by dentists, which was not the case in all states. The vast improvement in data feeds and exchanges and messages transmitted were staggering. Multiple states noted the economic impacts to their states with the addition of the incentive dollars flowing in.

Challenges and Barriers

Despite the overall success of the program, CMS leadership identified challenges along the way, ranging from staff turnover and establishing buy in with states to program branding and limited utility of initial certified health IT products. Turnover of leadership and staff at all levels created challenges including shifting visions and priorities as well as the need for frequent trainings for

staff new to the program. While strong relationships with ONC and Medicare were described as positive outcomes of the program, we also heard that coordinating with these groups could create tension and challenges. Working with the states, too, posed challenges including wide variation in technology and capacity to implement the program across states and how to scale state successes when each state was operating a very different Medicaid program.

Details of the program presented some challenges. For example, CMS leadership discussed challenges with branding the program and getting buy-in — especially as a similar but separate program from the Medicare EHR Incentive Program, and with different requirements. Branding and buy-in was cited as a challenge again when the program transitioned from Medicaid EHR Incentive Program to the Medicaid Promoting Interoperability Program. We also heard challenges about affecting change in the health IT landscape, such as a lack of health IT industry standardization and alignment, limited information about the quality of health IT vendors, limited utility of initial certified health IT products, and challenges translating EHR adoption into improved availability of health data and improved health outcomes. Finally, we heard from multiple stakeholders that the limited provider types eligible for the program was a barrier to success.

The most common challenges that states faced centered around the complexity and lack of clarity around the program. There was ambiguity and confusion in how it should be implemented and how federal policies impacted individual states. States noted that the rollout felt rushed and it was time-consuming for staff. There was also inconsistency noted across the board when the program was initially implemented, and with the guidance received from CMS state officers.

Impact on the National Health IT Landscape

CMS leadership noted positive impacts of HITECH on the national health IT landscape, with one noting, “It was transformative. It infused a lot of attention and dollars. It also created a lot of momentum for conversations about standards that had been out there but not as turbo charged. Also, some of the impact was that it created actual deadlines and timeline for when states and the industry had to be ready to deliver.” Multiple stakeholders cited money as the driver of HITECH’s impact — both incentive dollars to providers and the 90/10 funding for state health information exchange, while others noted the importance of program branding and awareness. Specific examples of impact included states’ abilities to integrate clinical data with Medicaid systems and states’ abilities to use the Medicaid program to drive health IT policy development as well as strong relationships between CMS, MeT, and states.

State respondents also recognized the positive impact and importance of HITECH for their states through modernization of systems, economic value, increased awareness, and adoption of HIT, advancing interoperability, and general support for enhancing the HIT infrastructure. They noted greater access to health information and increased meaningful use of EHR systems. Respondents from various states noted that HITECH allowed them the opportunity to create health IT advisory councils or similar groups. This led to greater coordination across the state as it related to HIT initiatives and activities. HITECH increased the awareness of the benefits of technology in healthcare, beyond hospitals. Communication improved between other stakeholders. There was increased utilization of data by health plans, specifically the Medicaid plans. HITECH also drove improvements with documentation, increased cooperation among healthcare providers, and a general shift beyond EHR adoption to improving delivery and outcomes.

The impact of the program to public health is undeniable. We heard that HITECH supported substantial integration of lab results to point of care. It aided the public health infrastructure for HIEs, improved care transitions, increased surveillance, and supported timely access to information for providers. This laid a foundation for states to be better equipped for the unexpected COVID pandemic.

Some stakeholders shared less enthusiastic assessments of HITECH's impact. One acknowledged that the program did not achieve the ideal of seamless availability of health records anytime, anywhere. Another noted that while the HIT landscape is still not perfectly integrated, it is further along because of the HITECH program. Finally, we heard hope that the current or future administration will help get the national health IT landscape over the finish line — moving from having EHRs in place to a health IT superhighway.

