MDHHS

Michigan Department of Health & Human Services

2022 Final Michigan State

Medicaid Health Information Technology Plan (SMHP)

State of Michigan

Table of Contents

List of Tables and Figures

Introduction

Purpose

The State Medicaid Health Information Technology Plan (SMHP) describes Michigan's activities over the next 5 years supporting implementation of Section 4201 Medicaid provisions of the American Recovery and Reinvestment Act (ARRA).

This document will describe how Michigan intends to:

- Administer the Electronic Health Record (EHR) incentive payments to eligible health providers.
- Monitor Promoting Interoperability payments to eligible health providers.
- Coordinate all ongoing Health IT (HIT) initiatives including Medicaid Promoting Interoperability Program, Statewide Health Information Exchange (HIE) initiatives and Regional Extension Centers supported by the Office of the National Coordinator for HIT (ONC), and other programs.
- Outline various sources of funding for HIT-related initiatives, including Michigan's Health Information Technology (HIT), Health Information Exchange (HIE), and Medicaid Management Information System/Community Health Automated Medicaid Processing System (MMIS-CHAMPS) IAPDs. Other APDs that fund Activities related to systems that interact with Health Information Technology include the Decision Support System (DSS), Eligibility and Enrollment (E&E) and Integrated Service Delivery (ISD) IAPDs. The bulk of the systems and projects most closely related to the Medicaid EHR Promoting Interoperability Incentive Program are in the first 3 APDs listed.
- Use advances in technological infrastructure and governance to add value beyond the basic requirements of the Promoting Interoperability program for both Medicaid providers and beneficiaries.

Overview of the SMHP

The Michigan Department of Health and Human Services (MDHHS) administers the Promoting Interoperability Program. The Health and Aging Services Administration (HASA), formerly known as Medical Services Administration (MSA) is Michigan's State Medicaid Agency (SMA) and is housed within MDHHS. For the purposes of this document, the acronyms 'HASA' and 'SMA' can be used interchangeably. For a complete list of relevant acronyms, please refer to the latest iteration of Michigan's APDs. MDHHS prepared this SMHP revision and associated HIT IAPDU with support from the Michigan Public Health Institute (MPHI). While not a HITECH submission, the MMIS-CHAMPS Enhancements IAPDU includes several items that were previously included in the former HIT-MMIS IAPDU.

This document has been updated to reflect MSA's structure as of 2022 and the agency's known plans to date through 2027. The scope of this document is intended to illustrate how the Promoting Interoperability Program complements and enhances other components of Medicaid, and vice versa.

The SMHP consists of the following main sections:

- Michigan's "As-Is" HIT Landscape
- Michigan's "To-Be" HIT Landscape
- Michigan's Medicaid EHR Promoting Interoperability Incentive Program Implementation Plan
- Michigan's HIT Roadmap

Michigan's Audit Strategy for its Medicaid Promoting Interoperability Program will be submitted to CMS in a separate document.

About This Document

The SMHP is a "living" document and is reviewed and updated as needed. The "To-Be" visions of systems described in this document are subject to the availability of funds and evolving state needs. Revisions will be submitted to Centers for Medicare and Medicaid Services (CMS) for approval approximately once a year. Once approved, the current version is available on the MDHHS website and at https://www.michiganhealthit.org/.

Please note that references to "Meaningful Use" or "MU," especially in the context of historical information, may still appear in this document.

Public Input

Public input is welcomed on this document. Comments will be accepted on an ongoing basis. Comments should be directed to the contact form available at https://www.michiganhealthit.org/. Meaningful comments will be responded to and incorporated into the next version as appropriate.

Section A: Michigan's "As-Is" HIT Landscape

Criterion 1: Extent of EHR Adoption by Practitioners and Hospitals

An online survey was embedded into the Incentive Program registration module. In order to attest for the program, providers must complete the survey. The survey data that is collected is analyzed and a report of findings is published on the michiganhealthit.org website. The most recent report available represents the 2021 Medicaid Promoting Interoperability program year (January 2021-September 2021).

A total of 486 surveys were completed, representing both individual practices as well as group practices. The topics covered in the survey include the following:

- Extent of EHR System Implementation
- Years in the incentive program
- Major concerns, benefits, and usage rates regarding the EHR System
- Health information Exchange and M-CEITA participation

This latest set of survey results showed similar concerns and impacts. Key takeaways this year are that initial costs of implementation remains the key concern for EPs in all years of the program. This may reflect an unclear distinction between "initial" vs. "recurring" implementation costs, especially as necessary upgrades and enhancements take place during the duration of the program. However, as hospitals and physician groups identify a need or desire to switch their vendor, a new EHR system would come with initial implementation costs. Disruption to practice workflow and recurring costs are also cause for concern, though somewhat less so than in 2018. EPs that reported as part of a group practice tended to rank these issues as a greater concern than individual EPs. Patient privacy did increase its share of EPs calling it a minor or medium concern, especially for EPs later in the program. Impacts of EHR use had a clear distinction between factors related to time, resources, and efficiency vs. factors related to use of information and patient care. Clear majorities of EPs reported improvements in access to patient information, care coordination, decision support, patient outcomes, health care delivery processes (e.g. reduced time to review lab, radiology, or pathology orders), communication/provision of information to patient, practice workflow – presumably related to better/more information being available, and privacy/security of patient information. These correspond to a perception that more can and is being done to deliver care to a given patient or to all patients via the use of the EHR.

As far as the ability to reduce staff based on implementing an EHR system, 18% believe it is too early to tell. An increasing percentage (over a 33%) of EPs surveyed have been able to reduce or reassign staff because processes have become more efficient: a decreasing percentage (28%) have made no changes to staff, and just under 20% have had to add staff. These frustrations are encapsulated by some of the following free-text comments Michigan received:

As of December 31, 2021, 7,859 unique Eligible Professionals (EPs) and 120 unique Eligible Hospitals (EHs) participated in the EHR Incentive Program.

As of December 31, 2021, there are approximately 1,308 professionals and 110 hospitals that have successfully completed all participation years in the program.

For additional information related to this criterion, including a table of payment histories and program status by provider type, please refer to the Environmental Scan in Appendix A.

Criterion 2: Extent of Broadband Internet Access

Michigan, through "Connecting Michigan" as part of the "Connected Nation" initiative, has expanded its overall broadband coverage becoming the first state with a Connected Community in 2011 and has quickly become one of the best scoring states in overall coverage of broadband communications.

However, in 2015, the Federal Communications Commission (FCC) updated the federally recognized definition of broadband as internet service that offers 25Mbps download speeds and 3Mbps upload speeds. Under this new definition, as of July 2018, 92.26% of Michigan households are able to receive broadband internet[1]. This rate increased from 90.15% in 2017. The extent this internet service which meets these criteria is available in Michigan is illustrated by the map[2] on the following page.

---

[1] "Planning – Broadband Infrastructure, Adoption, and Technology Usage in Michigan." Connected Nation. http://www.connectednation.org/michigan/planning/ Retrieved April 12, 2019.

[2] "Michigan Maps." Connected Nation. https://connectednation.org/michigan/state-mapping/ Retrieved April 12, 2019. Please note that the July 2018 25 Mbps download map no longer includes mobile wireless broadband, which was included in the September 2017 25 Mbps download map.
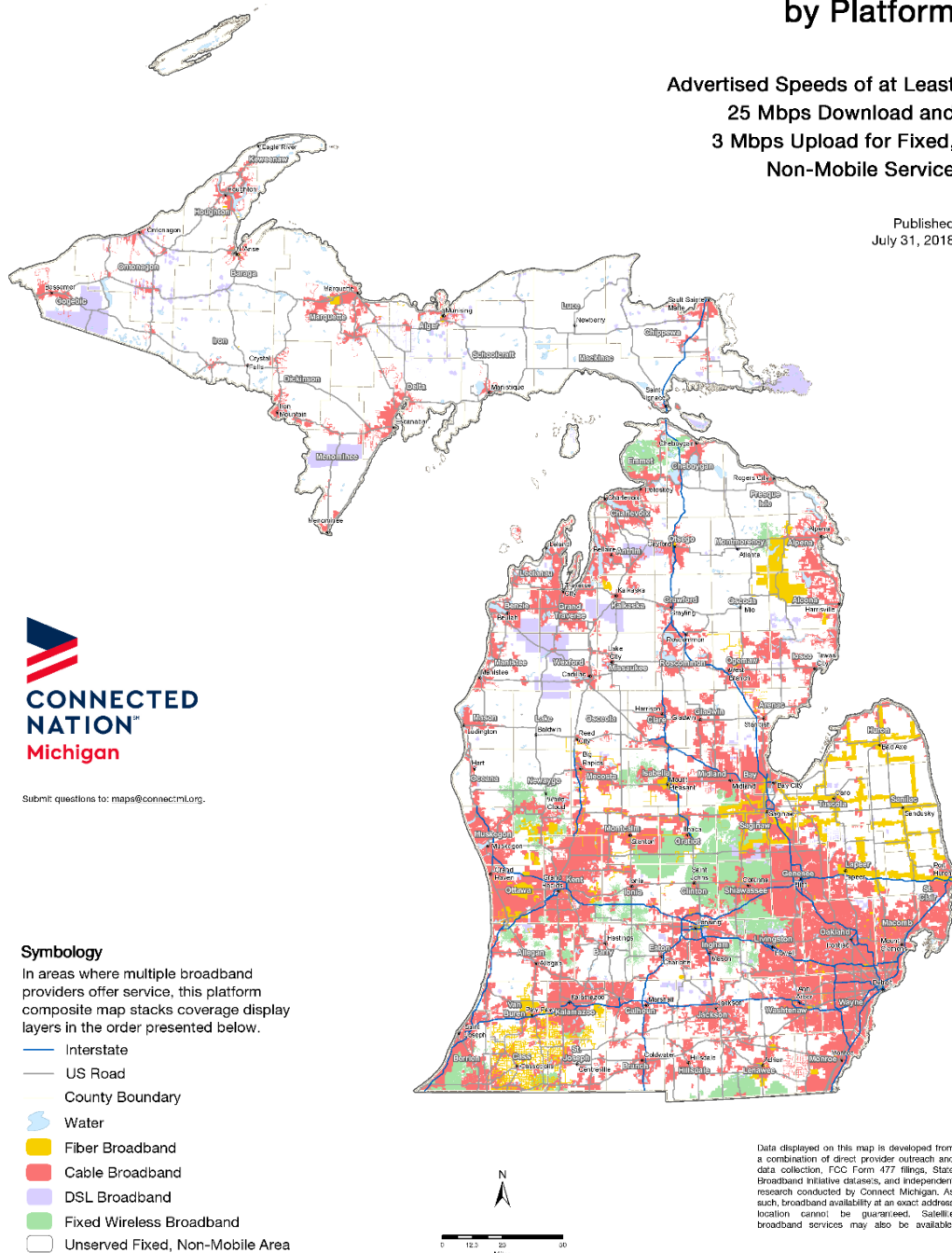
Figure 1: 25 Mbps download Broadband in MI

As illustrated by the map on the previous page, broadband internet access that meets the FCC's current standards is concentrated in cities and metropolitan areas and is very limited in rural areas, particularly in central Michigan, the Northern Lower Peninsula and the Upper Peninsula.[3]

However, the FCC sets the minimum threshold for Internet Service Providers (ISPs) receiving Universal Service funds to build rural broadband at 10Mbps download speeds and 1Mbps upload speeds. When this is taken as the minimum standard, the broadband access picture in Michigan[4] appears much more complete, as can be seen on the following page.

---

[3] The rural "Thumb" region of Michigan east of Flint-Saginaw and north of metropolitan Detroit was previously included as having 25 Mbps download/3 Mbps upload based on mobile wireless access. There is an increased fiber presence along major state trunkline highways, but it would be accurate to say that fixed, non- mobile broadband internet access meeting the FCC's current standards is limited in the Thumb as well.

[4] "Michigan Maps." Connected Nation. https://connectednation.org/michigan/state-mapping/ Retrieved April 12, 2019.
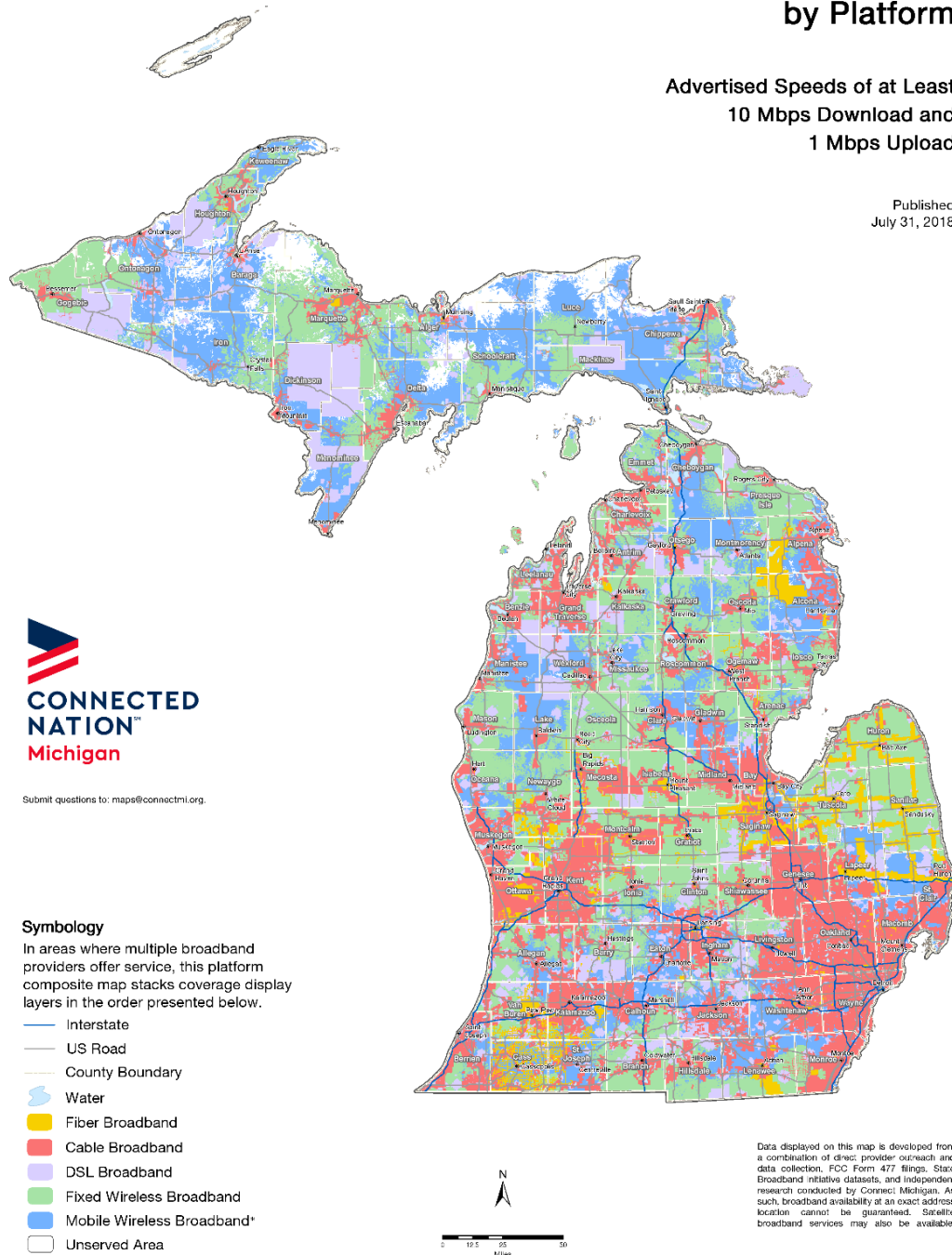
Figure 2: 10 Mbps download Broadband in MI

By the 10Mbps standard depicted above, the majority of the state has adequate internet access, although there remain some isolated areas without internet access at this speed. Many rural areas are also limited to mobile wireless broadband in this speed range, which could potentially limit the use of some web-based healthcare tools under certain circumstances. The FCC Rural Health Care Pilot described in previously submitted SMHPs concluded in 2012. The FCC Healthcare Connect Fund Program, which succeeded the RHC Pilot Program in 2013, provided financial support to 448 eligible rural providers in Michigan in funding year 2018 to connect to broadband service.[5]

The governor's office in Michigan continues to monitor broadband accessibility in Michigan and will continue to leverage opportunities to continually improve the infrastructure. In addition, there is a Connecting MI broadband workgroup that regularly meets and will help to prioritize future projects.

Criterion 3: Federally-Qualified Health Centers

Michigan has at least one Health Center Controlled Network (HCCN) that receives at least some funding from the Health Resources and Services Administration (HRSA with ongoing HIT/EHR initiatives. These include The Michigan Primary Care Association (MPCA).

The Michigan Primary Care Association (MPCA)

MPCA is a non-profit membership association, a HRSA State and Primary Care Association awardee, and grantee of record for the Michigan Quality Improvement Network (MQIN), a Health Center Controlled Network (HCCN), for the past ten years. MQIN is funded by the Health Resources and Services Administration (HRSA) by the grant program CFDA: 93.527 and has ongoing HIT/EHR initiatives.

The MQIN functions include:

- Providing vendor-neutral T/TA to support health centers as they adopt, implement, and optimize electronic health records
- Improving data quality and reporting
- Facilitating health information exchange and population health management
- Supporting clinical and operational quality improvement through federal programs such as Meaningful Use, Patient Centered Medical Home (PCMH) and HealthyPeople2030.
- Electronic Health Records and Electronic Dental Records

MQIN enables and facilitates the use of HIT to improve the quality of care in health centers as a mechanism to improve implementation of comprehensive team-based care, care-coordination and transitions of care services and expanded use of evidence-based clinical practice guidelines. The Virtual CHC team of MPCA handles the hosting and other technical aspects of implementing an EHR.

_____

[5] "Rural Health Care Commitment Search." Universal Service Administrative Co. https://rhc.usac.org/hcf/public/CommitmentSearch.htm. Retrieved June 15, 2018.

The MPCA previously participated in the HIT Network project (HRSA H2LIT16865) assisting Federally Qualified Health Centers (FQHCs), FQHC 'Look-Alikes', and other community-based providers to adopt and use EHRs. As part of their HIT Innovation Project (HRSA H2LIT16631), they brought technology and continuous quality management together through a point-of-care clinical tool. The goals of the MPCA are to increase the number of chronic disease patients that are monitored and managed, achieve Healthy People 2030 objectives for the patient population, increase data accuracies by eliminating manual entry of data, and increase efficiencies within Health Centers that maximize personnel, revenue, and time spent with patients.

The Voices of Detroit Initiative (VODI)

The Voices of Detroit Initiative received HRSA funding starting in 2011 and oversaw a network of FQHCs in the metro Detroit area. VODI was a community-based health care coalition dedicated to providing Detroit's uninsured and under-insured with access to affordable, effective health care through an organized, sustainable delivery system.

VODI offered EMR services to participating health centers. The combination of the web-based Minimal Clinical Record (MCR) and thin client / web server-based Electronic Medical Record and Practice Management System (EMR / PM) provided further coordination and integration of the Voices of Detroit Initiative Primary Care/Safety Net Network. Since its inception, VODI converted 3,200+ ER visits to primary care, saving $1.6 million (source: http://voicesofdetroitinitiative.org in 2018). The Voices of Detroit Initiative had ceased operations as of 2019.

Criterion 4: Veterans Administration and Indian Health Services EHRs

Veterans Administration

EHR connectivity for veterans' nursing homes in Michigan is also on the rise. Michigan has two state veterans' nursing homes (note that they are state-based veterans' nursing homes as opposed to nursing facilities under the federal Veterans Administration). The Grand Rapids Home for Veterans was expected to achieve full implementation of EHR by early Fall 2018. The Marquette Home for Veterans is also moving towards full implementation of their EHR. The Marquette home has begun integration with the statewide HIE, through the regional Upper Peninsula Health Information Exchange. This work is expected to be completed in 2020.