Stakeholder Relationships

A unique aspect of the HITECH program was the cooperative relationships developed beyond the Medicaid HITECH team within CMS, and between CMS and other federal agencies. Within CMS, the Medicaid HITECH team worked closely with:

- Medicare
- Regional Offices, the Center for Clinical Standards and Quality
- The Office of E-Health Standards and Services
- The Office of Communications
- The Data and Systems Group Director
- The Office of the Chief Health Informatics Officer
- Office of Information Technology
- Prior Authorization
- Office of Program Operations and Local Engagement
- Office of Strategic Operations and Regulatory Affairs
- financial analysts and funding specialists

Coordination with other federal agencies included working with:

- Office of the National Coordinator on certification, best practices, roadmaps, and policy papers
- Health Resources and Services Administration on eligibility for Federally Qualified Health Centers providers
- Indian Health Services on eligibility for their providers
- Centers for Disease Control and Prevention on Clinical Quality Measures
- Substance Abuse and Mental Health Services Administration
- Health and Human Services Regional Directors
- Assistant Secretary for Preparedness and Response
- Office of the Assistant Secretary for Health
- Office of Management and Budget
- Office of Civil Rights
- Appalachian Regional Commission

Relationships with States and Territories

We heard that the relationships between the CMS Medicaid HITECH team and states and territories as part of the HITECH program were unique — as CMS aimed to be true partners working bi-directionally toward a common goal rather than implementing federally driven, state-ran programs. As a result, the CMS HITECH team worked more closely with states than other CMS teams, often speaking with states daily and visiting states to build excitement about the program and initiate and support outreach efforts. The MeT helped facilitate the strong relationship between CMS and the states through coordinating outreach and communications.

State Reported Data

Data reported by states as part of the HITECH program included NLR and SLR interface data that documented incentive payments as well as data collected voluntarily and monthly and quarterly data collected to meet statue and regulation requirements. While we heard that the data were used to highlight milestones, monitor program performance, identify areas where TA was needed, and inform program operations, we also heard that the data were probably not reviewed and used as much as they could have been. One stakeholder shared that the types of data collected were not necessarily the most useful for the program. State respondents cited collaboration with other states as helpful in meeting their reporting requirements. States often shared their reporting approach and methodology with one another. There was an appreciation for the updates to the annual reporting template to include pre-populated information from the previous year's submission.

Effective Modes of Technical Assistance

CMS leadership shared that they thought there were many good modes of TA provided to the states through the HITECH program. The Communities of Practice were cited most frequently, with stakeholders emphasizing their role building shared experience among states and bringing outsiders' perspectives on program topics. In-person multi-regional meetings, site visits, FAQs, the MedicaidHITECHTA.org portal, interactive all state calls, national conferences, and the MeT itself were also noted multiple times as effective modes of TA to the states.

The Role of the MeT

CMS leadership emphasized the importance of the MeT to the success of the HITECH program, with one sharing "in my opinion, the HITECH program would not have been successful or effective without the extensive support provided by the MeT, hand in hand with CMS." Stakeholders shared that the contract was a partnership that connected subject matter experts to the states and a strong model that should be repeated in future program implementation efforts. Another noted that more program autonomy within HITECH might have allowed for MeT to take on a greater role in some aspects of the program.

Lessons Learned

After the experience of implementing the HITECH program for 10 years, CMS leadership identified the following lessons learned for the implementation of similar programs in the future.

- **Develop clear program direction and standardization across states** – CMS leadership noted that it would be important for the program to start with clear priorities that do not compete with other programs, and a clear blueprint for states rather than requirements to work within. They noted that because the program was not prescriptive, there was an

incredible amount of variation across states that prevented achieving the streamlined and integrated health system outcomes the program was intended to create. Others noted that more multi-state collaboration could help states learn from one another in a flexible program.

- **Get off to a good start** – Multiple stakeholders expressed the need for more dedicated resources at the beginning of the program including financial support, subject matter expertise, and in-person working sessions. This would allow the program to develop clear direction and standardization from the beginning.
- **Establish an outreach plan** – Stakeholders credited improved success and increased participation rates once they were able to routinely check in and meet with providers. There were surveys, targeted outreach, and larger community events. States also gathered community members to share best practices which proved beneficial for all participants. This also presented an opportunity to bring in outside representatives from different stakeholders to share and collaborate with the group.
- **Publish materials and guidance** – Respondents noted that having educational materials improved internal capabilities at the state, federal, and contractor levels, in addition to materials to aid providers and hospitals.
- **Coordinate with federal partners** – CMS leadership identified the need to better integrate the similar, but operationally quite different, Medicare and Medicaid Promoting Interoperability Programs. Similarly, they noted the need to be more prescriptive in coordination with ONC about how states could use Medicaid and HIE money.
- **Plan for sustainability** – CMS noted that conversations with states about planning for sustainability should have happened sooner and state plans should have been required to be sustainable.

Specific to the content of the HITECH program, both CMS leadership and state respondents noted that they would have liked to see behavioral health and long-term care providers included in the program. A state noted that EHR tools considered to be compliant were not necessarily useful to achieve goals, acknowledging that the HITECH program overestimated the extent to which health IT vendors would improve product usability on their own without being mandated.

6 – Best Practices/Recommendations for Consideration

What CMS Could Implement in the Future

- *Implement a follow-on program to HITECH to address gaps in HIT*. Stakeholders emphasized the need to support provider types not eligible for HITECH who have been 'left behind.'
- *Coordinate with state leadership.* Gather the consensus and buy-in for any CMS program by establishing goals and benefits with state Medicaid directors and other key stakeholders within the state.
- *Get off to a good start.* Invest in dedicated resources at the beginning of the program including financial support, subject matter expertise, and in-person working sessions.
- *Develop clear program direction, standardization across states, and simplify requirements.* Ensure future efforts start with clear priorities that do not compete with other programs and include a clear blueprint for states to support streamlined and integrated health system outcomes.

- *Coordinate with federal partners from program outset.* CMS leadership identified the need to better integrate the similar, but operationally quite different, Medicare and Medicaid Promoting Interoperability Programs and to be more prescriptive in coordination with federal partners.
- *Plan for sustainability well before program close.* We heard that during HITECH, conversations with states about planning for sustainability should have happened sooner and state plans should have been required to be sustainable.
- *Design data collection to maximize value.* Future programs should collect data in user-friendly formats, link to outside data sources, define data reporting requirements based on what information will be most useful to improve program implementation and performance, update data reporting requirements to meet changing program needs over time, and engage with states and territories about what data would be useful.
- *Require audit reporting.* For future CMS programs involving auditing, CMS should consider requiring reporting audits to CMS in the regulations.
- *Report data to CMS early*: States who started reporting audits to CMS early in the program were able to utilize the data in the NLR to reconcile audits and appeals, to create trend analysis reports, and to utilize data from reported audits to assist with creating risk categories for future program year audits. The collective data in the NLR from the states allowed CMS to review common audit findings, risks, and concerns which could be leveraged for future CMS guidance and best practices.

What Future Contracting/Support Vendors Could Do

- *Update CMS-approved outcomes and metrics on the CMS Certification Repository on GitHub*. The CMS MES Certification Repository allows states to reuse outcomes and associated metrics for post HITECH HIE projects.
- *Provide outreach* to states about changes or additions to CMS-Required Outcomes to inform state certification planning efforts.
- *Assist with the transition to MES funding* to include non-traditional MES modules such as HIE and Public Health.
- *Provide guidance and artifacts that* detail policies and requirements in digestible terms for states to reference.
- *Provide Reporting TA* such as one-on-one technical assistance to states regarding online reporting tools and audit reporting.

What CMS Could Do to Facilitate Strong Partnerships with States in the Future

- *Support and invest in interstate cooperation from program outset*. States commented that when collaboration between states happened, it was a very helpful model. But many states did not begin cooperating until well into the HITECH program. CMS could facilitate interstate cooperation from program outset to help states learn from one another.
- *Provide states with a clear value proposition from program outset.* A clear message with concrete value to the states and key partners will help state leaders gain buy-in from necessary stakeholders and promote a strong state program and state-federal partnership.