Indian Health Service (IHS) Clinics

There are 12 tribal regions in Michigan, with each operating at least one health clinic. Each tribal clinic has EHR capabilities. Tribal clinics operate on a variety of health systems; IHS Resource Patient Management System (RPMS), Greenway, Greenway Intergy, Dentrix, and EPIC. Due to frustrations with RPMS, as of March 2020, 5 of 12 of the Michigan tribes have self-funded/purchased a commercial off-the-shelf electronic health record system (Greenway, Greenway Intergy, EPIC) and are having many challenges with fully implementing their systems to support improved patient health outcomes; this includes but is not limited to vaccine transmissions to MICR, ADT, referral management and reviewing IHS clinical care performance measure as required by GPRA. In 2012, a Rural Health Grant was used to explore the possibility of connecting tribal EHRs to sub-state HIEs in Michigan. Grantees discovered that a barrier to widespread HIE participation among tribal clinics was a lack of access to necessary funding. In 2020, the Inter-Tribal Council of Michigan established a process improvement group that meets weekly to support tribal health systems that use RPMS. The establishment of this group has improved

access to IHS clinical care performance measures and has increased capacity among the participating clinics to support care for patients with diabetes, cancer screening, cancer survivors, and behavioral health, tobacco and alcohol screenings.

Only 6 of the 12 Michigan tribes have been legally onboarded to MiHIN for immunization use cases to update MICR. The Bay Mills, Sault Tribe, Hannahville, and Keweenaw Bay Indian Communities were previously connected to UPHIE and participated in multiple use cases, however, that is not the case in 2022. The Hannahville Indian Community purchased the EPIC health system in the spring of 2020 and is the <u>only</u> tribe in the Upper Peninsula transmitting vaccine or ADT data through UPHIE via their connection to OSF St Francis Hospital in Escanaba. The Bay Mills Indian Community has connectivity to UPHIE; however, no files have been submitted to MIHIN since February 2021. Multiple clinics in the upper and norther lower peninsulas are unable to update MICR through MIHIN due to the incompatibility of the vaccine funding code for COVID-19 (MIA10) with RPMS. As of January 2022, the Inter-Tribal Council of Michigan is supporting the staff at MiHIN to address the compatibility of the

MIA10 vaccine funding codes with RPMS.

The Nottawaseppi Huron Band of Potawatami has connected through Great Lakes Health Connect (GLHC, now a wholly owned subsidiary of MiHIN) to participate in multiple use cases including receiving MCIR and dental data, however, the Nottawaseppi health system has three clinic sites, and only one site is able to transmit data through MiHIN.

State-Operated Psychiatric Hospitals

Michigan has five state-operated psychiatric hospitals which serve Medicaid beneficiaries, including Caro Center, the Center for Forensic Psychiatry, Hawthorne Center, Kalamazoo Psychiatric Hospital and Walter Reuther Psychiatric Hospital. Since prior to 2014, all five facilities are operating on AVATAR, by Netsmart, a certified EHR. After connecting state psychiatric facility EHR systems in FY2020 with other State funding, MDHHS will evaluate a proposal that the MDHHS Data Hub will integrate the AVATAR systems with HIE messaging in FY2021.

Criterion 5: Stakeholder Engagement

Realizing the potential benefits that HIT could provide, Michigan's health care leaders have been collaborating for many years. Michigan has two formal groups, the Michigan Health Information Technology Commission and the MiHIN Operations Advisory Committee. In the next five years, the Michigan Health IT Commission will be expanding its collaboration with statewide stakeholders to improve health information exchange connectivity, onboarding, and technical assistance. This objective is established in Michigan's newly published health IT roadmap, called the Bridge to Better Health report. In addition, Michigan has very active health plans and stakeholder groups from various healthcare related sectors. All these groups have broad stakeholder involvement and are described below.

Michigan Health Information Technology Commission

The Michigan legislature created the Michigan Health Information Technology Commission in 2006. The HIT Commission is a public advisory committee to the Michigan Department of Health and Human Services (MDHHS), and the HIT Commission is charged with responsibility of facilitating and promoting the design, implementation, operation, and maintenance of an interoperable health care information

infrastructure in Michigan. Each of the 13 members of the HIT Commission are appointed by the Governor and represent a different health care stakeholder. Staff from Michigan's Medicaid program participate in the meetings and provide status updates on a regular basis. Some of the most recent topics discussed by the HIT Commission include:

- Statewide efforts to integrate physical and behavioral health services information

- Opportunities to utilize data analytics in population health reporting

- Statewide initiatives to incorporate Social Determinants of Health into community health practices

- Opportunities to strategically align the commission, department and stakeholder priorities around interoperability, per the 21st Century Cures Act and the Office of the National Coordinator for Health Information Technology's Technical Exchange Framework and Common Agreement

- Statewide efforts to align priorities and funding strategies for health IT under a central State of Michigan health IT roadmap planning document, facilitated and updated regularly by the representation of the HIT Commission and the state's stakeholders via advisory committees. In 2022, the HIT Commission will publish a five-year roadmap for the State, called the Bridge to Better Health report. This roadmap establishes several initiatives to improve interoperability and data governance, including improving health information exchange as a public health utility, increasing State technical assistance, increasing support for public health data systems, and improving State data standard setting.

Current members of the commission are listed:

(a) The director of the department (the Michigan Department of Health and Human Services [DHHS]) or his or her designee	Elizabeth Nagel, MDHHS Senior Deputy Director
(b) The director of the department of information technology (the Michigan Department of Technology, Management and Budget [DTMB]) or his or her designee	Jack Harris, DTMB Chief Technology Officer Term expires August 3, 2024
(c) One individual representing a nonprofit health care corporation operating pursuant to the nonprofit health care corporation reform act, 1980 PA 350, MCL 550.1101 to 550.1703	Marissa Ebersole-Wood, Ph.D. Term expires August 3, 2022
(d) One individual representing hospitals	Heather M. Wilson Term expires August 3, 2025

(e) One individual representing doctors of medicine	Michael Zaroukian, M.D., Ph.D., M.A.C.P., F.H.I.M.S.S. Term expires August 3, 2023
(f) One individual representing doctors of osteopathic medicine and surgery	Paul LaCasse, D.O., M.P.H. Term expires August 3, 2023
(g) One individual representing purchasers or employers	Camille Walker Banks Term expires August 3, 2025
(h) One individual representing the pharmaceutical industry	Allison Brenner, PharmD Term expries August 3, 2024
(i) One individual representing schools of medicine in Michigan	Norman Beauchamp, M.D. Term expires August 3, 2025
(j) One individual representing the health information technology field	Jim VanderMey Term expires August 3, 2022
(k) One individual representing pharmacists	Heather Somand, PharmD Term expires August 3, 2022
(l) One individual representing health plans or other third party payers	Nicholas D'Isa, *Chair* Term expires August 3, 2022
(m) One individual representing consumers	Renée Smiddy, M.S.B.A. Term expires August 3, 2022

MiHIN Operations Advisory Committee (MOAC)

Building off the highly successful Michigan Health Information Network (MiHIN) Conduit to Care workgroups that met during 2006, in late 2009 the Michigan Department of Community Health (MDCH, a predecessor agency of MDHHS) reconvened similar workgroups to help guide the state health information exchange (HIE) planning efforts. The Governance and Finance Workgroup developed an integrated governance approach involving key stakeholders in addressing the most important clinical, technical, financial, and performance measurement aspects of HIE. The Technical Workgroup was responsible for providing input towards the development of technical deliverables for the statewide HIE effort and collaborating with the other workgroups to ensure that clinical and measurement capabilities are built into the infrastructure. The Business Operations Workgroup focused on accelerating adoption of Health Information Technology in the State of Michigan in order to lower costs, improve quality, and increase the overall satisfaction with care. These workgroups merged into what was named the MiHIN Operations Advisory Committee (MOAC). In 2018, the MOAC was re-aligned into the following five

workgroups:

- Data Stewardship: Charged to examine cross-organizational mechanisms to improve the overall quality, integrity, and reuse of data shared or accessible through the MiHIN network; this team also helped to ensure that master data and message content are actionable among multiple stakeholders throughout the state.
- Issue Remediation: Responsible for provision of clarity around the scope or charter of MOAC advisory committee and associated working groups, the Issue Remediation team was also charged with the resolution of impasses that might occur as groups convene or, if a conflict persists, shall be accountable for documenting the concern and advancing the issue to the MiHIN Board of Directors if necessary or appropriate.
- Privacy: Reviewed and analyzed Federal and State of Michigan privacy laws and regulations to determine their impact on the exchange of information between trusted data sharing organizations that operate in the state.
- Technical and Operations: Helped to establish the necessary processes to support statewide data-sharing policies or procedures and align with the evolving regulatory framework to enforce them, including security policies and procedures.
- Use Case: Facilitated ongoing development of data-sharing use cases to support statewide health information exchange. This group provided input during the use case development process, helping to identify and further define data sharing scenarios, implementation concerns, end-user impact, implementation specifications and instructions.

In 2019, MiHIN leadership updated the MOAC structure to better align with their advancing organization that had grown to maintain full-time staff resources fulfilling many of the previous workgroup functions. Today, MOAC consists of quarterly advisory committee meetings, and ad-hoc task forces and meet-ups, to provide guidance to MOAC in emerging HIE areas. The Issue Remediation workgroup remains part of the structure to address impasses of the ad hoc groups. Current facets of MOAC are described in detail below. However, MiHIN just hired a new Senior Director of Engagement and is actively evaluating the structure of MOAC with the new MDHHS co-chair to ensure the governance structure aligns all stakehodlers and their changing needs.

- Task Forces are ad hoc subgroups with clear members, start/end dates, deliverables and deadlines; Example topics may include conformance, quality measure information, and interoperability (given recent federal activities). Task forces report back to the Quarterly MOAC Meeting the outcome of their working meetings.
- Meet ups are ad hoc groups that MiHIN leaders may convene based on relevant topics that need stakeholder feedback and recommendations. Meet ups invite all MOAC members to provide input for consideration before ideas are fully solidified, do not involve voting responsibilities, and are more focus group oriented.
- The Issue Remediation group is charged with the resolution of impasses that might occur as groups convene. If a conflict persists, this group is accountable for documenting the concern and advancing the issue to the MiHIN Board of Directors if necessary or appropriate.

Medicaid remains directly involved with the MOAC, with MDHHS personnel chairing or co-chairing the advisory committee and participating in ad hoc task forces, meet ups, and the Issue Remediation workgroup, as convened.

Health Plans

Medicaid Health Plans partner closely with the SMA to promote HIT in Michigan. In the past, the SMA has leveraged the Medicaid Health Plan contract to help promote core use cases and core HIT/HIE functionality in Michigan. Michigan plans to leverage future contracts as well that help to further advance HIT/HIE initiatives. Currently all Medicaid Health Plans are active members of the Michigan Health Information Network (MiHIN). The SMA recognizes the power of collaborating with the Medicaid Health Plans.

Other Stakeholder Groups

The following stakeholders represent a sample of additional organizations that are working closely with MiHIN and Michigan Medicaid to help advance HIT in 2021. There are currently about 70 organizations from across the state of Michigan participating in MOAC.

Types of Organizations Represented in MOAC
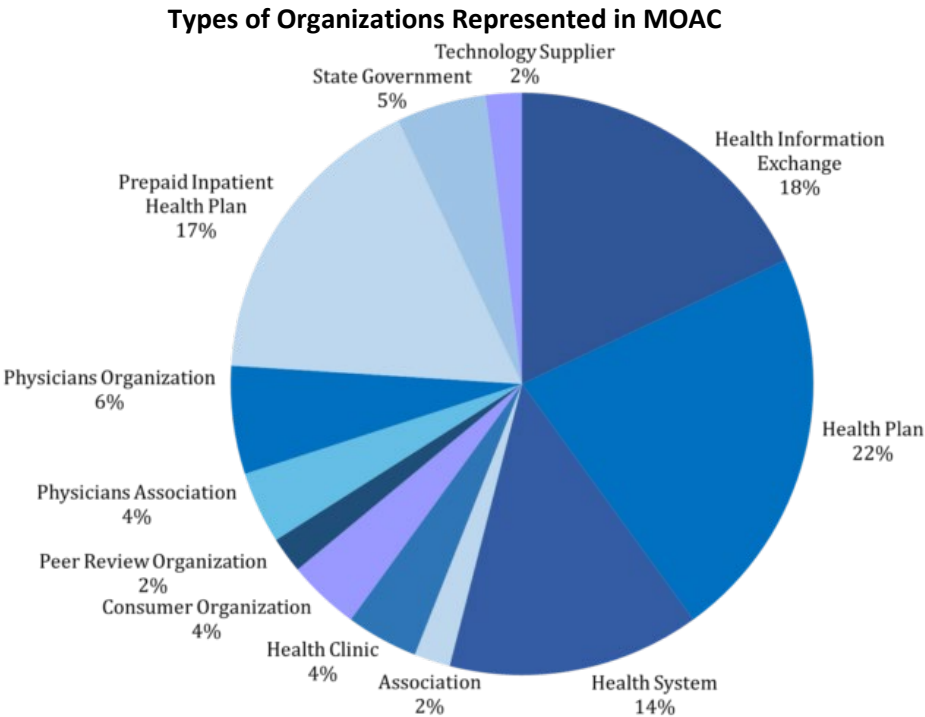
Figure 4: Types of Organizations Represented in MOAC

Organizations currently participating in the advisory committee and/or working groups include:
- Administrative Network Technology Solutions (ANTS)
- Aetna
- Alcona Health
- AmeriHealth
- Answer Health

- Ascension
- Blue Cross Blue Shield of Michigan (BCBSM)
- Blue Cross Complete
- Bronson
- CMH Partnership of Southeastern Michigan (CMHPSM)
- Concerto
- Data Stewardship
- Department of Veteran Affairs
- Michigan Department of Technology, Management, and Budget (DTMB)
- Detroit Wayne Mental Health Authority (DWMHA)
- GMP Network
- Harbor
- Health Alliance Plan (HAP)
- Health Hero, Inc
- Henry Ford Allegiance Health
- Henry Ford Health System (HFHS)/ Jackson Community Medical Record
- Hurley Hospital
- Huron Valley Physicians Association (HVPA)
- Integrated Health Partners
- Ingenium
- Iron Mountain VAMC
- Jackson Health Network
- Macomb County CMH
- Michigan Care Improvement Registry (MCIR)
- McLaren
- McLaren Health Plan
- Michigan Data Collaborative
- Michigan Department of Health and Human Services (MDHHS)
- MediPortal
- MedNetOne
- Meridian Health Plan
- Michigan Medicine
- Michigan Primary Care Association (MPCA)
- Midwest Health Plan
- Molina Healthcare
- Michigan Peer Review Organization (MPRO)
- Michigan Public Health Institute (MPHI)
- Michigan State Medical Society (MSMS)
- Michigan State University
- Netsmart
- Northern Michigan Regional Entity (NMRE)
- Northcare Network

- Northern Physicians Organization (NPO)
- Oakland Community Health Network (OCHN)
- Olympia Med
- Oakland Physician Network Service (OPNS)
- OST, Inc.
- Patient Ping
- Priority Health
- Region 3 Prepaid Inpatient Health Plan (PIHP)
- Region 7 Prepaid Inpatient Health Plan (PIHP)
- Region 10 Prepaid Inpatient Health Plan (PIHP)
- Southeast Michigan Health Information Exchange (SEMHIE)
- Southwest Michigan Behavioral Health
- Spectrum Health
- Together Health Network
- Total Health Care
- Traverse Health Clinic
- Trinity Health
- United Physicians
- University of Michigan
- Upper Peninsula Health Information Exchange (UPHIE)
- Upper Peninsula Health Plan (UPHP)

Criterion 6: HIT/E Relationships with Other Entities

The state has established a broad set of relationships with various stakeholder groups throughout Michigan to maximize the potential impact of health information sharing amongst all participants in Michigan's statewide HIE, MiHIN. MiHIN can be described as a network of networks, as it coordinates information sharing across several Qualified Organizations. Many categories of participating companies have achieved 100% participation in the Michigan network, with other categories growing quickly and new categories being added as appropriate and needed. These relationships help guide much of the data sharing efforts in Michigan as various stakeholders participate in developing Use Cases, in large part driven by support for Promoting Interoperability objectives.

These relationships are maximized through multiple regular communication forums and group collaboration events, including bi-weekly stakeholder calls to discuss progress and challenges, quarterly QO meetings for HIE-QOs and Payer QOs, participation in the MiHIN Operations Advisory Committee (MOAC) available to certain kinds of QOs, and regular workshop events to which all stakeholders are invited to participate to address specific issues in health information sharing in Michigan. Open communication is encouraged with all stakeholders, and new stakeholders are added regularly and welcomed broadly to participate in Michigan's data-sharing efforts.

Primary categories of qualified organization stakeholders include:

Health Information Exchange Qualified Organizations (HIE-QOs)

Health Information Exchanges are organizations that provide services to enable the electronic sharing of health-related information. Twelve HIE-QOs are currently signed up to share information through Michigan's network of networks. These organizations are expected to support most of the Use Cases developed for Michigan's healthcare providers. An updated list of HIEs can be found at: https://mihin.org/exchanges/

Payer Qualified Organizations (PQOs)

Payer qualified organizations consist of health plans providing insurance services to consumers and companies in Michigan. Health plans must have beneficiaries in Michigan to act as qualified organizations. Prepaid Inpatient Health Plans (PIHPs) focused on behavioral health services participate in the network of networks as a special type of payer qualified organizations.

Government Qualified Organizations (GQOs)

Any state or federal organization wishing to participate in health information sharing in Michigan or with organizations in Michigan fall into the GQO category. These can include the Michigan Department of Health and Human Services as well as federal agencies such as the Department of Veterans Affairs, the Social Security Administration, the Centers for Medicare and Medicaid Services, Department of Defense and others.

Consumer Qualified Organizations (CQOs)

CQOs participate in consumer-focused Use Cases and offer supported/authorized patient-facing services. An example would be the Peace of Mind Registry for advance directives that is run by the Gift of Life Michigan organ and tissue recovery program. Other CQOs can include Personal Health Record vendors.

Community Based Organizations (CBOs)

CBOs participate in statewide core services and use cases to promote cross-sector data sharing between the health and human service organizations. These can include schools, prisons, and community information exchanges (CIE). This new stakeholder type advances interoperability and whole person care by extending care coordination into the community, where patients live, work, and grow.

Criterion 7: HIE Governance Structure

HIE governance in Michigan can be described in two categories: State reporting infrastructure and MiHIN governance.

State Reporting Infrastructure

As part of administering the Medicaid Promoting Interoperability Program in Michigan, MDHHS continues to work very closely with its public health partners in the state to ensure that public health registries are available for eligible professionals and eligible hospitals to use as part of their Meaningful Use attestation process for incentive payments. In addition, MDHHS ensures that these registry testing results are available to review staff to ensure high program integrity. Currently in Michigan, the

following registries are available for eligible professionals to meet public health message submission Meaningful Use Objectives:

Public Health Measure	System Name	Available Since
Immunization Registry Reporting	Michigan Care Improvement Registry (MCIR)	January 1, 2011 (Receive Immunization Data) January 1, 2016 (Receive and Respond to Queries for Immunization Histories and Forecasts)
Syndromic Surveillance Reporting	Michigan Syndromic Surveillance System (MSSS)	August 1, 2013
Public Health Registry Reporting – Cancer Case Reporting	Michigan Cancer Surveillance Program (MCSP)	March 1, 2014
Public Health Registry Reporting – Birth Defect Reporting	Michigan Birth Defects Registry (MBDR) – EPs Michigan Birth Defects Registry (MBDR) – Hospitals	March 1, 2014 - EPs February 1, 2016
Public Health Registry Reporting – Pediatric Oral Health Reporting	Michigan's Dental Registry (MiDR)	**As of June 12, 2020 MiDR is no longer an available Registry**
Public Health Registry Reporting – Newborn Screening	Newborn Screening (NBS)	January 1, 2015
Public Health Registry Reporting – Birth and Fetal Death	Michigan Birth Registry (MBR)	January 1, 2017
Public Health Registry Reporting – Prescription Monitoring Program	Michigan Automated Prescription System (MAPS)	April 4, 2017
Electronic Case Reporting	Michigan Disease Surveillance System (MDSS)	January 1, 2018
Electronic Laboratory Results Reporting	Michigan Disease Surveillance System (MDSS)	January 1, 2011

Table 1: Available Public Health Registries for EPs

On the hospital side, the following registries are available:

Table 2: Available Public Health Registries for EHs

Public Health Measure	System Name	Available Since
Immunization Registry Reporting	Michigan Care Improvement Registry (MCIR)	January 1, 2011
Syndromic Surveillance Reporting	Michigan Syndromic Surveillance System (MSSS)	August 1, 2013
Specialized Registry Reporting / Public Health Registry Reporting – Newborn Screening	Newborn Screening (NBS)	January 1, 2015
Specialized Registry Reporting / Public Health Registry Reporting – Birth Defects Reporting	Michigan Birth Defects Registry (MBDR)	February 1, 2016
Specialized Registry Reporting / Public Health Registry Reporting – Birth and Fetal Death Reporting	Michigan Birth Registry (MBR)	January 1, 2017
Electronic Reportable Lab Result Reporting	Michigan Disease Surveillance System (MDSS)	January 1, 2011
Specialized Registry Reporting / Public Health Registry Reporting – Prescription Monitoring Program	Michigan Automated Prescription System (MAPS)	April 4, 2017
Electronic Case Reporting	Michigan Disease Surveillance System (MDSS)	January 1, 2018

In addition to the above public health registries utilized for Meaningful Use incentive payments, there are numerous messaging projects that are at various stages in the state that all leverage existing state infrastructure and add further value and efficiency to the HIE environment in Michigan. These projects include implementing the following systems or submitting results to the state's Data Warehouse:

- Admit, Discharge & Transfer information
- Blood Lead results
- Blood Spot & Newborn Screening, Hearing results
- State of Michigan Bureau of Laboratories results in the StarLIMS System
- Cancer Pathology lab test results
- Electronic Death Registration System (EDRS)
- Immunization forecasting and history

Although this list in not all-encompassing of what is happening in the HIE space in Michigan, it does represent the HIE-related projects that have at least begun planning and initiation and are actively being tracked and with MDHHS oversight. In addition, these are all Medicaid- related projects that are being or have been at least partially funded through either the MMIS-CHAMPS Enhancements IAPD or MMIS OAPD.

MiHIN Governance

Michigan's Health Information Exchange organizations all participate in MiHIN, and provide services across the entire state, including the Upper Peninsula region.

The HIE governance structure for Michigan began pursuant to Michigan Public Act 137 of 2006, when the Michigan Legislature created the Governor's Health Information Technology (HIT) Commission for the following purpose:

"…to facilitate and promote the design, implementation, operation, and maintenance of an interoperable health care information infrastructure in the State."

Subsequently the HIT Commission created an operational plan calling for the creation of the Michigan Health Information Network shared services (MiHIN) to operationalize HIT Commission policies including the statewide sharing of health information.

Michigan employs a public-private model, instead of complete state control, that streamlines and aligns public health and meaningful use reporting requirements into a consistent approach. MiHIN functions as a separate nonprofit organization and is the State Designated Entity (SDE) tasked with the responsibility of exchanging health information statewide. Thus, MiHIN is not an HIE, however it does engage in HIE by connecting the many HIEs that serve Michigan with the State with payers and other data sharing organizations.

MiHIN's Board of Directors consists of leaders from each of the stakeholder classes that participate in the statewide network, including a designee from the State Medicaid Agency, the Medical Services Administration (MSA) and the Director of MDHHS. Additionally, every entity that enters into the full data sharing legal infrastructure becomes a "Qualified" data sharing organization and has the opportunity to participate in MiHIN governance through the MiHIN Operations Advisory Committee (MOAC) and taskforces formed in response to stakeholder needs. The taskforces make recommendations to the MOAC, which then makes recommendations to the MiHIN Board, the HIT Commission, or both. MSA is also entitled to representation on the MOAC and its taskforces.

Criterion 8: Role of the MMIS

Michigan's Medicaid Management Information System (MMIS), CHAMPS, was the first completely web-based system of its kind in the U.S. and played a major role in Michigan's Promoting Interoperability Program. CHAMPS uses Medicaid Information Technology Architecture (MITA) design standards, JAVA and XML in order to be object oriented, web-centered, and real-time. It is based on reusable JAVA components and is optimized for efficient performance and maximum functionality delivered to the user via the web browser. It has demonstrated improved customer service and support, reduced claims processing time, and allowed automation of many previously manual processes.

For a more comprehensive look at the current and to-be status of various projects and modules associated with MMIS in Michigan, see Section B. A broad overview of the role of the MMIS in the SMA's current HIT/E environment, including its history, key features and its role in Clinical Quality Measure

(CQM) submission for MU, is provided below.

History

In April 2006 the State of Michigan began a significant initiative to replace its 30+ year old Medicaid Management Information System (MMIS). The legacy system was a COBOL-based system originally written in 1972, with rewrites in 1975 and 1985 and HIPAA remediation completed in 2003.

The State partnered with software vendor CNSI for design, development, and implementation (DDI) of its state of the art, real time, HIPAA compliant, web centric MMIS. The new system, Community Health Automated Medicaid Processing System (CHAMPS), was first implemented in 2009 and as of June 2010 all major phases were complete. MMIS certification was awarded in August 2011 and in its next big step forward, CHAMPS infrastructure was updated to be Cloud enabled in 2018. Currently, there are over 450 interfaces with other external systems responsible for data transmissions in and out of CHAMPS. In the subsequent eleven years of CHAMPS Operations, DDI of CHAMPS modules have continued aggressively as Michigan works toward a fully interoperable, cloud-based, online, modular, enterprise-wide solution for streamlined, accurate, and cost-effective service delivery.

Key Features

Figure 5: Michigan's MMIS, CHAMPS

Benefits Administration and Reference

The BA functional component of CHAMPS supports a variety of customized benefit programs and categories of services based on the State's eligibility programs. Each benefit plan encompasses a unique set of eligibility criteria, provider network, reimbursement rules, medical policy, and cost sharing components. Reference Data (standard code sets) and MI specific Rate data are also stored in the BA subsystem, are date and time specific (current and historic). Both the benefit plan and reference/rates data are utilized in establishing proper payment and editing of the claims and encounters that are processed in CHAMPS for State of MI programs.

Eligibility and Enrollment Subsystem

The Eligibility and Enrollment (EE) subsystem is responsible for maintaining beneficiary eligibility and health plan enrollment, in accordance with State and Federal regulations. It is also used for real time eligibility verification and to ensure proper payment & processing of claims and encounters in CHAMPS for Medicaid and other State physical and mental health programs. CHAMPS also has a TPL subsystem for coordination of benefits and assisting in TPL recovery activities.

Prior Authorization Subsystem

The PA subsystem is a key component of CHAMPS claims processing and payment auditing. PA requests can be entered by providers or State reviewers via DDE screens in CHAMPS (with attachment/document upload) and are reviewed by the State to assess, pre-approve, or deny selected medical or other services prior to payment. The PA process serves as a cost containment and utilization review mechanism, and as quality assurance to support payment for treatments and services that are medically necessary, appropriate, or cost- effective.

Claims Subsystem

CHAMPS CE subsystem processes and audits claims real time 24x7 from initial entry via HIPAA/electronic submissions as well as Direct Data Entry (DDE) through final disposition and payment determination. Encounter transactions from Medicaid managed care entities are also processed and audited via HIPAA/electronic submissions into CHAMPS. Each transaction is edited against data maintained by other CHAMPS subsystems to ensure that the content is valid and can be fully adjudicated. The CHAMPS Claims Encounter subsystem provides enterprise- wide capabilities and can process and edit/audit an extensive variety of required HIPAA transactions.

Contracts Management Subsystem

In CHAMPS, CM is the subsystem for managing direct services contracts, typically Managed Care and other contractually purchased services such as transportation, in-home care, and mental health and substance abuse services. The domain of these contracts is limited to contracts for services to eligible populations of the State of Michigan, as distinguished from administrative services contracts. The CM subsystem also configures and stores all components of the Managed Care Rates and associated

start/end dates and has functionality for triggering transactions for capitation rate payment increases and recoveries for retrospective eligibility/enrollment reviews.

Financial Services Subsystem

The CHAMPS OFIN subsystem utilizes an ORACLE commercial off the shelf (COTS) product tailored to CHAMPS that includes a set of business processes to ensure that the CHAMPS financial transactions (e.g. payments or recoveries for claims, gross adjustments and managed care capitations) are recorded, accounted/netted in accordance with Generally Accepted Accounting Principles (GAAP) and interfaced into the State's financial system.

Customer Relationship Management/Member Services

CHAMPS MMIS also includes CRM subsystem that provides Customer Service Representatives (CSRs) with a comprehensive view of the contact's information. The system is capable of recording and reporting/auditing provider, beneficiary, and other contact interactions such as general inquiries, grievances and complaints, appeals, claim status, miHealth card replacement requests, and protected health information requests.

Common Components/General Services Subsystem

The GS subsystem provides the functionality for common services required by the various sub-systems across all of CHAMPS. This functionality includes common rules for navigation/display, reports, correspondence, application security for role-based access to CHAMPS subsystems, Single Sign On (SSO) application integrations for enterprise security, auditing, and system logging.

Facility Settlement Module

Medicaid program Cost Settlement has historically been a labor and data intensive process that reconciles over $2 billion in interim and initial settlement payments against submitted Medicaid allowable costs during the settlement period. Gross Adjustments for settlement payment are initiated to recover funds to address any overpayments or underpayments made during the settlement period. As of December 2018, the newest CHAMPS module for Facility Settlement (FS) funded through MMIS-CHAMPS Enhancements IAPDU Activity 14, "Cost Settlement Initiative," has been completed and moved to maintenance and operations.

CQM Reporting for Meaningful Use

Clinical Quality Measure (CQM) submission is a component of Meaningful Use (MU). While getting a better understanding of CQM reporting, it became apparent that there are a lot of similar yet slightly different quality reporting initiatives in Michigan, with each initiative having a different set of data that is required to be submitted and most times each initiative collecting the measures via a proprietary file format. Michigan began a CQM collection initiative focused first on how to decrease the administrative burden for Medicaid Promoting Interoperability program participants. This project enhances Michigan's MMIS.

The initial version program set up a collection infrastructure at the Michigan Health Information Network (MiHIN) which is called Clinical Quality Measure Recovery and Repository (CQMRR). CQMRR is built on the Quality Reporting Document Architecture (QRDA) standards that are built into the EHR certification standards for participation in the Medicaid Promoting Interoperability Program. CQMRR collects quality measures via the HIE environment from both eligible hospitals and eligible professionals and extracts, validates, parses and routes the information to the correct federal and state systems. For Michigan, the endpoint is the state Data Warehouse, where the information is retrievable by the State Level Repository (SLR) (eMIPP) application of the MMIS system. 2018 was the first year that electronic CQM data was used from the CQMRR process to issue CQM credit for MU.

eMIPP Module for Promoting Interoperability Program

Michigan's EHR Medicaid Incentive Payment Program product (eMIPP) is used for program registration and verification and Meaningful Use reporting and tracking. It is a module of CHAMPS. Michigan is in compliance with MU Stage 3 and accepting attestations under this stage.

CareConnect 360

CareConnect 360 will improve care coordination by enabling the sharing of Medicaid beneficiaries' care summaries electronically by creating and implementing a standardized CDA. For more on this system, see To-Be Criterion 3.

Criterion 9: Activities to Facilitate HIE and EHR Adoption

There is a wide range of state activities currently underway in Michigan to facilitate HIE and EHR adoption. Notable examples include e-Prescribing, ongoing REC operations and coordination of ARRA projects. Projects that are very new or in the planning stages include Qualified Data Sharing Organizations, Carebridge and behavioral health integration. Each of these initiatives is described in more detail below.

e-Prescribing

e-Prescribing is one of the most cost-effective HIT options for early adoption. Medicaid has been encouraging e-prescribing since 2008. According to SureScripts' 2012 "National Progress Report," Michigan routed 11.3 million prescriptions electronically in 2009; 16.2 million in 2010; and 22.6 million in 2011. Those percentages represented 20%, 29%, and 38% of eligible volume in each year, respectively. According to the same study, 33% of Michigan's physicians routed prescriptions

electronically in 2009. That figure jumped to 76% by April 2014, according to an ONC analysis of Surescripts data. In the 2014 Surescripts progress report, Michigan was ranked number three in the top 10 states e-Prescribing controlled substances. In 2018, Act 368 was amended to require the reporting of controlled substances to the state. The Michigan State Health IT Commission has also recommended an e-prescribing mandate.

REC Operations

Michigan's Center for IT Adoption (M-CEITA) is one of 60 vendor-neutral Regional Extension Centers (RECs) originally funded by the ONC.

Because of M-CEITA's demonstrated value in the technical assistance space, the State of Michigan wishes to continue to have them available as a resource to the Medicaid provider community for support of MU. Early in the program, it was estimated that Michigan had 6,000 Medicaid Eligible Professionals (EPs). However, as of February 29, 2020, the number of unique EPs paid to date peaked at 7850 Medicaid Eligible Professionals (EPs) who meet the criteria for participating in the Medicaid Promoting Interoperability Program in FY18 and beyond. Those Medicaid EPs received at least one incentive payment for meeting program requirements during or prior to Program Year 2016. Please note that the increase from 7811 from last year would have to be the result of providers who had entered the program in other states and received their first Michigan payments.

Thousands of these EPs have begun the program under Adopt, Implement, and Upgrade (AIU), but have yet to achieve Year 1 of meeting Promoting Interoperability (formerly Meaningful Use, or MU) requirements and need technical assistance to successfully achieve and attest to the Promoting Interoperability requirements. The State of Michigan believes that progress can be accelerated with greater levels of ongoing TA.

In addition, as a result of the State Medicaid Director's Letter released on February 29, 2016, entitled "Availability of HITECH Administrative Matching Funds to Help Professionals and Hospitals Eligible for Medicaid EHR Incentive Payments Connect to Other Medicaid Providers", MDHHS continued planning in 2018 for another new REC objective, to be implemented within the next 5 years. This is M-CEITA support of MU for Long-Term and Post-Acute Care (LTPAC), which would further assist care coordination and optimization of EHRs. This objective was started in FY20 and planned for that fiscal year only but was largely shut down due to the COVID-19 pandemic that disproportionately impacted these facilities.

Coordination of ARRA Projects

The main ARRA-related HIT initiatives, the Medicaid Promoting Interoperability Program, the Michigan Health Information Network (MiHIN), Knowledge Grid (K-GRID) Alert and Notification System, and Michigan's regional extension center (M-CEITA), are being closely coordinated. Medicaid is involved in the MiHIN Operations Advisory Committee as well as its associated workgroups and has a seat on the MiHIN Shared Services board. MSA also frequently meets with representatives of the University of Michigan Department of Learning Health Sciences for K-GRID planning. The Michigan HIT/HIE Coordination workgroup that previously met monthly no longer does so. It included the project leadership from the Medicaid Promoting Interoperability Program, MiHIN, M-CEITA, the State of Michigan's internal HIE efforts (the MDHHS Data Hub), Provider Outreach and Consumer Engagement,

and the Michigan HIT Commission. The Strategic Integration Administration (SIA) described in To-Be Criterion 1 continues to coordinate with many of the parties that formerly met as part of that workgroup. Much of the project management oversight portfolio previously housed within SIA has transitioned to the Michigan Department of Technology, Management, and Budget (MDTMB)'s Enterprise Project Management Office (ePMO). MSA also continues to coordinate as needed with many of the parties on HITECH-specific projects as well as with SIA and the ePMO to provide coordination and guidance. MDHHS through its IT Executive Governance Team and its IT Oversight Teams – which follow the structure of the former SIA Integrated Service Areas – gives direction and feedback from a strategic and portfolio-wide perspective over all IT projects, including HIT and HIE Activities.

Qualified Data Sharing Organizations

Michigan's success in sharing health information results from the collective efforts of many organizations working together to improve the way health information is sent, found, received and used. These organizations, which often have differing priorities and may even be competitors, have spent countless hours analyzing, discussing, planning and implementing solutions that can help healthcare providers make informed care recommendations with better access to patient information.

Many different kinds of organizations are collaborating to securely share health information in Michigan, including:

- **Health Information Exchanges**: In Michigan, there are twelve health information exchanges connected to Michigan Health Information Network Shared Services (MiHIN), each working to make easier access to healthcare information a reality. These exchanges work directly with hospitals, doctors, physician organizations and other healthcare providers to improve communication regarding a patient's care.
    - o The health information exchanges currently connected to MiHIN include:
        - ▪ Administrative Network Technology Solutions, Inc.
        - ▪ Henry Ford Health System
        - ▪ Huron Valley Physicians Association
        - ▪ Ingenium
        - ▪ Jackson Community Medical Record
        - ▪ Michiana Health Information Network
        - ▪ Michigan Medicine
        - ▪ Northern Physicians Organization
        - ▪ Oakland Physician Network Services
        - ▪ PatientPing
        - ▪ Southeast Michigan Health Information Exchange
        - ▪ Upper Peninsula Health Information Exchange
- **Health Plans:** There is a natural alignment between health information exchange (HIE) and payer (health plan) incentives. The benefits of effective HIE result in organized care coordination and accurate patient information across the continuum of care. Health plans in Michigan and nationwide are participating in HIE efforts which ultimately improve the efficient delivery of quality care for their members.
    - o Health plan contributions to HIE include sharing patient-provider attribution data for routing patient notifications to their attributed physician, and distribution of quality metrics to providers based on claims analysis. Health plans are utilizing HIE

to receive clinical quality measures (labs, medications, diagnosis codes) traditionally captured via chart audits at the provider location.

- o Additionally, payers are realizing the benefits of receiving transition of care notifications for their members, to enhance utilization management and care coordination activities. As market demands including quality ratings, performance incentive programs, population health, and accountable care organizations increase the importance of generating a holistic picture of a member's clinical information, health plans are realizing the opportunity to leverage HIE in meeting this demand

- **PIHP's:** A Prepaid Inpatient Health Plan (PIHP) is an organization that is responsible for managing Medicaid services related to behavioral health and development disabilities. A PIHP also provides medical services to consumers under a contract with the state Medicaid agency with prepaid capitation payments, is responsible for arranging inpatient care; and does not have a comprehensive risk contract.
  - o Michigan Health Information Network Shared Services works with the ten PIHP's throughout Michigan, including:
    - Mid-State Health Network
    - Lakeshore Regional Entity
    - Macomb County Community Mental Health
    - Oakland Community Health Network
    - Region 10 Prepaid Inpatient Health Plan
    - Community Mental Health Partnership of Southeast MI
    - Detroit Wayne Mental Health Authority
    - Southwest Michigan Behavioral Health
    - Northern Michigan Regional Entity
    - NorthCare Network

https://mihin.org/prepaid-inpatient-health-plans/

- **TDSO:** A Trusted Data-Sharing Organization (TDSO) is any organization that has signed any form of agreement with Michigan Health Information Network Shared Services (MiHIN) for data sharing. TDSOs can be insurance plans, pharmacies, or other healthcare organizations. Many TDSOs become active participants with MiHIN, sponsoring and taking part in use cases and conferences.
  - o Below is a list of the TDSOs we are working with:
    - Answer Health
    - Beaumont
    - Bronson Healthcare Group
    - Costco
    - Covenant Healthcare
    - CVS/Caremark
    - GMP Network
    - Huron Valley Physicians Association
    - MedNetOne Health Solutions
    - Meijer

- Michigan Health & Hospital Association
- Mid Michigan Medical Center – Alpena
- Munson Healthcare
- OSF Healthcare System
- Surescripts
- Together Health Network
- U.S. Department of Veterans Affairs
- Walgreens
- Walmart
- Wayne State University Physician Group

https://mihin.org/other-data-sharing-organizations/

Care Bridge

The Care Bridge is the Care Coordination framework for Michigan's integrated care program. It allows Integrated Care Organizations (ICOs) and Prepaid Inpatient Health Plans (PIHPs) to securely exchange patient data for MI Health Link, which is an initiative to coordinate care for Michigan residents dually enrolled in Medicaid and Medicare. MI Health Link enrollees often have complex needs that require effective communication and coordination between physical and behavioral health providers.

The Care Bridge allows Integrated Care Teams (ICTs) comprised of specialists across multiple organization types to create unified care plans for beneficiaries. Through the Care Bridge, the members of an enrollee's ICT facilitate formal and informal services and supports in an enrollee's person-centered care plan. This streamlined tool to exchange patient information helps ensure the patient's needs are being met. ICOs also use the Care Bridge to collect documentation that contributes to each member's Integrated Care Bridge Record (ICBR).

An ICBR is an individualized enrollee record generated and maintained within each ICO's electronic care coordination platform. It allows secure access for enrollees and the ICT to use and update information.

An ICBR provides a comprehensive and detailed overview of a member's physical health, behavioral health, long-term care, and relevant services and supports. An ICBR also contains a member's history, conditions list, lab results, medications, assessments, Individual Integrated Care and Supports Plan (IICSP), specialty provider reports, referrals, progress notes, and status changes.

Currently, MI Health Link operates in the following four regions of Michigan: the Upper Peninsula, Southwest Michigan, Macomb County, and Wayne County. ICOs in these regions have been using the Care Bridge since 2015.

As of 2022, over 39,132 people are enrolled in MI Health Link in these four regions.