Recommendations for Medicaid Enterprise System

- *Support HIT for providers excluded from the Medicaid PI Program.* Both CMS leadership and state respondents noted that they would have liked to see behavioral health and long-term care providers included in the program.
- *Focus efforts on HIT useful to achieving goals.* States explained that the EHR tools considered to be compliant as part of HITECH were not necessarily useful to achieve goals, with CMS leadership acknowledging that the HITECH program overestimated the extent to which health IT vendors would improve product usability on their own without being mandated. Future MES activities could proactively focus efforts on supporting HIT that is useful to achieving goals.

Potential Funding or Support Ideas for the Medicaid Enterprise System

- *The Cures Act* has set forth major requirements for data standards and interoperability that can be leveraged to promote HIT. Components include a Trusted Framework (TEFCA), U.S. Core Data for Interoperability (USCDI), Information Blocking, interoperability/FHIR, enhanced certifications to ensure data sharing and a focus on patient access to their information. New policies and incentives have been published for the 2023 Medicare Promoting Interoperability Program that include requirements for TEFCA participation, increased public health reporting and the collection of SDoH data. Similar requirements could be leveraged for MES which could greatly expand interoperability.
- *CDC's Data Modernization Initiative (DMI)* is a multi-year, $1 billion-plus effort to modernize core data and surveillance *infrastructure* across the federal and state public health landscape *that can be leveraged to promote HIT*. DMI is at the heart of a national effort to create modern, integrated, and real-time public health data and surveillance that can protect from health threats. CMS and CDC working together to facilitate and incentivize data exchange and interoperability could greatly impact population health outcomes. SMA collaboration with State Department of Health Agencies subsequently working together could yield significant outcomes.

Appendix A: CMS Questions

CMS Questions	
1	What do you consider were significant milestones and accomplishments during the HITECH program?
2	What were some of the challenges and barriers you had to overcome in implementing the EHR Incentive Program at the federal level?
3	How would you describe the impact of HITECH on the national health IT landscape?
4	Outside of the Medicaid HITECH Team, were there other CMS stakeholders involved in implementing the EHR Incentive and HITECH Program? (Please identify names or roles)
5	How did CMS coordinate with other federal agencies?
6	Coordinating with the states, was this different than traditional relationships with the states in the past or on other programs?
7	How was the state reported data reviewed and utilized within CMS?
8	In your opinion, what modes of TA were most effective for the states?
9	How did the role of the MeT help with overseeing the HITECH program and provide support for the states?
10	If the HITECH and Incentive Program were to be rolled out again, what changes would you make?
11	Do you have anything else you would like to share about the HITECH Program?

Appendix B: State Questions

State Questions	
1	What were some challenges/barriers you had to overcome in implementing the EHR Incentive Program?
2	What were some significant milestones for the EHR incentive/HITECH program in your state?
3	How would you describe the impact of HITECH on your state?
4	How did providers/hospitals react to the program initially? How did their perceptions change?
5	How did you check on progress with your providers? How did your state gauge that you were making strides with MU?
6	What helped with reporting to CMS?
7	Have you received any feedback from patients/Medicaid beneficiaries on the impact of Health IT?
8	What mode of TA was most helpful for your state teams? Please rate the following as Most Helpful to Least Helpful. • CoPs • RCCs • Onsite Regional Meetings OR MedicaidHITECHta.org Website Repository of Resources • Emails • Topical Webinars • Computer-Based Training Modules
9	What, if any, other funding sources are available in your state to advance health IT? How did they interact with HITECH?
10	What systems or infrastructure that you established under HITECH have been transitioned to the MES?
11	If the HITECH and Incentive Program were to be rolled out again, what changes would you like to incorporate? (At the state or CMS level)
12	How has your state transitioned HITECH resources into the MES environment?