Behavioral Health Integration

The integration of behavioral health (including substance use disorders) into other aspects of health care is critical to facilitate care coordination, access to necessary resources, and increasing the health and wellness of Michiganders. MDHHS has made significant progress in terms of behavioral health integration through efforts centered on delivery system enhancements, policy and operational

improvements, and technological infrastructure investments. These initiatives span all Michiganders served by Michigan's public behavioral health system, including the community-based Medicaid and GF-funded delivery systems and the State of Michigan Hospitals and Centers. Highlights of current and future initiatives include, but are not limited to, the following:

Michigan Integrated Crisis and Access Line (MiCAL)

In 2018, the Michigan Legislature's House of Representatives CARES (Community, Access, Resources, Education, and Safety) Task Force recommended the creation of a statewide crisis and access line to help all Michiganders have access to crisis support and behavioral health care. The Legislature funded the Michigan Crisis and Access Line (MiCAL) in 2018 and codified it into law (PA 12 of 2020) in January 2020, establishing a statewide crisis line that accepts calls, texts, and chats, including NSPL/9-8-8 contacts.   Common Ground, a long-time Lifeline Affiliate and crisis services hub, was chosen as the MiCAL staffing vendor through an extensive Request for Proposal (RFP) process in November 2020.

MiCAL, which went live in April 2021 in two pilot regions, Oakland County and the Upper Peninsula, will provide statewide crisis assessment, intervention, support, information, and referral for all Michiganders, through phone, text, chat, warm-handoffs, and follow-up services. MiCAL is based on the SAMHSA air traffic control model. Through coordination with Prepaid Inpatient Health Plans (PIHPs), CMHSPs, and Certified Community Behavioral Health Clinics (CCBHCs), it activates face-to-face crisis intervention through mobile crisis services, pre-admission screening, and other crisis stabilization services. MiCAL is integrated with 2-1-1 and is integrating with MiCARE (OpenBeds) to develop a comprehensive resource directory to help facilitate optimal care coordination. MiCARE will house Michigan's legislatively mandated psychiatric bed registry.

Michigan Warmline and the Frontline Strong Crisis line are two additional lines under the MiCAL Umbrella each with their own phone numbers and staffing who use MiCAL's CRM, staffing vendor, and infrastructure. The Warmline is operational statewide and provides support from certified peers and/or recovery coaches to people with behavioral health issues. Frontline Strong crisis line for First Responders is part of the Frontline Strong initiative supporting First Responders with behavioral health issues. The Frontline strong project is not yet live. Wayne State University is leading its development in partnership with a stakeholder group, MDHHS, and Common Ground.

MiCAL will roll out regionally over the next 10 months to provide statewide coverage by the end of October 2022. The rollout involves expanding coverage for both the National Suicide Prevention Lifeline (NSPL) and MiCAL as well as establishing coordinated care partnerships with each PIHP, CMHSP, and the state's CCBHC Demonstration. Furthermore, MDHHS will utilize MiCAL to implement the new NSPL three-digit number – 988 – which goes live in July 2022. Michiganders calling MiCAL or 988 will be connected to immediate crisis and suicide response supports with coordination into local systems of care, 911, and other support services.

The law also requires the development of a customer relationship management (CRM) system to house MiCAL and other MDHHS internal business processes. The CRM is a highly customized to

support MiCAL's functioning as a centralized crisis and access line through features such as an automated safety assessment (CRM determines risk level dependent upon answers to key questions), referral system, follow up system and integrated resource directory. It also has a partner portal which allows real time coordination with crisis service and behavioral health providers through encounter notes, crisis alerts, and referrals. The CRM is also integrated with Michigan's Medicaid system, allowing access to a caller's Medicaid benefits with the caller's permission. The system tracks a variety of metrics related to quantity and quality of services provided.

Medicaid Health Homes

Medicaid Health Homes provide intensive care management through an interdisciplinary care team comprised of behavioral and physical health providers. A core requirement of Medicaid Health Homes is the utilization of HIT to maximize care coordination, facilitation to needed community resources, and the development/oversight of a whole-person individual plan of care. MDHHS' Behavioral and Opioid Health Homes will continue to utilize CareConnect 360 and the Waiver Support Application (part of the Decision Support System IAPD) to allow Lead Entities and Health Home Partners (providers) to have access to invaluable claims/encounter data and patient profiles to inform care planning and adhere to robust care management expectations for Medicaid beneficiaries served by the Health Home. Health Homes will continue to expand into more MI counties in FY22.

Substance Use Disorder Specific Integrations

Michigan's 1115 Behavioral Health Demonstration – SUD Health IT Plan

Furthermore, Michigan's Section 1115 Waiver Substance Use Disorder (SUD) Health IT Plan calls for enabling better care coordination, meaningful choice for SUD patients, and identifying SUD risks for earlier effective intervention. Michigan's approved waiver contains several technological infrastructure improvements that will lead to better integration and coordination of care.

MI is currently developing an electronic consent management to optimize information sharing. MI has developed a monitoring metric dashboard for MDHHS and its contracted PIHPs to monitor their quality metrics and benchmark against state mean/median values. MI has created a SUD user role in Care Connect 360 for designated users to yield the whole picture of one's care needs with SUD information for appropriate PIHP user groups.

Certified Community Behavioral Health Clinics (CCBHC)

MI has been approved as a Certified Community Behavioral Health Clinic (CCBHC) Demonstration state by CMS. The demonstration launched in October 2021 with a planned implementation period of two years. Thirteen sites, including 10 CMHSPs and 3 non-profit behavioral health providers, are participating in the demonstration. The CCBHC model increases access to a comprehensive array of behavioral health services by serving all individuals with a behavioral health diagnosis, regardless of insurance or ability to pay. CCBHCs are required to provide nine core services: crisis mental health services, including 24/7 mobile crisis response; screening, assessment, and diagnosis, including risk assessment; patient-centered treatment planning; outpatient mental health and substance use services; outpatient clinic primary care screening and monitoring of key health indicators and health risk; targeted case management; psychiatric rehabilitation services; peer support and counselor services and family supports; and intensive, community-based mental health care for members of the

armed forces and veterans. CCBHCs must adhere to a rigorous set of certification standards and meet requirements for staffing, governance, care coordination practice, integration of physical and behavioral health care, health technology, and quality metric reporting. The CCBHC funding structure, which utilizes a prospective payment system (PPS), reflects the actual anticipated costs of expanding service lines and providing care to a broader population. Individual PPS rates are set for each CCBHC clinic and address historical financial barriers, thereby supporting sustainability of the model. MDHHS is operationalizing the financing and delivery of the CCBHC through its contracted PIHP managed care delivery system of care.

<u>Promoting Integration of Primary and Behavioral Health Care (PIPBHC)</u>

PIPBHC is a five-year Substance Abuse and Mental Health Services (SAMHSA) that seeks to improve the overall wellness and physical health status for adults with SMI or children with an SED. Integrated services must be provided between a community mental health center (CMH) and a federally qualified health center (FQHC). Grantees must promote and offer integrated care services related to screening, diagnosis, prevention, and treatment of mental health and substance use disorders along with co-occurring physical health conditions and chronic diseases.

Criterion 10: State HIT Coordinator

Michigan continues to rely upon both an appointed State HIT Coordinator and M-CEITA, the state's REC, as resources to support the administration of the Promoting Interoperability program.

State HIT Coordinator

The Michigan Department of Health and Human Services, which includes the SMA, began efforts in FY2020 to convene a cross-functional workgroup to coordinate HIE and HIT strategies and initiatives across the department and its program areas. This department HIT workgroup is facilitated by several DHHS bureaus, such as the Policy, Planning, and Operations Support Administration and Strategic Integration Administration. These administrations, led by Elizabeth Nagel, Senior Deputy Director for Policy, Planning, and Operational Support, and Sudhakar Ramaswamy, Senior Deputy Director for Strategic Integration, act as the department facilitators for planning, development, and implementation of policies and programs for HIT and HIE. Collaboratively, the HIT workgroup also serves as the department's liaison to the U.S. Department of Health and Human Services' Office of the National Coordinator. Ms. Nagel and Mr. Ramaswamy also work directly with internal stakeholders at MDHHS as well as external partners, including other state agencies and private and public sector health organizations and vendors. They provide support and recommendations to MDHHS leadership and executive committees regarding HIT and HIE policy decisions.

Administrative Support: M-CEITA

The RECS were originally tasked with assisting priority primary care providers with adopting and meaningfully using EHRs through funding by the ONC. Medicaid and the MDHHS recognized the benefits the REC provided to Medicaid providers under this program through the Michigan Center for Effective IT Adoption (M-CEITA) collaboration expanding the scope of services to other underserved Medicaid providers. Two groups of Medicaid providers were serviced under this expanded contract.

The first group was Medicaid EPs who are specialists working towards Year 1 PI (Promoting Interoperability, formerly known as Meaningful Use, or MU) achievement in either Modified Stage 2 (through 12/31/18) or Stage 3. The second group was Medicaid EPs working towards meeting Modified Stage 2 (through 12/31/18) or Stage 3 Promoting Interoperability requirements in Years 2-6 of the program, or years 1-5 of meeting PI requirements according to the Meaningful Use standards.

Participation information for each of the 2 Medicaid groups serviced is detailed below:

Table 3: M-CEITA Technical Assistance

Funding Objective	Begin	End	Available Spots	EPs to MU by 12/31/21
M-CEITA would provide TA to help Medicaid EPs achieve Year 1 of Promoting Interoperability/MU Modified Stage 2 or Stage 3 requirements.	FY13	FY22	600	605
M-CEITA would provide TA to help Medicaid EPs achieve Years 2-6 of Promoting Interoperability/MU Modified Stage 2 or Stage 3 requirements.	FY14	FY22	4240	4268

As you can see above, the M-CEITA milestones for both groups were exceeded by program end on 12/31/2021.

Objective B: M-CEITA Support of the PI Program for Long Term Post-Acute Care (LTPAC):

Beginning in FY19, M-CEITA was approved to develop and offer a technical assistance program to Long-Term and Post-Acute Care (LTPAC) organizations with EPs enrolled in the Medicaid Promoting Interoperability Program. This support will facilitate the adoption and meaningful use of interoperable HIT systems. This will assist Eligible Professionals working in LTPAC facilities and who are also participating in the Medicaid Promoting Interoperability Program to meet their care coordination and health information exchange measures. M-CETIA successful wrapped up this demonstration program in September of 2020 and now offers this technical assistance as part of their service offering.

Criterion 11: Current SMA Activities Impacting Future of Promoting Interoperability Program

The SMA has several key activities underway that will influence the direction of the Promoting Interoperability Program over the next 5 years. Notable initiatives include the (Mi-Way) Statewide Consumer Directory, Clinical Quality Measure Recovery and Repository Service, myHealthButton/myHealthPortal , Active Care Relationship Service, MILogin, Identity Exchange Hub,

and the Common Key Service. For a more comprehensive look at how these and other MSA services will mature over the next 5 years, please refer to To-Be Criteria 1 and 2.

Strategic Priorities: Person-Centric Services, Human Centered Design, and Integrated Service Delivery

The HIT/E goals of MDHHS are closely tied into the Department's overarching strategic priorities for putting people first over programs. MDHHS is undertaking an evolution that can be summarized as: "People first, with the goal of helping all Michiganders succeed, no matter their stage in life. We'll do it with collaboration and cooperation on a scale never seen, and effective, efficient, and accountable government that better services people."

As a result of this plan for HIT/E and the Promoting Interoperability Program in Michigan, Michigan has established a HIT/E infrastructure that has adapted and is maturing into a highly integrated, highly automated framework that supports Medicaid beneficiaries holistically, integrating benefit programs with what has already been built for the Promoting Interoperability Program. By increasing the levels of automation, interoperability, and modularity, MDHHS has continued its pursuit of higher levels of MITA maturity (see 2017 MITA SS-A submission). These initiatives encompass the ongoing Strategic IT principles of Person-Centric Services, Human Centered Design, and Integrated Service Delivery.

Inclusion of 18F Best Practices:
As Michigan moves to an agile development process, several 18F best practices will be adopted. Michigan will be assigning Product Owners to each Agile development project, and ceremonies and artifacts will be required at the end of each sprint.
At the end of each sprint cycle, the vendor shall provide the following deliverables:
1. A formal demonstration of the work completed during the sprint. The demonstration will be accompanied by a written narrative describing which user stories were completed in the sprint, as well as the remaining user stories to be included in the product.
2. A completed Quality Assessment Surveillance Plan QASP as described by 18f.

Person-Centric Services
Person-centric means, among other things, offering an IT infrastructure that can request information of the applicant for all of the programs they are interested in applying for, and displaying all of the information for the programs in which the applicant is enrolled. Achieving this required a restructuring of some of the state's HIT/E systems, which was a technical challenge that has been and is being met by the development of the Enterprise Service Bus, Enterprise Data Warehouse and Trusted Data Sources. (See below within As-Is Criterion 11).

Human Centered Design
Michigan has adopted the process of deploying new functionality and redeploying existing functionality using Human Centered Design (HCD). The Michigan HCD efforts exemplified by Project Re:Form and Project Re:New, implemented or piloted existing functionality in a way that transformed the user experience. The Michigan

Multi-Benefit Application (MDHHS 1171) shortened the longest assistance application in the United States. It is now 80% shorter and can be processed in half the time of the previous application. Project Re:New utilized Human Centered Design to simplify the renewal process. Renewal rates improved 12% and have achieved a 95% on-time rate over the previous 75% on-time rate. Michigan will be implementing this approach of HCD to simplify, modernize and reorganize functionality going forward.

Integrated Service Delivery (ISD)

MDHHS manages hundreds of unique programs that customers, including Medicaid beneficiaries, interact with in a multitude of ways. MDHHS looked at several programs to see how to achieve more person-centric flexibility. MDHHS has reformed and set the stage for how it interfaces with customers through technology and has committed to making the service delivery system even more focused on the customers' needs.

Integrated Service Delivery has tangibly changed the way services are delivered by focusing MDHHS on serving people rather than administering programs. ISD was at the forefront of that transformation through workforce innovation, modernization of technology systems, and stronger partnership with communities. ISD's success has been defined by measurable health, safety, and self-sufficiency outcomes. MDHHS's ISD transformation focused on five critical innovations:

The first phase of ISD deployment, which resulted in the creation of the ISD Portal, focused on integrating the eligibility, enrollment, and reporting processes for Medicaid with non-Medicaid services including the food assistance program (SNAP), the Family Independence Program (FIP)/Temporary Assistance for Needy Families (TANF), state emergency relief (support for heat, energy, utilities, home repair, home ownership, relocation and burial), child development and care and Women, Infants and Children (WIC).

Strategic Alignment

A single, comprehensive strategic structure to align, integrate and ensure the effectiveness and transparency of the programs, services and benefits MDHHS provides.

Holistic Assessment

A common assessment to holistically identify a person's needs, goals and the programs which may be supportive in achieving their goals.

Common Connector and Plan

A common application, referral and success planning process across programs to serve as a single entry and connection point to all supportive opportunities.

Robust Self-Service

Robust client self-service opportunities including online services and a call center where customers can get support with a variety of programs.

Streamlined Renewal

A streamlined renewal and information update process which exchanges information and determinations across programs to minimize administrative burden.

Additionally, Person-Centric Services and ISD built on existing investments in existing solutions, including some which are outside of the scope of the SMHP, including MiPage (the State of Michigan's consumer web portal) and the modified adjusted gross income (MAGI) rules engine (see Eligibility and Enrollment IAPDU Activity 4).

Existing solutions that have supported ISD and Person-Centric Services and are more closely related to HIT/E efforts within the scope of the SMHP include the Master Person Index (MPI) to credibly identify Medicaid

beneficiaries in all State of Michigan systems and programs where their information is dispersed, user identification and authentication (MILogin), decision support tools (MDHHS Data Warehouses), and the MDHHS Data Hub/Enterprise Service Bus (ESB). The overview of these critical components that are now available for all future system work is described further below within As-Is Criterion 11.

Active Care Relationship Service

The Active Care Relationship Service (ACRS) is a care coordination tool used by some Medicaid providers in Michigan. MiHIN supports this tool on behalf of MSA in service of Medicaid beneficiaries.

An average patient has three physicians who help provide care for them. A patient with a complex condition like diabetes can have as many as nine to twelve health care providers on their care team. The relationships between a patient and the providers who actively care for them are called patient-to-provider attributions. The Active Care Relationship Service keeps track of the "active care relationships" between patients and their providers. For providers, an "active care relationship" means the provider has seen the patient within the past 24 months and expects to see them again. For payers, this relationship is attributed to an eligible member of a health insurance plan that payer offers.

The ability to accurately route information between providers for better Care Coordination, such as Admission, Discharge, Transfer (ADT) messages, an accurate and up-to-date record is needed where the active care relationships between patients and the health professionals on their care team can be easily retrieved. The Active Care Relationship Service (ACRS) provides the ability to link patients with their care team members (providers with active care relationships to that patient). ACRS supports better-coordinated transitions of care by enabling notifications to be sent to physicians and care management teams when there are updates in a patient's status. Better care coordination using ACRS enables the improvement of post-discharge transitions, prompt follow-up with patients and improved communication among providers to support patients, especially those with multiple or chronic conditions.

Figure 6: Providers/Organizations with Active Care Relationships in Michigan
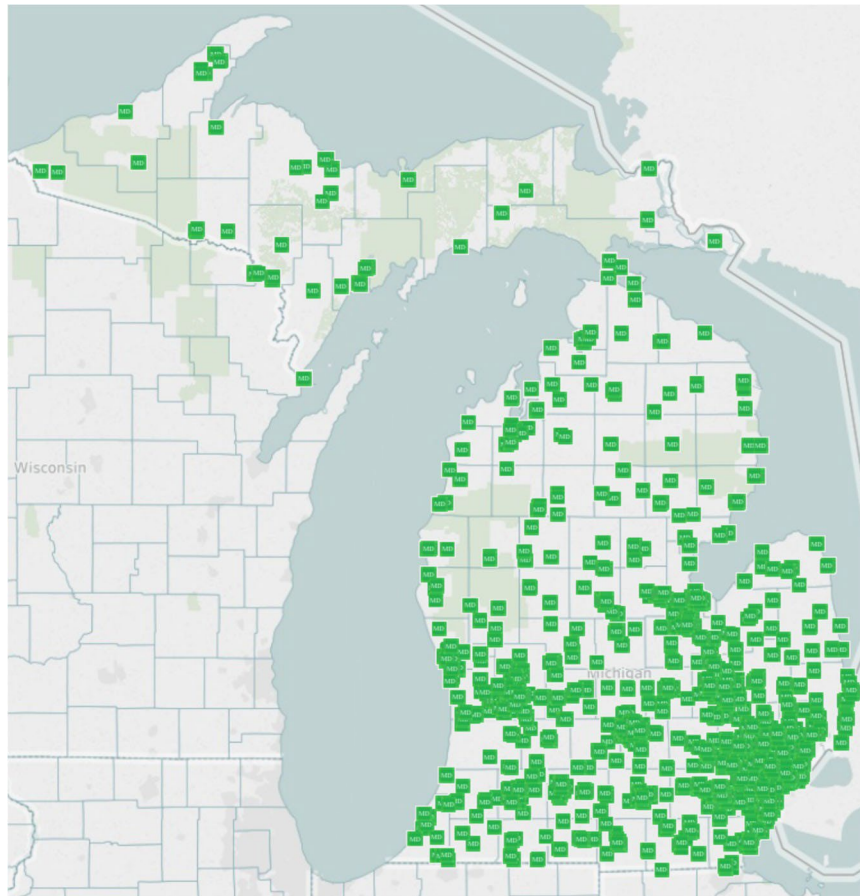
The Use Case to Submit Active Care Relationships (ACR) enables organizations to record the active care relationships attributing a patient with health professionals at that organization. These attributions are then utilized to accurately route information for a patient to all members of their care team (e.g. ADT messages, Medication Reconciliations, etc.). Operating as a service, ACRS enables authorized persons and organizations to search for care providers who have an active care relationship with a patient. Searches can be made from provider/physician organizations, other health care facilities/organizations, and payers.

Provider organizations contribute information about patients and their attributed health professionals including, but not limited to, patient name, patient date of birth, patient address, patient phone, health professional name, health professional identification number, health professional contact information, health professional organizations, and other associated information as appropriate.

In addition, ACRS can be used to establish relationships between patients and attributes assigned to those patients by payers, providers, physician organizations, or through various predictive models. These attributes can then be added to ADTs to enrich those messages with additional information that

can be used to by providers to create a situational awareness of their patients. Attributes for a patient can include high utilizer status, if the patient has a chronic disease, their risk scores for mortality or readmission, and even potential exposure to an event that may negatively impact their health.

For more on plans to enhance the capability and interoperability of ACRS, see To-Be Criterion 2.

Statewide Consumer Directory

The Statewide Consumer Directory, which is receiving support through the MMIS OAPD, advances the interoperability of the Medicaid Enterprise. It enables Medicaid beneficiaries to state their preferences (e.g., contact information, providers to be notified, and privacy consent) and participate in an electronic dialogue regarding their health. The Statewide Consumer Directory is a centralized registry hosted by the Michigan Health Information Network (MiHIN) but is under the direction and oversight of MDHHS. The consumer directory is a centralized registry that not only stores beneficiary preferences about their health, but it also points to where important documents such as living wills or consent forms are stored that can be retrievable by Medicaid providers, first responders, living will registries, Medicaid HMOs, Pioneer ACOs, and other health care stakeholders when appropriate.

Patients need help in finding, accessing, organizing, updating, and sharing their health information. This need is even greater when that information is generated and stored with multiple medical professionals and healthcare organizations (sometimes referred to as the "care team"). Patients should also have the ability to discover and share health information with resources that are potentially beneficial to them. These resources could include:

- Personal health records
- Clinical trials
- Research studies
- Mobile apps
- Other services that add value to a patient's healthcare

Patients also need a way to identify and manage their care team members to ensure the right healthcare providers are receiving updates when new information is available. The patient's care team members require the correct tools to share data with the patient according to individual patient preferences but in a way that does not add extra workflow burdens or increase the risk of unintentional disclosure. The Consumer Preference Management use case lets organizations leverage the Statewide Consumer Directory to give patients more visibility and control over their health information and how it is managed and shared. The SCD is one more step toward the development of an interoperable, fully integrated Medicaid Enterprise. This is in accordance with CMS' explicitly stated goals of accelerating health information exchange (HIE), advancing interoperability, and supporting Medicaid transformation efforts. The consumer directory aligns with the patient-mediated health information exchange strategies outlined by the Office of the National Coordinator (ONC) and the Centers for Medicare and Medicaid Services (CMS). In addition, the SCD will be sustainable and future charges to the state of Michigan will be on a subscription fee basis based on proportionate share. It will also be leveraged for Coordinating the Care Coordinators, described in To-Be Criterion 2.

eMIPP System and Health System Testing Repository (HSTR)

The Electronic Medicaid Incentive Payment Program (eMIPP, also described in As-Is Criterion 8), which received support through the MMIS-CHAMPS Enhancements IAPD, was used for program registration and verification and Meaningful Use reporting and tracking. It is a module of CHAMPS. Michigan went live on 1/2/2018 with the provisions required by the Inpatient Prospective Payment Systems (IPPS) Final Rule. Also in FY 2018, Michigan began requiring all clinical quality measures (eCQM) be submitted electronically. Thousands of Medicaid providers successfully submitted eCQM's as part of their program attestations.

The MU requirements under the Medicare and Medicaid Promoting Interoperability Programs required providers to electronically submit certain forms of public health data to applicable registries maintained by MDHHS. In order to capture all of the public health-related testing results in one centralized location, MDHHS created a web-based Health System Testing Repository (HSTR), which is also receiving support through the MMIS-CHAMPS Enhancements IAPDU and is also described in To-Be Criterion 2. The HSTR is used to track transaction testing for Medicaid systems that include an automated workflow to assure providers/entities have appropriately tested transactions before being approved for production. HSTR will remain functional going forward for purposes of PI audit questions as well as continued on-boarding that continues to happen post PI program. HSTR is also used for purposes of OID generation and tracking, which is a necessity for most use case onboarding with MiHIN.

Clinical Quality Measure Recovery and Repository (CQMRR) Service

CQMRR (also described in As-Is Criterion 8), which is receiving support through the MMIS-CHAMPS Enhancements IAPD, is built on the Quality Reporting Document Architecture (QRDA) standards that are built into the EHR certification standards for participation in the Medicaid Promoting Interoperability Program. CQMRR collects quality measures via the HIE environment from both eligible hospitals and eligible professionals and extracts, validates, parses and routes the information to the correct federal and state systems. For Michigan, the endpoint is the state Data Warehouse, where the information is retrievable by the State Level Repository (SLR) (known in Michigan as eMIPP) application of the MMIS system to enable CQM credit for MU. At this point, CQMRR will sit idle until the future state of electronic clinical quality measurement collection is further fleshed out.

Reporting clinical quality measures has grown to become an enormous burden and source of excess administrative costs for healthcare professionals. Multiple reporting programs, including Medicare and Medicaid, require similar, non-aligned measure information, meaning providers and health plans spend tremendous time calculating, formatting, and reporting quality measures. Plus, requirements for these reporting programs change frequently, making it almost impossible for healthcare professionals to keep up.

The Michigan Department of Health and Human Services (MDHHS) and the Michigan Health Information Network Shared Services (MiHIN) have created a quality alignment and transport infrastructure called the Clinical Quality Measurement Recovery and Repository (CQMRR) Service. This service receives, validates, and processes inbound electronic Clinical Quality Measures, then sends them to the appropriate destination. The CQMRR service enables Medicaid providers and health plans to fully embrace a Report Once infrastructure that eliminates burdens currently impacting healthcare due to multiple, non-aligned reporting programs and:

- Helps healthcare providers meet Meaningful Use requirements from Medicaid
- Allows providers to "report once" to meet requirements for multiple programs
- Helps health plans and providers identify and close "gaps in care" more quickly
- Reduces burdens on healthcare providers, health plans, and the State
- Gives more immediate visibility to quality measures for all participants

myHealthButton/myHealthPortal

The myHealthButton (myHB) is a free mobile app for Medicaid, Healthy Michigan Plan, MIChild and Children' Special Health Care Services (CSHCS) beneficiaries that allows them to access their health care benefits, records and more including several planned consumer engagement activities, making the button a "one stop shop" for Medicaid beneficiaries to complete their necessary business with the State of Michigan. The myHealthPortal (myHP) allows all the above noted beneficiaries access to the same information on their home computer or laptop. Patient utilization of electronic health records is a core concept underpinning Meaningful Use. myHealthButton and myHealthPortal provide this access for Michigan Medicaid beneficiaries. myHealthButton and myHealthPortal continues to see tremendous growth as its number of registered beneficiaries has climbed to over 89,000.

Integrated Service Delivery (ISD) Portal

The Michigan Department of Health and Human Services (MDHHS) implemented the Integrated Service Delivery (ISD) Portal (also known as MiBridges) to provide Michiganders with a holistic view of their information regardless of program. The holistic view MDHHS is creating centralized information about a person in one place so that the person and MDHHS staff do not have to go to multiple systems to interact with multiple programs. The ISD Portal also centralizes self-service features that enable applicants and beneficiaries to perform functions for themselves that previously required the assistance of MDHHS Staff.

Master Person Index

As citizens continue to demand more online access to Medicaid resources and information, we are faced with increasing interoperability between systems. To do this, we need to identify what State system has information on or about a citizen; the Master Person Index (MPI) is filling this role. Knowing in which systems a person exists across all the systems that make up the Medicaid Enterprise is a vital first step to system interoperability, improving care, and monitoring for fraud, waste, and abuse.

Understanding our customer, the citizens of the State of Michigan, is the key to the department's ability to interact and effectively serve its citizens. With volumes of data stored across multiple source systems and the often-dynamic state of that data, we are faced with challenging integrity and relationship issues. The MPI enables our State to combine, compare, review, and resolve potential data issues. The result is an index with all the systems and corresponding identifiers that has information on any one citizen. This index can then be used to identify citizens across all State systems.

The MPI is designed to collect and securely store key citizen demographic attributes from all State systems and using a sophisticated and flexible data model and attribute weighting, the probabilistic algorithms identify and link records across these source systems. The deployed algorithms identify probable data issues and linkages across the systems that potentially represent the same citizen. The

algorithms standardize each data element and compare both similarities and differences to determine the likelihood of a match. This matching and linking process gives a complete citizen picture across all the source systems. The process does not affect the data stored within the source systems; instead, it builds a cross-reference table inside the MPI. As new data sources are added to the MPI, additional features can be leveraged to improve operations and outcomes.

With over 25 systems already contributing their populations to the MPI and more systems being added every year, the MPI is becoming a powerful source of information to link across the different systems and sources of data. The value of the MPI increases with each new source of data, and every new source of data presents new and unique opportunity to improve Medicaid operations. In 2018, all deaths in the state were added to the MPI, which enabled a new MPI feature to be planned: a real-time notice to participating systems when one of their records matches to a death record. This notice is delivered to the participating systems pre-matched to the system's key identifier and in real-time. This notice allows the receiving system to take timely and appropriate actions (such as disabling access or services or triggering new actions because of a death). This replaces manual processes and monthly batch processes that each system had to develop on their own with an enterprise-wide solution that can be leveraged for all systems.

Trusted Data Sources (TDS)

FY19 ‑ FY20 Eligibility and Enrollment (E&E) IAPDU Activity 1, FY19 ‑ FY20 Decision Support System (DSS) IAPDU Activity 13

Michigan has implemented an eligibility determination and enrollment system for Medicaid and CHIP. MAGI eligibility determinations are near real time and include Trusted Data Sources from the Federal Data Services Hub (FDSH) to verify attested information. Use of the Master Person Index (MPI) (DSS IAPDU Activity 13) for State of Michigan trusted data sources will be critical to this effort by proving a more robust solution.

Health Directory

Today, multiple organizations track health professionals via basic information such as name, address, specialty, or national provider identifier. But new models of care require health professionals to be able to send, receive, find, and use health information electronically and securely. To efficiently manage these activities, participants must know where health professionals would like information on their patients to be sent, and how health professionals would like to receive the information (i.e., via what transport method and message type).

The Health Directory helps this exchange of health information by collecting information on a wide variety of health professionals in a comprehensive, easily accessible database, including demographics such as name, address, phone, organization affiliation(s), and email address, as well as interoperability information including the electronic address required to know how and where health information is to be delivered electronically for each health professional.

The Health Directory performs like an "indexed routing table" allowing information to not only be stored but also to be electronically routed based on health professional preferences that have been updated within the directory.

The Health Directory is a key infrastructure component for efficient exchange of health information.

The Health Directory use case allows participating organizations and healthcare professionals to manage information regarding healthcare professionals including electronic address – utilizing a centralized directory service – to allow health professionals to efficiently share health information.

The Health Directory Activity was completed in 2018 and has moved to an operational status. Cost is distributed among the HIE stakeholders per participation in shared core services. As needed in the future, costs will be broken out via a fair-share subscription fee. The Health Directory will be leveraged for Coordinating the Care Coordinators (See To-Be Criterion 2).

Identity Exchange Hub

As health information technology has expanded, so too has the need for healthcare providers to log in to multiple systems to perform their jobs. These multiple logins are difficult to track and therefore become a security risk, a drain on productivity, and produce excess administrative costs to maintain.

The Michigan Department of Health and Human Services (MDHHS) and the Michigan Health Information Network Shared Services (MiHIN) have created an Identity Exchange Hub service that helps providers use one login and password to securely access multiple healthcare systems, including those internal and external to the State. The service helps Medicaid to establish, manage and authenticate user identities for applications on an individual level inside State government.

Identity Exchange Hub Service Value allows Medicaid providers to participate in a Single Sign-on solution that:
- Satisfies requirements of HIPAA, FERPA, and IDEA
- Employs trusted, strong authentication technologies
- Establishes common set of policies, practices, and protocols to manage identity and trust of IT users and devices across independent organizations
- Reduces burden on healthcare providers by minimizing number of portals they must access and number of usernames/passwords they must remember
- Reduces security risks of unauthorized access and disclosures
- Allows State to leverage other systems' identity and credentialing when their standards equal or exceed those of State or MDHHS systems

Having been completed, this Activity (7) is no longer included in the MMIS-CHAMPS Enhancements IAPDU going forward. It will be leveraged as part of other use cases as determined by need.

MILogin

MILogin is an enterprise-wide single sign-on and identity and access management solution which enables the State of Michigan to establish, manage, and authenticate user identities for Web and

Mobile information technology systems. This solution is providing identity management and identity federation (IDFED) capabilities in compliance with various Federal and State laws and regulations, such as HIPAA/HITECH, FISMA, FIPS, IRS 1075 and others. MILogin utilizes robust Identity Proofing and Multi Factor Authentication (MFA) capabilities to ensure secure access to sensitive and protected citizens' information. It provides citizens and business entities with unified single sign-on capabilities for State of Michigan web and mobile applications and eliminates the need for multiple usernames and passwords to access various State of Michigan systems and applications. This solution is being implemented under the MILogin (formerly called MICAM) project, which has been receiving support from CMS through the MMIS-CHAMPS Enhancements IAPDU.

MILogin continues to grow and expand in use and features, and recently it was used to great success for the Integrated Service Delivery (ISD) portal. ISD leveraged MILogin's extensive existing user base and the advanced Identity Proofing and Multi Factor Authentication (MFA) capabilities to secure the new portal.

The Michigan Department of Health and Human Services' (MDHHS) goal is to continue to migrate existing Medicaid applications to the Michigan Identity, Credentialing, and Access Management solution, known as MILogin, which provides a comprehensive solution for State of Michigan (SOM) agency-customized and commercial off-the-shelf (COTS) web and mobile applications related to Single Sign-On (SSO), user authentication, and account/identity management services for internal (SOM workers) and external (third-party and citizen) users. The use of MILogin allows web and mobile applications to comply with the Michigan Cyber Security (MCS) 13350007 Identity, Credentialing, and Access Management Standard.

MILogin accesses various state applications and systems related to Medicaid and other benefit programs, including CHAMPS (Medicaid claims processing), Bridges/MI Bridges (E&E), MiSACWIS (automated child welfare information system) and others. It serves as an enterprise solution for Medicaid users, serving beneficiaries, providers, health plans/entities, and State staff. The State will continue to be able to use the enterprise solution for existing and future State applications, State government health systems and trusted third party applications.

Common Key Service

Patient-matching is very difficult due to the many ways patient information is stored in different computer systems and networks. For example, one hospital registration/admission system may show gender as "Male," "Female," and "Unknown," while a primary care doctor's office system may simply list "M," "F," and "U." And while this simple difference can be quickly understood, the problem can be much more complex. A patient's name may be entered as Maryann Anthony at the hospital, Marianne Anthony in her primary care physician's system, and Mary Anthony in her specialist's system.

To streamline the exchange of health information, electronic healthcare systems require reliable patient-matching tools to ensure that the right information is attributed to the right patient every time. The Common Key Service (CKS) use case utilizes multiple methods to link health information to individuals, such as:

1. The CKS uses proven matching criteria to ensure that patient details (such as last name, date of birth, and phone number) positively and accurately identify the patient.
2. The CKS connects with a master person index (MPI) to manage information about patients and to eliminate duplicate entries with great accuracy.
3. This MPI uses an industry best-practice formula to determine that Maryann Anthony, Marianne Anthony, and Mary Anthony are in fact the same person based on her other details (such as last name, date of birth, and last four digits of her Social Security Number).
4. The CKS assigns a unique key that is stored and attached to the patient in the MPI and shared with all systems exchanging information about that patient. Each system can link their respective medical record number to the same common key and then include the common key when exchanging information about the patient.

Essentially, the CKS strengthens matching by providing a consistent and accurate detail (the individual patient's common key) that each system can rely on.

This reliable matching capability improves patient safety and data integrity in all use cases when information is shared about a specific patient. Over time, as CKS adoption grows throughout the state and more and more local systems link patients to a common key, it may no longer be necessary to include all of a patient's demographic information when exchanging their medical information. This would further improve the privacy and security of the information exchange as well by de-identifying the message.

Regarding the Common Key Service operational status, MDHHS utilizes it for Medicaid purposes based on a fair share participation fee, the cost of which is included in the MMIS OAPDU.

Common Gateway Service (CGS)

The Common Gateway Service establishes connectivity between the MDHHS Data Hub and the Michigan Health Information Network (MiHIN) common gateway and enables the State to use the existing, certified eHealth Exchange node. The eHealth Exchange node creates a connection with various federal agencies, including the Social Security Administration (SSA), Centers for Disease Control (CDC), Veterans Administration (VA) and others. This activity formerly in MMIS-CHAMPS Enhancements IAPDU Activity 9 executed the work necessary to expand external sending and receiving of Continuity of Care Documents (CCDs).

MDHHS will ensure the CGS will support Medicaid provider and beneficiary query-based transactions that fully align with the ONC roadmap and the emerging National (NwHIN, CCC), EMR vendor (CommonWell, CarEquality), and health plan (X12) interoperability roadmaps. The Intelligent Query Broker (IQB) included in HIE IAPDU Activity 1 will augment the existing Common Gateway in conjunction with the Active Care Relationship Service, but the Common Gateway Service node operational costs will

be reflected in a fair share subscription fee for which Medicaid will request support through the MMIS OAPDU. MDHHS looks forward to discussing the move of this developed MMIS component to the fair share cost allocated participation fee in the OAPDU.

MDHHS Data Hub Enterprise Service Bus

The MDHHS Data Hub Enterprise Service Bus (here referred to using the technical acronym ESB; generally, in the APDs it is referred to as the MDHHS Data Hub) follows the required Seven Conditions and Standards and enhances the interoperability of the Medicaid Enterprise. Provider EHRs collect and transmit health information in standardized formats to MDHHS health systems via Michigan's HIE infrastructure: the sub-state HIEs, MiHIN, and the ESB. The information is moved through the ESB, which routes each message to the appropriate health system, with appropriate acknowledgements returned to the sending system. MDHHS is currently utilizing two technologies to perform the function of an Enterprise Service Bus (ESB). One of the ESBs, the MDHHS Data Hub, is primarily used for real-time clinical information or transactions going to or from the State. It is based on the Commercial Off-The-Shelf (COTS) Orion Health's Rhapsody Integration Engine (Rhapsody). It interconnects all the independent systems using various messaging technologies, including HL7 and web services. The other ESB, the State of Michigan Hub, built on IBM WebSphere, is primarily used for sharing information between systems using web services. This ESB also facilitates all technical communication between the State and the Federal Data Services Hub (FDSH). The two technologies have been joined into one ESB service to perform the functions depicted below.

Figure 10: Joined Enterprise Service Bus
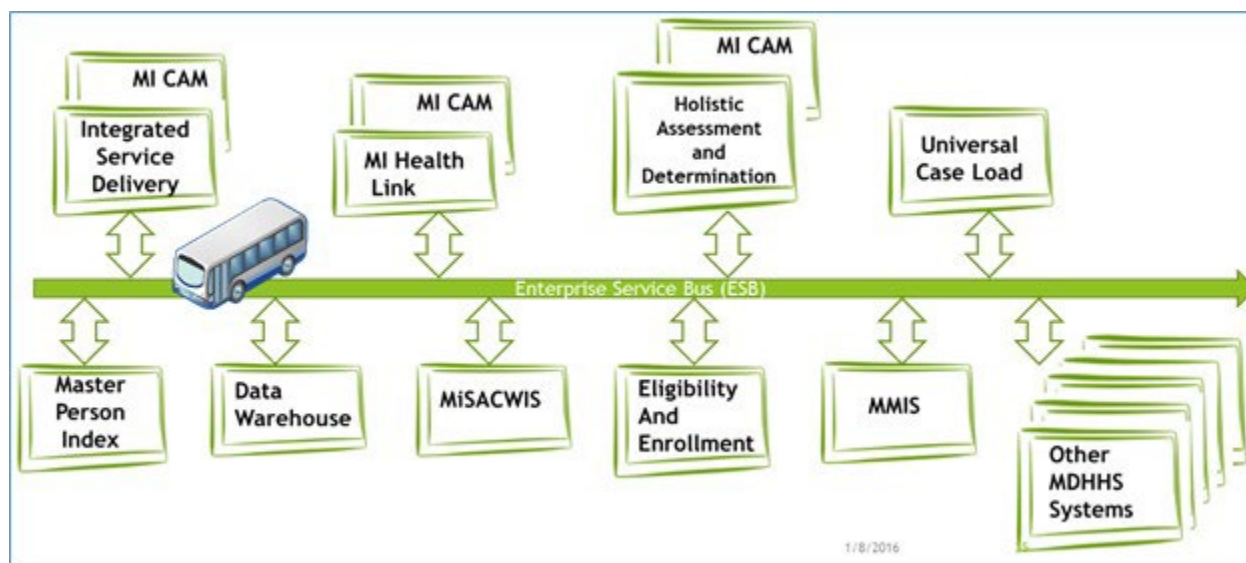
The MDHHS Data Hub Enterprise Service Bus (ESB) has grown leaps and bounds from its early use to support a handful of meaningful use/promoting interoperability-related use cases. In addition to continue supporting the early use cases, a dozen new use cases have been added. These new use cases

support Medicaid operations with real-time messaging from the health care community to State systems and message traffic between State systems. Some of the recently added use cases include: real-time query for immunizations history and forecast, physical health Admit-Discharge-Transfers (ADTs) for the Medicaid population, additional meaningful use-related population health use cases, supporting the Master Person Index's (MPI) real-time traffic needs, and many more. The ESB will continue to add new use cases and features as interoperability spreads across the Medicaid enterprise and the health care community. Recently the ESB has added the ability to support the emerging FHIR (Fast Healthcare Interoperability Resources) standard and this new capability is planned to be leveraged in future use cases. The ESB has also been expanded to support the increased message volume, 2.5 million messages a week[6] and enhanced with additional security and logging capabilities to keep pace with the expanded use of the ESB. The ESB's real-time messaging capabilities are foundational to many of the planed future use cases. Developing and maintaining interfaces between the various MDHHS health systems and the ESB has been receiving support from CMS through the MMIS-CHAMPS Enhancements IAPDU (Activity 10) and MMIS OAPDU.

Admit, Discharge, Transfer Notifications

Admission, Discharge, Transfer (ADT) notifications are widely regarded as a keystone to improving patient care coordination through health information exchange. ADT notifications are sent when a patient is admitted to a hospital, transferred to another facility, or discharged from the hospital.

Notifications are then sent to update physicians and care management teams on a patient's status, thus improving post-discharge transitions, prompting follow-up, improving communication among providers,

and supporting patients with multiple or chronic conditions.

ADT notifications also support the identification of patients who are frequent or high users of the health care system. This allows Medicaid/Medicaid providers to steer those patients toward clinical and non-clinical interventions, reducing unnecessary overutilization by preventing avoidable emergency department visits and hospital readmissions.

MiHIN currently routes ADTs for Medicaid patients to MSA based on the beneficiaries listed in the Medicaid Active Care Relationship Service file. These ADTs are stored in the Data Warehouse for use by the CareConnect360 application to provide Medicaid providers with near real-time information for care coordination purposes, decreasing the reliance on claims data stored in CHAMPS that may be out of date.

_____

[6] As of May 2018

Cancer Registry

Modified Stage 2 and Stage 3 ruling included the measure of submitting cancer case data to a specialized registry. To meet this measure, providers are required to send cancer case information in an electronic format to the existing Michigan Cancer Surveillance Program.

Reports should be submitted for any patient encounter related to cancer, including diagnosis, referral, treatment, and follow-up. To enable electronic submission of reports, an interface to the Cancer Registry has been Developed over the past several years, with providers being onboarded to submit their cancer cases.

CHAMPS Provider Enrollment

The CHAMPS Provider Enrollment module is the tool that Michigan uses to govern enrollment, disenrollment, and sanction of Medicaid Providers in the state. It interacts with eMIPP to identify any Eligible Providers in the Promoting Interoperability Program that are not actively enrolled in Michigan Medicaid, have license suspensions or other sanctions, and prevent improperly disbursing Promoting Interoperability incentive payments to sanctioned providers. MMIS-CHAMPS Enhancements IAPDU Activity 12 regarding updates to this module for Provider Enrollment fee collections, screening, and ownership is completed as of FY2019 and moving to maintenance and operations.

Human Centered Design

Human-centered design (HCD) is an iterative design process in which designers focus on the users of the system in order to gain a solid understanding of who will be using the product. The process involves the users in an iterative fashion throughout the entire design and development process and incorporates their feedback to refine the requirements and design. The goal of this process is to produce a system that offers a more efficient, satisfying, and user-friendly experience for the user. During the implementation of the Integrated Services Delivery Portal (MiBridges), MDHHS partnered with Civilla (A Human Centered Design practitioner who specializes in reimaging institutions and public services). This partnership resulted in removing barriers to benefits by transforming the longest assistance application in America. The resulting measures of the effort were incredible. For the 2.5 million applicants who were now able to access benefits, 90% of people were able to able to apply in less than 20 minutes, 96% of questions were completed and resulting staff time was reduced by 75%.

Criterion 12: Changes in State Policy Impacting Promoting Interoperability Program

In April 2015, MDHHS rebidded its Medicaid managed care contracts across the state. Awardee implementation of the new rebid requirements was required by January 1, 2016. The 2015 RFP

represented a shift in bidder evaluation toward population health management, payment reform, HIE participation and other goals of Michigan's State Innovation Model (SIM) initiative. The five narrative submission sections all relate to the promotion of HIT/E and related ONC and CMS goals. Today, these goals are represented in contracts using the following criteria:

1. Population health management, including quality assessment and performance improvement, care management, and behavioral health integration. This section also includes items related to social determinants of health, data analytics on population health management, and community collaboration.

2. Patient-Centered Medical Homes (PCMH) including the approach to encouraging primary care providers to transition to PCMHs, as well as experience contracting with accountable systems of care, such as risk bearing provider entities.
3. Provider network, including details on provider availability and enrollee access to culturally appropriate services.
4. Payment reform, including details on current value-based payment arrangements and the bidder's intentions to expand value-based reimbursement in Michigan if awarded a contract.

Criterion 13: Interstate HIT/E Activities

There is an ever-growing number of atypical providers that are being registered in the CHAMPS Provider Enrollment subsystem, some of which contain out of state addresses. Most atypical providers do not have an NPI number. Because of this fact, it is difficult to assess the level of claims and encounter activity associated with these out-of-state providers.

In the addition to the above-described care relationships with out of state providers, Michigan is involved in several interstate projects and organizations to advance HIE/E collaboratively and cost effectively. Prominent examples include the Michiana Health Information Network, the Sequoia Project (eHealth Exchange), CommonWell, CareEquality, the Office of the National Coordinator, the National Association for Trusted Exchange (NATE), and the Strategic Health Information Exchange Collaborative (SHIEC). In addition, MiHIN is also engaged with sharing health information across state lines with South Dakota.

Michiana Health Information Network (MHIN)

Michiana Health Information Network (MHIN) is one of the oldest and most successful health information exchanges and healthcare IT organizations in the United States. Since 1998 MHIN has been serving healthcare providers across the Midwest. MHIN provides secure, timely delivery of relevant clinical information through a number of technology and communication solutions. MHIN streamlines secure access to data to improve quality and reduce costs.'

MHIN was added to Michigan's network of networks to support the interstate exchange of health information for patients living in southern Michigan and northern Indiana, crossing state lines for work or family and visiting healthcare providers in the other state.

Sequoia Project (eHealth Exchange)

The eHealth Exchange is a group of federal agencies and non-federal organizations that came together under a common mission and purpose to improve patient care, streamline disability benefit claims, and improve public health reporting through secure, trusted, and interoperable health information exchange.

The eHealth Exchange is a rapidly growing network of exchange partners who securely share clinical information over the Internet across the US, using a standardized approach. By leveraging a common set of standards, legal agreement and governance, eHealth Exchange participants are able to securely share health information with each other, without additional customization and one-off legal agreements. The eHealth Exchange connectivity spans across all 50 states and is now the largest HIE Network in the US.

Michigan was one of the first states to complete onboarding with the eHealth Exchange for the purpose of enabling health information sharing with other states and other organizations outside Michigan, including federal agencies such as the Department of Veterans Affairs, Social Security Administration, Centers for Medicare and Medicaid Services, and others. Michigan continues to participate with the eHealth Exchange on an ongoing basis.

National Association for Trusted Exchange (NATE)

The National Association for Trusted Exchange (NATE) brings the expertise of its membership and other stakeholders together to find common solutions that optimize the appropriate exchange of health information for greater gains in technology adoption and improvement of patient outcomes. Consistent with NATE's mission to address the legal, policy and technical barriers that inhibit health information exchange between data holders and healthcare consumers, NATE leads and participates in a number of ongoing and emerging projects focused on exchange via multiple modes of transport, including Direct secure messaging and APIs. Working with a broad set of stakeholders through multiple task forces, crowdsourcing and a call for public comment, NATE was proud to make available the first release of NATE's Blue Button for Consumers (NBB4C) Trust Bundle beginning in 2015. In 2016, NATE began to extend the utility of its trust community beyond Direct secure messaging to include other consumer-centric technologies, such as those that leverage APIs or other modes of exchange.

Michigan partners with NATE on projects to expand health information sharing across the state and nation, and to promote adoption of solid nationwide standards that will best support health information sharing for the future.

The Strategic Health Information Exchange Collaborative (SHIEC)

SHIEC strives to enable the secure exchange of patient information to improve the quality, coordination, and cost-effectiveness of healthcare locally, regionally, and nationally. We are the largest consortium of its kind in the country, representing 76 HIEs that together cover more than 92% of the United States population, and 125+ total organizations.
We advocate on behalf of our member organizations to ensure their needs are represented in nationwide conversations about critical healthcare issues, including health IT, health data sharing, and stewardship.

Criterion 14: Interoperability Status of Public Health Reporting Systems

MDHHS continues to make major investments in its public health reporting systems and databases. Michigan maintains the following health systems:

- Michigan Care Improvement Registry (MCIR) (immunizations)
- Michigan Disease Surveillance System (MDSS)
- Michigan Syndromic Surveillance System (MSSS)
- Bureau of Labs (BoL): StarLIMS (Laboratory Information Management System) for orders and results
- Newborn Screening for Blood Spot orders and results, Critical Congenital Heart Disease (CCHD) screening reporting, and hearing screening results for Early Hearing Detection and Intervention (EHDI)

- Cancer Registry (interface enhancements completed)
- Birth Defects Registry (previously intended to be part of a broader Chronic Disease Registry)
- Vital Records (birth and death), including real-time death notices to key State systems to prevent fraud, waste, and abuse
- Blood Lead Results Database
- Michigan Breast and Cervical Cancer Information System (MBCIS) that supports Michigan's WiseWoman program, Michigan's Breast and Cervical Cancer Control Navigation Program (BCCCNP) and Michigan's Colorectal Cancer Early Detection Program (CRCEDP). (Interoperability to same not funded in an APD but rather by a CDC grant)

These systems relate to the MDHHS Data Hub, as illustrated in the diagram below:

Figure 7: MDHHS Data Hub
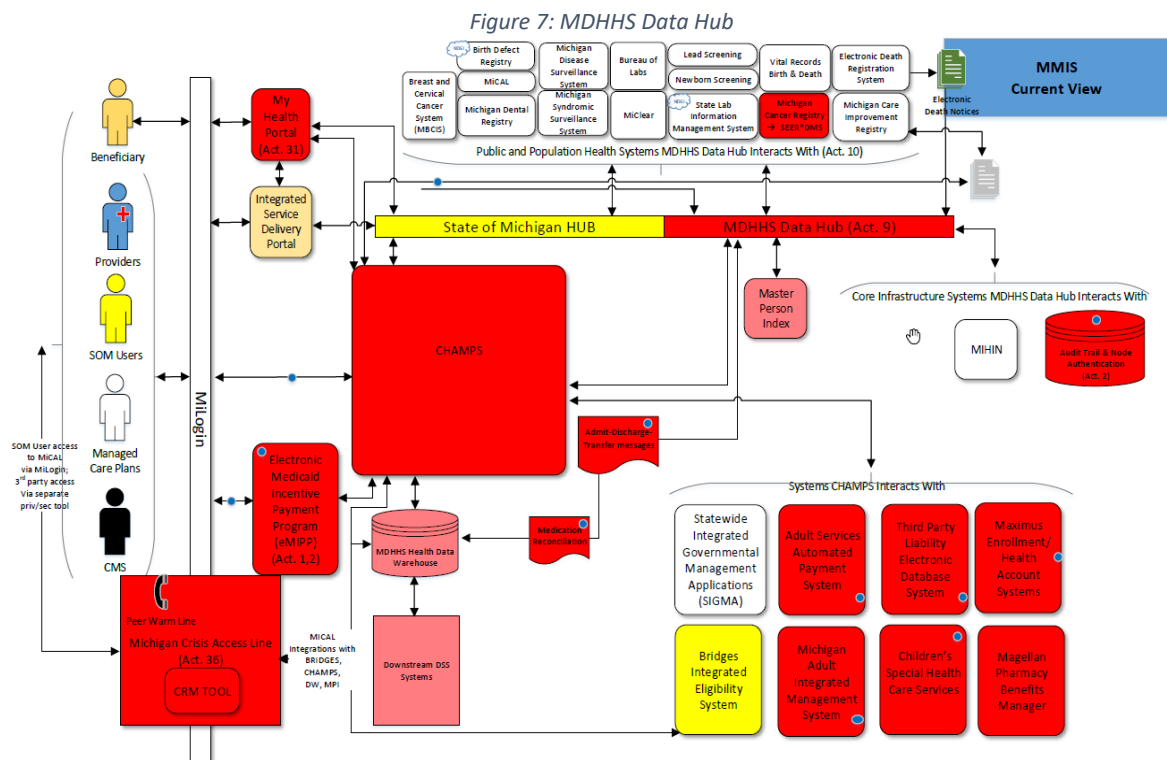
Within 5 years, Beneficiary health information will be able to be linked across MDHHS health systems as the latter are integrated with the Master Person Index (MPI).

Criterion 15: HIT-Related Grants

Given the continued growth of health IT infrastructure and the department's dedication to its sustainability, HIT is the basis and the vehicle for data sharing in many of department's initiatives. The following list of grants is not exhaustive, given the continued interconnectivity between HIT and the department's strategies over time.

Newborn Screening Grant

In December 2015, MDHHS Bureau of Laboratories received a NewSTEPs 360 program grant, a collaboration between the Colorado School of Public Health (Colorado SPH) and the Association of Public Health Laboratories (APHL), supported by the Health Resources and Services Administration (HRSA), Grant # UG8MC28554. Under this grant, the MDHHS Bureau of Laboratories will deploy and pilot HL7 messaging for Newborn Screening Dried Blood Spot to collect demographic submission and results reporting to/from the state laboratory, and to verify receipt of the dried blood spot card by the laboratory. The Grant focuses on-boarding the first handful of hospitals and developing lessons learned that can be used for state-wide rollout. This project will leverage the MDHHS Data Hub ESB for both the inbound "order" OML message and the outbound "result" ORU message. The inbound OML message leverages Message Acknowledgment (ACK), Basic and Advance Error Handling, Message Structure Validations, Business Rule Validations, and Message Payload Translation services to convert the incoming HL7 OML messages into a data base insert. That insert is entered into a holding table within the newborn screening application for processing. The outbound ORU message leverages the Advance Outbound Message Routing – ESI Look-up and Outbound Message Guaranteed Delivery services from the MDHHS Data Hub ESB.

This project is on hold pending upgrades to StarLIMS system.

State Innovation Model (SIM) Grant

In 2015, the Centers for Medicare and Medicaid Services (CMS) awarded Michigan $70 million over four years to test and implement an innovative model for delivering and paying for healthcare in the state. The award, made through the CMS State Innovation Model (SIM) initiative, was based on a plan submitted by the State in 2014 called "Reinventing Michigan's Health Care System: Blueprint for Health Innovation," a plan that guides the state as it pursues better coordination of care, lower costs and improved health outcomes.

The SIM initiative ended in January 2020. To further operationalize SIM activities and develop capacity for future sustainability, the department secured state general fund dollars from the Michigan Legislature for FY2020. These sustainability funds will allow continuation of activities under SIM's three main umbrellas: Population Health, Care Delivery, and Technology. Community Health Innovation Regions, or CHIRs (pronounced "shires"), which are intended to build community capacity to drive improvements in population health, form the base of the Population Health component. The department seeks to develop strategies and funding models for expanding CHIRs across the state. Into the future, the Care Delivery component will be anchored by the Patient-centered Medical Home (PCMH) Initiative and the promotion of alternative payment models. Following SIM closeout in January 2020, the department promoted a statewide Social Determinant of Health (SDoH) screening HIE use case, which has gained widespread adoption across the CHIRs. The Technology component of SIM, which promoted the SDoH use case, will continue to leverage Michigan's statewide infrastructure and related health information exchange (HIE) initiatives to enable and support advances in population health, care coordination and payment and care delivery strategies.

Into the future, the Michigan CHIR model will develop into a statewide program that will better facilitate regional connections between clinical and community service organizations, to better serve

vulnerable residents of Michigan's health and SDoH needs. DHHS will continue to work collaboratively with other State agencies, the Office of the Governor, and the Michigan Legislature to pursue continuity funding and strategies to ensure that CHIR-influenced collaboration models continue to evolve into the future.

Michigan Disease Surveillance System Support

Since 2009, approximately $4.5 million of public health funds from ten different national and Michigan sources has been invested in the Michigan Disease Surveillance System (MDSS).

Centers for Disease Control (CDC) Infrastructure and Interoperability Grant

In 2012, the Michigan Care Improvement Registry (MCIR) received a two-year, $800,000 CDC grant to promote HL7 interoperability. MCIR has recently received an additional $2 million over 2 years to support continued HIT/HIE participation.

Michigan Syndromic Surveillance System Support

Since 2010, approximately $540,000 of public health funds from ten different national and Michigan sources has been invested in the Michigan Syndromic Surveillance System (MSSS). The Early Hearing Detection and Intervention (EHDI) program received a CDC grant that covers staff salary & fringes, and one of the grant goals is to "To implement an EHDI tracking and surveillance data system that is EHR compatible."

Other Grants and Awards Impacting the Bureau of Laboratories

Various public health entities have issued the Bureau of Laboratories (BoL) grants and awards since 2010. The prime example impacting Health IT projects was a 2-year, $588,000 CDC Infrastructure and Interoperability grant. This was used to implement HL7 messaging of viral respiratory results, upgrade HL7 message version from 2.3.z to 2.5.1, and enroll two additional hospital laboratories into electronic messaging of Michigan Reportable Diseases to the Michigan Disease Surveillance System.

Michigan Cancer Surveillance Program Support

The Michigan Cancer Surveillance Program annually spends approximately $250,000 supporting the Michigan Cancer Registry and receives considerable in-kind support from the National Program of Cancer Registries in the form of software development, customization, maintenance and support with these expenses covered almost entirely by funds from CDC.

Michigan Birth Defect Surveillance Program CDC Funding

The Michigan Birth Defect Surveillance Program annually spends approximately $150,000 on supporting the Michigan Birth Defect Registry and receives $72,000 in annual funding from CDC for collaboration with their efforts to support birth defects surveillance in the states.

Vital Records Support

MDHHS's initial investment in the birth and death registry systems was an estimated $14 million. Roughly $2.3 million of this total cost used funds from federal sources including the Social Security

Administration (nearly $1 million), Medicaid (at roughly $1 million) and the Centers for Disease Control at $330,000. The Michigan Division of Vital Records and Health Statistics spent approximately $1.28 million in systems development, testing, support, user support and training and systems/data management as needed to operate the WebEBC (electronic birth certificates), Birth Registration System (BRS) and Electronic Death Registration System (EDRS). Funds in the amount of $4.2 million have been acquired to purchase a replacement to the Web EBC system with work on redeployment targeted for January 2020, when current system reaches end-of-life.

National Center for Health Statistics

Funding from the National Center for Health Statistics within CDC in the amount of $205,000 was provided and helped fund efforts to increase the levels of voluntary participation in the use of the EDRS by medical certifiers.

Centers for Medicare and Medicaid Innovation Award

Michigan's Dental Registry development was funded by a Round Two Health Care Innovation Award from the Centers for Medicare and Medicaid Innovation (approximately $2.1M over FY15-16).

National Center for Health Statistics

The National Center for Health Statistics is providing $205,719 for improving the timeliness and the quality of mortality medical information included in Michigan's Electronic Death Registry System (EDRS).

Michigan Health Endowment Fund

On November 6, 2017, the Michigan Department of Health and Human Services received a $500,000 grant from the Michigan Health Endowment Fund (MHEF) to support the development of Customer Relationship Management Tools for Coordinating Care Coordinators through Activity 3 of the Health Information Exchange IAPD. Michigan intends to use these funds as its 10% match for that Activity.

Half of these funds were available as a $250,000 payment available as of December 15, 2017. The other half was made available as of January 2019, and all grant funding was set to expire September 30, 2019. Due to delays in IAPD approval and the subsequent reformulation of the project schedule (Third quarter of FY19 through Second quarter of FY21), Michigan sought and obtained a MHEF no-cost extension to obtain sufficient matching funds to complete the CRM Tools for Coordinating Care Coordinators Activity before the end of Fiscal Year 2021. As of Winter 2020, the no-cost extension is through 9-30-2020 (End FY2020). This funding is used as the match to Activity 3 in the HIE IAPD for Fiscal Years 2019 through 2021; any wrap-up FY21 funding requests would require a further MHEF no-cost extension beyond the end of FY20.

Section B: Michigan's "To-Be" HIT Landscape
Criterion 1: HIT/E Goals for the Next 5 Years
MDHHS: New Opportunities for Service

The State of Michigan has made significant enhancements to its HIT/E landscape. This investment has established a new IT framework that can be leveraged and reused for projects in the future. This framework provides a standards-based approach that promotes and facilitates technology standardization and reuse, interoperability, data sharing, and overall efficiency and effectiveness. It further aligns MDHHS to the Medicaid Information Technology Architecture (MITA) standard for maturity of business, architecture, and data for Medicaid systems. As new Federal and State regulations, program initiatives, and system upgrade opportunities present themselves, the tools, technologies, and processes described in Section A: Michigan's " As-Is" HIT Landscape are in place and available to support future IT work.

Coordination in an Increasingly Integrated IT Landscape

As system maturity improves and more systems are leveraged to create a holistic healthcare system that encompasses and moves beyond the Promoting Interoperability Program and even Medicaid, it will be important for the State of Michigan to be clear with Federal partners about which systems are funded specifically for Medicaid use. Therefore Michigan includes cross-references in all its APD submissions.

These parenthetical notations clearly describe the locations and limits of funding that may impact multiple systems in multiple areas. This way, as Michigan's various automated systems become increasingly intertwined, it will be easier for the State and its partners to avoid funding the same work in two separate APDs or leaving important work unfunded.

MDHHS's IT Executive Governance Team was constituted in its current form in 2020. It oversees this careful coordination of systems development and integration, supported by the Enterprise Project Management Office within the Michigan Department of Technology, Management, and Budget, a separate Michigan Cabinet-level department. The Strategic Integration Administration (SIA), originally established in 2015 as the Business Integration Center, continues to support MDHHS IT Executive Governance. It coordinates with the EPMO, MSA, and MDHHS' Financial Operations Administration to ensure that its development efforts align with other departmental initiatives, thereby reducing the potential for inefficiencies resulting from duplicative or incompatible systems development across program areas. For this reason, the SIA now appears in a reduced capacity within the governance section of multiple State of Michigan APDs. To the extent that elements of the primary HIT/E governance structure described in As-Is Criteria 6 and 7 as well as To- Be Criterion 4 are within MDHHS proper, they fall within the purview of MDHHS IT Executive Governance.

State Innovation Model (SIM) and HIE

In 2015, the Centers for Medicare and Medicaid Services (CMS) awarded Michigan $70 million over four years to test and implement an innovative model for delivering and paying for healthcare in the state. The award, made through the CMS State Innovation Model (SIM) initiative, was based on a plan submitted by the State in 2014 called "Reinventing Michigan's Health Care System: Blueprint for Health Innovation," a plan that guides the state as it pursues better coordination of care, lower costs and improved health outcomes.

The SIM initiative completed its final year of operations in January 2020. The information gathering components of The Michigan Blueprint for Health Innovation have been able to rely almost entirely on existing Medicaid HIT/E infrastructure. All five Community Health Innovation Regions (CHIRs) established during SIM continue to be fully operational and serving vulnerable residents in their region. MDHHS is working closely with MiHIN to ensure CHIRs align with national standards on SDOH data as they are established. CHIRs continue to use SDOH data to inform change efforts aimed at improving health equity and community conditions.

APD Goals Impacting HIE

The HIE APD work was concluded as of 9/30/2021, and provided some key infrastructure components around MIGateway, electronic consent management and care coordination, especially as it relates to members of a care team that do not reside is a traditional care setting and do not have an NPI number. While this infrastructure is in production, the provider adoption is very minimal at this point. We will be working hard to increase provider adoption onto these use cases.

Specific HIT/E Targets

At program year end, we paid 7,859 unique professionals under the Medicaid PI program, of which 1,308 completed all 6 years of participation. While we are done issuing incentive payments, our focus will now switch to improving on use case onboarding with MiHIN as well as putting MDHHS in a better position to transfer to a model of being more outcomes based for purposes of maintaining our CMS certified Medicaid Enterprise. This will include collecting and reporting on project specific measurements and outcomes.

Criterion 2: SMA IT System Infrastructure in 5 Years

Due to the increasingly integrated nature of beneficiary service delivery in the State of Michigan, it is important to describe the planned future state of both HIT and MMIS systems to fulfill this criterion. MDHHS continues to develop all systems that are funded in the HIE, HIT, and MMIS-CHAMPS Enhancements IAPDUs toward a state of increased MITA maturity and increased utility in service of the strategic objectives described in To-Be Criterion 1 above. Major SMA IT infrastructure components related to the Promoting Interoperability Program that will undergo significant development over the next 5 years include the following:

- Statewide Active Care Relationship Service (ACRS)
- Intelligent Query Broker (IQB)
- Medical Information Digital Gateway (MIDIGate)
- Electronic Consent Management Service (eCMS)
- Statewide Directory and Customer Relationship Management (CRM) Tools for Coordinating Care Coordinators (CCC)
- Knowledge Grid (K-GRID) Architecture
- eMIPP System and Health System Testing Repository (HSTR)
- Medicaid Clinical Quality Measurement Recovery and Repository (CQMRR) Service
- Master Person Index
- Trusted Data Sources (TDS)
- MDHHS Data Warehouse Integrations
- MILogin
- Enterprise Service Bus (ESB)

- Admit-Discharge-Transfer Service
- State Government Health Systems
- Michigan Automated Prescription System (MAPS)

The planned future states for all of these systems are described here. Funding for these projects have appeared in various HIT, HIE, DSS and MMIS IAPD's over the years.

Active Care Relationship Service (ACRS)

HIE IAPDU Activity 1

To advance the Active Care Relationship Service, MiHIN will continue its efforts to provide an expanded ACRS data model, called ARCS 2.0, to support multiple types of Active Care Relationship (ACR) attributes and linkages; standardize on how ACR information is collected and used to enrich use cases to create an environment for patient situational awareness using multiple interconnected Fast Healthcare Interoperability Resources (FHIR) servers for advanced ACRS linkages including but not limited to health plans, providers, physician organizations, health systems, community-based services, pharmacists, government programs, and care coordinators, and advanced ACRS attributes including but not limited to high utilizer, communicable disease exposure, chronic disease, risk scores, level of engagement, social determinant risks, and substance use.

ACRS 2.0 as a service will also be expanded to serve as the record locator service for the Intelligent Query Broker (IQB). The IQB will serve as the statewide infrastructure necessary for Medicaid providers to query and retrieve information for their patients no matter where it exists in the HIE ecosystem. MiHIN will utilize the Active Care Relationship information in ACRS to intelligently direct the queries for a patient to the organizations of care team members that have an established relationship with a patient. This could also include any local, state, or national system.

ACRS 2.0 will also be leveraged for Coordinating the Care Coordinators, Population Health, and Health Equity Activities. (See the section of that same name in this Criterion)

Intelligent Query Broker (IQB)

HIE IAPDU Activity 1

The IQB will serve as the statewide infrastructure necessary for Medicaid providers to query and retrieve information for their patients no matter where it exists in the HIE ecosystem. MiHIN will utilize the Active Care Relationship information in ACRS to intelligently direct the queries for a patient to the endpoints for entities that have an established relationship with a patient. This could also include any local, state, or national system.

Medical Direct Information Gateway (MIDIGATE) Version 2 (v2)

HIE IAPDU Activity 1

Many doctors' offices continue using fax machines as part of their daily work for referring patients to other doctors, submitting claims for payment, and coordinating care with other providers. Using facsimiles is often an inefficient, ineffective, and insecure means to exchange health information, and information exchanged by fax is not in useful digital form but is essentially the equivalent of paper.

Although many providers have adopted Electronic Health Records (EHR) to digitize health information,

lack of interoperability among different EHRs still impedes effective exchange of electronic health information.

By building on and increasing integration of existing infrastructure such as the Active Care Relationship Service® (ACRS), Health Directory (HD), Admission, Discharge, Transfer (ADT) Notification Service, and Discharge Medication Reconciliation (MedRec) Service, MIDIGATE v2 would operate as a usable front-end that offers a single point of entry for practices, managing organizations, and other care coordination organizations to access a host of shared services available in the State of Michigan.

This would include the ability to: View and manage shared information for patients with whom they have an active care relationship, including members of the patient's care team and treatment information in the form of transitions of care messages (Admit, Discharge, Transfer (ADT) notifications and Discharge Medication Reconciliation messages); Access to the referral module of the Health Provider Directory; Submit quality measure information; and view quality measure dashboards.

By offering affordable and easy to use views to manage their information, MIDIGATE v2 would allow providers and managing organizations a single, consistent, and interoperable solution that is intuitive to use to coordinate the care of their patients. In addition, the front-end established by MIDIGATE v2 would allow providers and managing organizations to access the data from the original source using APIs to integrate these features into their existing processes and embed these shared services directly into their day-to-day workflows. This would also allow for sources to be added or changed without requiring major changes to MIDIGATE v2.

Statewide Electronic Consent Management System
HIE IAPDU Activity 2
The legacy consent framework of a beneficiary opting in or opting out has proven to be a naïve view of the complexities related to data sharing and does not scale to meet health care reform needs inclusive of full care coordination. Meaningful consent ensures an informed decision made by a beneficiary that is properly recorded and maintained. Patient consent may be represented via a "consent directive" that expresses a member's decision regarding how personal health information is accessed and shared in a traditional paper and electronic setting.

In order to advance statewide health information exchange as envisioned under Promoting Interoperability (formerly Meaningful Use) electronic consent management is necessary to enable healthcare providers to utilize technology to comply with existing laws regarding sharing sensitive information, and the empowerment of beneficiaries to decide how the information is accessed and shared. Sensitive information includes but is not limited to: domestic violence, genetics, mental health, reproductive health, substance abuse, minors, advance directives, and sexually transmitted infections.

A statewide electronic consent management service will allow individuals to electronically consent to share data that is relative to treatment and payment, while remaining compliant with HIPAA standards and other regulations that concern restrictive special scenarios such as behavioral health, substance abuse, HIV, minors, etc. The Section 1115 Waiver Substance Use Disorder HIT Plan (see To-Be Criterion

3) specifically calls for an e-consent management system for data sharing as one of its milestones. The implementation will also leverage MiHIN Core Infrastructure (ACRS, MIDIGATE) mentioned in the previous sections and the Sequoia Project or FHIR for sharing care summaries or querying across care settings. The statewide electronic consent management service (eCMS) will exist as a hybrid federated repository system capable of storing original consent data and protocols. It will also enable retrieval of existing distributed consent information from other trusted consent systems. These protocols will include an ability to dynamically request a new consent for a beneficiary, as well as retrieve existing consent data. This initiative will honor patient privacy while maintaining practitioner support, in order to better prepare in terms of patient accommodation during the care transition process.

A critical aspect of broad redistribution of care coordination information allowed under HIPAA is the ability to obtain audit trails of locations that information has been disclosed, as well as the retrieval of information regarding what organizations have been given access to protected health information (PHI). In addition to the service, a Universal Audit Repository (UAR) will be developed to produce audit trails regarding information access and disclosure of PHI at the organization and individual level. A repository of IHE-ATNA compliant audit events will be designed for capturing relevant disclosures across health plans, health networks, the State of Michigan and physician practices. The UAR will log all access and access attempts to PHI and consent directives. (This UAR is not to be confused with the audit function defined in FY19-FY20 MMIS-CHAMPS Enhancements IAPDU Activity 9, "Data Hub Infrastructure.") Consistent with the MiHIN model, the eCMS activity will encompass the full development of one or more statewide Use Cases (Summary, Legal Agreement, & Implementation Guide), along with the associated technology infrastructure to enable the service.

The eCMS will also be leveraged for Coordinating the Care Coordinators (see next section) and Specially Protected Information (SPI) ADT use case. The eCMS and SPI ADT Use Case is currently being piloted with three Prepaid Inpatient Health Plans (PHIPs) and Community Mental Health (CMH) providers.

Coordinating the Care Coordinators
HIE IAPDU Activity 3
Due to the complexity of coordination of care activities, transition of care can be difficult, and the quality of care that a patient receives can be impacted. Therefore, the MDHHS has initiated a plan via MiHIN to streamline the care coordination process through the implementation of a care coordination directory with the objective of improving health outcomes and increasing the effectiveness of care coordination. The use case is complete and in production. MDHHS and MiHIN continue to work toward a plan on how to progress and onboard more care coordinators to this use case in the future.

The quantity and types of individuals working with patients continue to grow: ranging from nurses embedded in patient-centered medical homes; to discharge planners; to chronic disease programs; and now more recently, community-based success coaches. This is especially true as payment models are updated, social services integrate programs with Medicaid, and penalties for readmissions reinforce the desire to better coordinate care. Beneficiaries now receive calls from multiple, uncoordinated groups of individual care coordinators each asking for information and making requests that often lead to beneficiary confusion and frustration.

This mechanism has been planned, developed, and implemented to formally enable care coordinator registration and population of a directory where this information can be electronically maintained and

shared among other healthcare providers engaged in care coordination. This includes the creation of a formal Use Case for electronically accessing this information and determination of electronic service information. Another major element included working with the Medicaid care coordinator community to establish defined roles and agreed-upon types of care coordinators to include in a directory. This allows each care coordinator to quickly recognize the forms of other coordinators working with a patient, and how to contact the coordinators manually or electronically via automated data sharing.

After the individual care coordinator has been registered and types or roles identified, MiHIN then works with the Medicaid community to include development of standardized rules of engagement for beneficiary interaction. These rules of engagement automate mechanisms to support agreed-upon standard practices for each care coordinator to electronically update their latest interaction with the beneficiary, and where possible, ensure that duplicate work does not occur, and unnecessary burdens on providers are removed.

The Michigan Section 1115 Waiver Substance Use Disorder (SUD) HIT Plan calls for the development of "a SUD residential bed registry in the context of the State's broader integrated crisis and access system" as well as a "Customer Relationship Management database for State, provider and designated contractors to facilitate and track access to needed treatment" by October 2021.[7] The CRM tools being developed here would supply the infrastructure that can be leveraged for these specific Substance Use Disorder use cases.

Knowledge Grid (K-GRID) Architecture (Alert and Notification System for Direct Secure Communications)
HIE IAPDU Activity 4
This project with the University of Michigan Medical School Department of Learning Health Sciences (U-M LHS) involves the design and development of an enhanced alert and notification solution that incorporates advanced analytics and Direct Secure communications among Eligible Providers seeking to more effectively achieve Meaningful Use (Promoting Interoperability). Unfortunately, because of COVID-19, it was determined that it would be in the best interest to indefinitely stop this activity until things stabilize and the department is able to reprioritize this activity.

eMIPP System and Health System Testing Repository (HSTR)
MMIS-CHAMPS Enhancements IAPDU Activity 2
eMIPP is an EHR Medicaid Incentive Payment Program product used in Michigan. This is the module of the MMIS, CHAMPS, used for Medicaid Promoting Interoperability Program registration and verification and Meaningful Use reporting and tracking. The Health System Testing Repository (HSTR), is closely integrated with eMIPP. The HSTR is used to track transaction testing with public health systems to assure providers and entities have appropriately tested transactions before being approved for production. This enables the Medicaid Promoting Interoperability Program to verify eligible professional and eligible hospital progress in meeting public health reporting requirements for Meaningful Use.

---

[7] Michigan SUD Health Information Technology Plan, Michigan Department of Health and Human Services, June 18, 2019.

Over the next 5 years, MDHHS intends to follow CMS guidance and payment reform activities in the state and will try to leverage the investments in the Medicaid Promoting Interoperability Program to the extent possible. HSTR will still remain functional for purposes of auditing, OID generation by providers and to continue to support public health onboarding and the MIPS program.

Medicaid Clinical Quality Measurement Recovery and Repository (CQMRR) Service
MMIS-CHAMPS Enhancements IAPDU Activity 3
This Clinical Quality Measurement Recovery and Repository (CQMRR) Service receives, quality-checks and validates, organizes, and restructures inbound Quality Reporting Data Architecture (QRDA)-formatted data files (electronic Clinical Quality Measures, or eCQMs) submitted by Medicaid providers. The CQMRR supports payment reform (e.g., accountable care), data-driven quality improvement, delivery system transformation, and other CMS initiatives.

Over the next 5 years, MDHHS intends to use this service to ensure that Medicaid providers encounter minimum burdens as they adopt and implement their various electronic quality measurement reporting requirements. This includes enabling Medicaid health plans to fully embrace an infrastructure that leverages electronic clinical quality measures and the automated resolution of gaps in care using the recognized quality and transport standards to allow providers to report their measures just once.

As of 9/30/21, the service is idle awaiting further decision making on how this strategically fits into the future of electronically collecting clinical quality measure.

myHealthButton/myHealthPortal (Integration with MI Bridges Portal)
MMIS-CHAMPS Enhancements IAPDU Activity 30
MDHHS is engaged in a multi-year Integrated Service Delivery (ISD) initiative designed to foster person-centered, holistic relationships with Michigan citizens that efficiently provide targeted programs and services to empower customers in reaching their self-sufficiency goals. MDHHS planned to design and develop the integration of the MDHHS Single Sign-On (SSO) capabilities of the MI Bridges Portal whose development work is separately funded in E&E IAPDU Activity 13 (formerly in ISD IAPDU Act. 1 during the major ISD-related development/enhancement) to transparently link a beneficiary to the Medicaid Consumer Engagement solution, myHealthPortal, without requiring separate authentication. The development work necessary on the myHealthPortal was included in MMIS- CHAMPS Enhancements IAPDU Activity 30. However, as of Spring 2019, this work was delayed due to budgetary constraints in Michigan and has now been de-prioritized until further notice. MDHHS expects budgets to improve in the latter half of FY 22 and into FY 23 and will resume this work when possible. MDHHS expects to submit an MMIS As-Needed update to accommodate this work.

myHealthButton/myHealthPortal (Addition of Transportation Social Determinants of Health Data)
MMIS-CHAMPS Enhancements IAPDU Activity 31 (NEW)
During conducting statewide education and outreach around the myHealthButton and myHealthPortal, a reoccurring suggestion that would keep coming up from users was the need for a technology solution to assist Medicaid beneficiaries in becoming more educated about and better connected to their available health related transportation resources.

To increase access to transportation services for Medicaid beneficiaries, MDHHS has submitted a grant application to the Michigan Health Endowment Fund (MHEF) to support enhancements in the myHealthButton and myHealthPortal that will help reduce confusion and burden for beneficiaries and facilitate more equitable access to needed transportation services. MDHHS would leverage this funding via Activity 31 to properly plan, design and develop the technology solution, as well as to properly educate users (Medicaid Beneficiaries) on the new functionality. This functionality is planned to go-live in September of 2022.

MI Bridges (formerly Integrated Service Delivery (ISD)) Portal

Eligibility and Enrollment IAPDU Activity 13

The Integrated Service Delivery (ISD) Portal, also called MI Bridges, will allow Michiganders to receive a diverse set of supports, services, and benefits together in a unified customer experience. This means that Michiganders using the Integrated Service Delivery Portal have a holistic view of themselves across the Medicaid programs they are participating in and can access Medicaid based electronic self-service functionality in one consolidated place. Work to integrate the myHealthPortal, which is more specifically tailored to Medicaid Beneficiary Consumer Engagement with the Integrated Service Delivery Portal is a longer-term plan for MDHHS. However, as of Spring 2019, this work was delayed due to budgetary constraints in Michigan and has now been de-prioritized until further notice. MDHHS expects budgets to improve in the latter half of FY 22 and into FY 23 and will resume this work when possible. MDHHS expects to submit an MMIS As-Needed update to accommodate this work.

Master Person Index

Decision Support System (DSS) IAPDU Activity 13

Like the death notice described in As-Is Criterion 11, an address change service, along with other key demographic changes, is also planned. New data sources and users will also be added to the Master Person Index; each additional data source improves linking and matching for Medicaid and contributes to providing a centralized, integrated 360-degree view of an individual. The MDHHS long-term vision is to grow the MPI to include additional data sources outside of the scope of Medicaid operations to further support MDHHS and State of Michigan citizen-centric service goals and initiatives. As this expansion happens, cost allocation will be applied. Additional enhancements to the Master Index Data Stewardship Portal (MIDSP) are also planned as new requirements are identified. The Michigan Section 1115 Waiver SUD HIT Plan also expects that the Master Person Index will be leveraged along with CareConnect360 for substance use disorder risk stratification via synchronization with homelessness, chronic condition, PDMP, and other risk-scoring data.

MDHHS Data Warehouse Integrations

Decision Support System IAPDU Activity 13

Related to the interface work described in the above section, the MPI will link two formerly separate data warehouses that are maintained by the department for different benefit programs. These two Data Warehouses were initially developed when MDHHS was separated into two agencies, Michigan Department of Community Health (MDCH) and Michigan Department of Human Services (MDHS). Currently, these Data Warehouses remain separate; however, data will not be duplicated in both warehouses.

The role of the MPI in this transition is depicted in the illustration below:

Enterprise Service Bus (ESB)

MMIS-CHAMPS Enhancements IAPDU Activity 9, Eligibility and Enrollment IAPDU Activity 1

The MDHHS Data Hub Enterprise Service Bus (ESB) has grown leaps and bounds from its early use to support a handful of meaningful use/promoting interoperability-related use cases. In addition to continue supporting the early use cases, a dozen new use cases have been added. These new use cases support Medicaid operations with real-time messaging from the health care community to State systems and message traffic between State systems. The ESB will continue to add new use cases and features as interoperability spreads across the Medicaid enterprise and the health care community. The ESB's real-time messaging capabilities (see As-Is Criterion 11) are foundational to many of the planed future use cases. The complementary MDHHS SOM Hub Eligibility ESB, funded by E&E IAPDU Act. 1, will continue to enable new functionalities to allow for changes in eligibility policy.

Clinical Data Repository (CDR)

Formerly MMIS-CHAMPS Enhancements IAPDU Activity 9
The CDR as described in some prior SMHPs is no longer being pursued by MDHHS (no development work having been done beyond some planning) due to a rethinking of data management approach.

Admit-Discharge-Transfer Service

MMIS-CHAMPS Enhancements IAPDU Activity 10; MMIS OAPDU

Knowledge of when a Medicaid beneficiary is undergoing care is critical for coordination of follow-up care and for managing costs. The Admit-Discharge-Transfer (ADT) Service will leverage the fact that hospitals and many health care professional offices already produce HL7 ADT messages for important transitions of care: admits, discharges, and transfers. The ADT message will be combined with other sources of episodes-of-care data. The ADT project will build the required infrastructure to receive episodes-of-care data and store them in an intelligent repository to assist in coordinating care.

MDHHS receives these ADT messages via MiHIN on a subscription fee basis that is proportionately allocated based on volume in the MMIS OAPD.

The Behavioral Health Specially Protected Information Admission Discharge Transfer (ADT) Notifications use case allows behavioral health providers to participate in the statewide exchange of health information via ADT Notifications, and simultaneously gives health providers the capability to see available beds at behavioral health facilities statewide.

This use case is being implemented at the same time as the Electronic Consent Management System (eCMS) use case. Once a Medicaid beneficiary consent to share specially protected information is received, then the eCMS infrastructure will send the SPI tagged ADT to the appropriate providers on the consent form. This work is currently being piloted with three PIHPs/CMHs in Michigan. Plans to expand after the pilot to more PHIPs/CMHs are targeted to begin late FY2022.

State Government Health Systems

MMIS-CHAMPS Enhancements IAPDU Activity 10

Michigan maintains several public health reporting and surveillance systems, which include the following:

- Michigan Care Improvement Registry (MCIR) (immunizations)
- Michigan Disease Surveillance System (MDSS)
- Michigan Syndromic Surveillance System (MSSS)
- Bureau of Labs (BoL): Newborn Screening (including Early Hearing Detection and Intervention – EHDI; Clinical Congenital Heart Defect – CCHD (deemed to be in operations); Blood Spot) and StarLIMS (Laboratory Information Management System)
- Cancer Registry (interface enhancements completed)
- Birth Defects (formerly Chronic Disease Registry)
- Vital Records (birth and death)
- Blood Lead Results Database
- Department of Corrections Electronic Health Records
- Interoperability with Michigan Breast and Cervical Cancer Control Information Systems
- Behavioral Health/Substance use Disorder Statewide ADT messages
- External Health Information Exchange Development via MiHIN
- Integrated Care Bridge Record (Care Plan)

(Some specific use cases like Medication Reconciliation information, State Psychiatric Hospital EHRs, Newborn Admission Notification Information – NANI, and sending Admit-Discharge-

Transfer data to CHAMPS have been removed due to state budgetary constraints.)

The specific tasks of each system vary, but all state government health systems serve the following goals:

- Improving beneficiary health
- Improving public health
- Enhancing Healthcare Effectiveness Data and Information Set (HEDIS) reporting
- Population research and analysis
- Analysis of program effectiveness
- Prevention of fraud, waste and abuse
- Promotion of interoperability
- Enhancement of Maternal Infant Health Program (MIHP) risk assessment
- Support of Meaningful Use under the Medicaid Promoting Interoperability Program (specifically with regard to public health reporting)

Over the next 5 years, the interfaces that support these systems will be enhanced to promote greater interoperability through defined Use Cases shared among Michigan stakeholders. This will improve Medicaid beneficiary care coordination and enable Medicaid hospitals and providers to achieve higher levels of Meaningful Use and alignment with the ONC roadmap. The scope of this interface work may be greatly reduced in the short term due to lingering budget impacts compounded by COVID-19 response.

Michigan Automated Prescription System (MAPS)
MDHHS will not be pursuing Medicaid SUPPORT Act funding related to onboarding providers to MAPS, Michigan's prescription drug monitoring program (PDMP). Section 333.7333a of the Michigan Public Health Code (Public Act 368 of 1978) empowers the Michigan Department of Licensing and Regulatory Affairs (LARA), a separate state department, to manage and maintain the state PDMP. LARA is using a separate source of funding to further develop and onboard providers to the PDMP. However, please see "Coordinating the Care Coordinators," and "Master Person Index" above in To-Be Criterion 2, as well as To-Be Criterion 3 for more on items related to Michigan's Section 1115 Waiver SUD HIT Plan. MAPS is also a Specialized Registry for Promoting Interoperability as of Program Year 2018.

Develop Population Health Platform
Population health is often defined as the health outcomes of a group of individuals, including the distribution of those outcomes within the group. Those outcomes are driven by multiple factors, including health behaviors, clinical care, behavioral health, and social determinants. There are multiple stakeholders that serve and impact the Medicaid population across the Stateof Michigan that have a vested interest in improving population health outcomes within the communities they serve, including health systems, community organizations, health plans, and business leaders. The focus areas within Activity 33 will establish a statewide population health platform that can easily be integrated with CHAMPS so they can easily share data between localhealth departments and other community organizations that provide both clinical and social treatment to reduce racial inequities and health disparities across Medicaid populations. A significant opportunity for these stakeholders to both share and gain access to the data flowing through the statewide HIN to support their

efforts to collaborate, improve health outcomes, and reduce health disparities for Medicaid beneficiaries. The Population Health Platform Activity will enable a more robust population health monitoring solution to strengthen and enhance Medicaid services. Core to the development process will be gathering key insight from Medicaid stakeholder participants on the governance and standards for sharing data to ensure adherence to all regulations and data security best practices, and to support confidence that information sharing, storage, and use are appropriate.

The Population Health Platform will reuse components of the Active Care Relationship Service (ACRS)™ . This service will be a foundational element for this Activity, serving as the mechanism to capture population and social determinants of health attributes, routing key information to identify a patient's care team and effectively routing the relevant information accordingly. Additional care team members, including community-based organizations, will be added to the health directory, enabling a broader group of stakeholders to both contribute and access information that can lead to better outcomes for the population served. Data flow to the HIN will allow for standardization of social determinants of health data capture, sharing, and accessibility via a longitudinal social care record that is integrated with clinical longitudinal health record. The platform will serve the dual purpose of reducing inequities or health disparities and improving health outcomes for the Medicaid and safety net population.

Complementary, non-duplicative work on Develop Population Health Platform is to be funded through Activity 3 "Identify and Load Additional Data Sets on the Data Warehouse" and Activity 5 "Develop Web Applications to Support Medicaid Programs and Processes" of the FY21-FY22 Decision Support Systems IAPD-As Needed Update.

Enhance Data Management for Medicaid Health Information Exchange

Access to appropriate, timely, and actionable data is key to the overall effectiveness of information exchange between Medicaid Health Plans and Medicaid Providers. A key goal of this activity is to align the data available to support beneficiary and provider inquiries and services, operations of claims control and computer capabilities, and management reporting for planning and control transaction specifications to improve Medicaid program management through the health information exchange. This series of projects aims at leveraging the next generation of interoperable infrastructure to capture, store, align, and present data that can be utilized and adopted by a wide variety of applications and services via APIs and modular components to support this functionality for the Medicaid program providers and payors.

These projects will be focused on enhancing the existing statewide infrastructure to expand the usefulness and availability of the clinical data being routed through the statewide network to enhance Medicaid providers' and payers' eligibility and enrollment determination, support the delivery of supplemental clinical quality data to the State of Michigan Medicaid Agency, and to ensure timely and appropriate access to data by providers that may be useful in identifying and closing gaps.

This will include consolidating data into next generation cloud services and data lakes and/or data warehouses, developing and implementing the APIs and rules engines necessary to surface information to

the appropriate Medicaid participants at the appropriate times, and building the framework to support reporting and analytics efforts at the Medicaid participant level, Medicaid population level, and overall Medicaid state level to meet current and future CMS reporting requirements.

A critical aspect of broad redistribution of care coordination information for Medicaid participants and dual-eligible participants allowed under HIPAA is the ability to obtain audit trails of locations where that information has been disclosed. Moreover, it requires the retrieval of information regarding which organizations have been given access to protected health information (PHI). In addition to the Population Health service, a Universal Audit Repository (UAR) will be developed to produce audit trails regarding information access and disclosure of PHI at the organization and individual level. A repository of IHE-ATNA[8] compliant audit events will be designed for capturing relevant disclosures across health plans, health networks, the State of Michigan, and physician practices. The UAR will log all access and access attempts to PHI and consent directives **(This UAR is not to be confused with the audit function defined in FY19-FY20 MMIS-CHAMPS Enhancements IAPDU Activity 9, "Data Hub Infrastructure.")**. The Population Health Use Case activity will encompass the full development of one or more statewide use cases (Summary, Legal Agreement, & Implementation Guide), along with the associated technology infrastructure to enable the service.

Complementary, non-duplicative work on Enhance Data Management for Medicaid Health Information Exchange is to be funded through Activity 3 "Identify and Load Additional Data Setson the Data Warehouse" and Activity 5 "Develop Web Applications to Support Medicaid Programs and Processes" of the FY21-FY22 Decision Support Systems IAPD-As Needed Update.

---

[8] Integrating the Healthcare Enterprise® Audit Trail and Node Authentication

Establishing Statewide Infrastructure
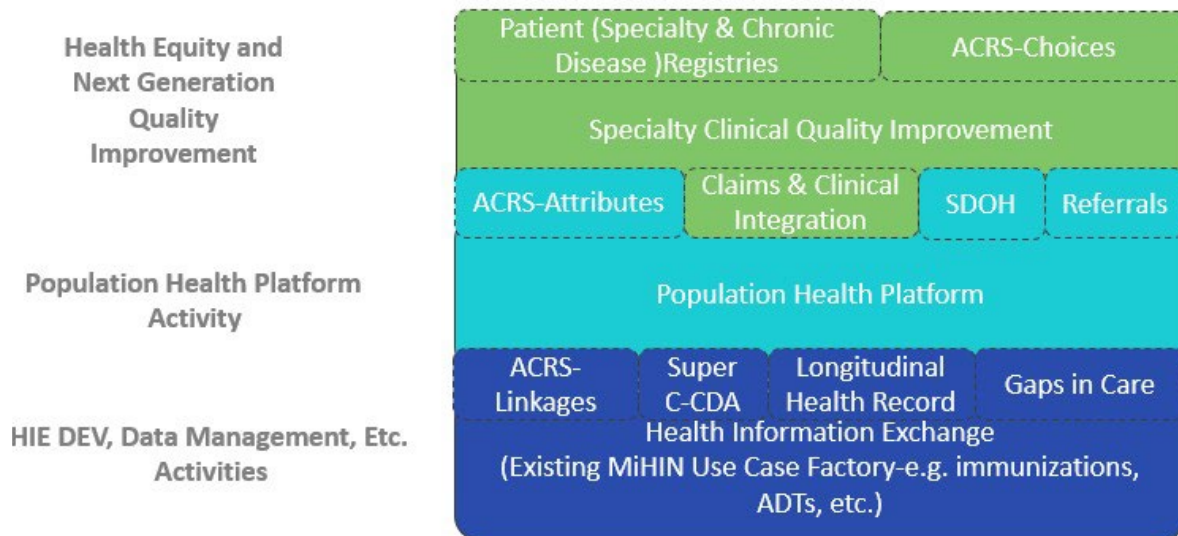
Criterion 3: How Medicaid Providers Will Interface with SMA IT in the Promoting Interoperability Program

Current Interface

Providers interface with the SMA IT system through the State Level Repository (SLR) in Michigan, called Electronic Medicaid Incentive Payment Program (eMIPP). eMIPP is a multi-state solution that can be integrated into any MMIS solution. Currently Illinois, Washington, Maryland and Utah utilize eMIPP for their state solution. eMIPP is fully integrated into the MMIS system (CHAMPS) in Michigan and leverages the Provider Enrollment and Financial subsystems of CHAMPS to administer the Medicaid Promoting Interoperability Program. Single Sign-On (SSO) technology is also leveraged for providers to access eMIPP.

Leveraging eMIPP Beyond the Incentive Program

Michigan will keep a close eye on any new federal legislation as well as Alternative Payment Models (APMs) that are being refined. The State is confident that it will be able to modify eMIPP in order to administer changes under these programs in the future. It is the intention of MDHHS to leverage the investments in the program, eMIPP and the Health System Testing Repository (HSTR) to support future payment reform activities around quality measurement collection and analytics.

Medicaid Providers Interfacing with the IT System

7,859 unique professionals have interfaced with eMIPP in order to attest for incentive payments under the Medicaid Promoting Interoperability Program. Of those unique professionals, over 2,300 have attested to meaningful use, of which most were required (did not meet the exclusion criteria) to

complete testing with a public health system.

Other Programs Interfacing with the SMA IT System

Behavioral Health is now interfacing with SMA IT through the statewide care management tool, CareConnect 360 (CC360). CareConnect 360 will improve care coordination by enabling the sharing of Medicaid beneficiaries' care summaries electronically by creating and implementing a standardized Clinical Document Architecture (CDA)-formatted Care Summary. These summaries include behavioral health data that are carefully managed, using stringent electronic consent standards. In particular, the second milestone of Michigan's Substance Use Disorder Health IT Plan (SUD HIT Plan) calls for CC360 to provide specific and appropriate "access to SUD claim/encounter information, including Admit-Discharge-Transfer (ADT) messaging." [9] Provider access to MIDIGATE v2 (See To-Be Criterion 2) via CareConnect 360 has been implemented.

Criterion 4: Future HIE Governance

Michigan's HIE Governance Structure Today

As described in the As-Is section, Michigan relies on the Michigan Health Information Network Shared Services (MiHIN) to operationalize HIT Commission policies including the statewide sharing of health information.

Michigan employs a public-private model, instead of complete state control, that streamlines and aligns public health and meaningful use reporting requirements into a consistent approach. MiHIN functions as a separate nonprofit organization and is the State Designated Entity tasked with the responsibility of exchanging health information statewide.

MiHIN's Board of Directors consists of leaders from each of the stakeholder classes that participate in the statewide network. Additionally, every entity that enters the full data sharing legal infrastructure becomes a "Qualified" data sharing organization and has the opportunity to participate in MiHIN's governance through the MiHIN Operations Advisory Committee (MOAC) and its ad hoc Task Forces and Meet Ups. Essentially the ad hoc Task Forces and Meet Ups make recommendations to the MOAC which then makes recommendations to the MiHIN Board, the HIT Commission, or both.

Regular meetings of all groups from general stakeholder calls to MOAC and ad hoc workgroups, to Board and HIT Commission meetings ensure that communication is facilitated both horizontally and vertically across the healthcare continuum in Michigan. In this way, all stakeholders in Michigan's health information sharing landscape have an opportunity not only to participate in the statewide network, but also to have a voice in the governance of the statewide HIE effort. In the past year, the stakeholders were invited to participate in the HIT Commission's 5-year roadmap effort, called Bridge to Better Health. Through these governance mechanisms within the statewide HIE, communication and feedback were supplied to the HIT Commission to help guide the future of HIE in Michigan.

---

[9] Michigan SUD Health Information Technology Plan, Michigan Department of Health and Human Services, June 18, 2019.

The Future of HIE Governance in Michigan

Consumers are an increasingly critical component as the state evolves numerous consumer- focused services such as the common key service, identity management, consent management and ultimately the ability to query for health information. The evolution of the Statewide Consumer Directory will support and parallel the growth of these services to reduce the cognitive burden on providers and consumers in accessing health information. Instead of consciously taking action to retrieve health information, the goal is to automate functionality so consumers can control and mediate paths for their health information.

To support this goal, a robust governance structure will be needed for consent, resolution of consent issues amongst providers, and a process for determining which consumer-focused organizations gain access to Michigan's HIE ecosystem. Additionally, payment models to compensate consumers for release of their medical information is an untapped area that will need to be considered. MDHHS has recognized the importance of needing a more formalized HIE governance structure in Michigan and has begun meeting internally to determine what that structure looks like going forward.

EHR vendors will need to continue to reach new levels of interoperability over the next five years. While the core components of the CMS Interoperability Final Rule have been implements in Michigan, there is still considerable need for more third-party applications to become onboarded as applications in Michigan.

 Therefore, the State will need to evolve governance structures with EHR vendors and the traditional medical community to determine how and when to share information with community services such as food banks, social services, etc. Additionally, big data analytics will happen outside the EHR vendors' purview, so governance will be needed to determine how to then accommodate big data into EHRs in a meaningful way at the point of care.

Criterion 5: Provider Adoption of EHR Technology over the Next Year

Encouraging Provider Adoption of Certified EHR Technology

The State of Michigan continued to contract the Michigan Center for Effective IT Adoption (M-CEITA) to provide Regional HIT Extension Center (REC) services to assist Medicaid providers towards achieving Meaningful Use up until the Medicaid PI program ended on 12/31/2021. Medicaid successfully contracted with M-CEITA since 2013 to offer technical assistance to providers. As 2016 was the final year for eligible professionals to sign up for the program, Medicaid worked hard to ensure that no provider that wanted to participate was left behind. M-CEITA reached all of their contractual milestones with the state of Michigan and played a large role in the success of the Medicaid PI program in Michigan because of their boots on the ground approach and leveraging their existing relationships from the complementary technical assistance work that they previously did on other programs. MDHHS hopes to leverage the M-CEITA model with any future technical assistance endeavors.

In addition, Medicaid will continue to collaborate with the Medicaid Health Plans servicing Michigan to

encourage adoption amongst their provider bases. Recent Health Plan contract language requires the Plans to assist Medicaid in its efforts and MDHHS will continue to leverage the contract in the future to support HIT/HIE efforts.

Outreach Strategies

Now that the Medicaid PI program has sunset, MDHHS will focus on completing the necessary auditing, reporting and any appeal handling. MDHHS will still maintain its MichiganHealthIT website, MU and Public health mailboxes and will continue to promote general HIT/HIE at various trade association meetings that happen across the state.   MDHHS certainly wants to keep any momentum going as a result of the Medicaid PI program.

Criterion 6: Plans to Leverage FQHCs for EHR Adoption

As described in As-Is Criterion 3, Michigan had an FQHC with HRSA HIT/EHR funding: The Michigan Primary Care Association (MPCA). The initiatives described in the As-Is section are expected to continue over the next three years. Specifically, goals of the MPCA are to increase the number of chronic disease patients that are monitored and managed, achieve Healthy People 2030 objectives for the patient population, increase data accuracies by eliminating manual entry of data, and increase efficiencies within Health Centers that maximize personnel, revenue, and time spent with patients.

Criterion 7: Future of Assisting Providers with Certified EHRs

Ongoing Assistance and Assessment

Michigan contracted with M-CEITA until 12/31/2021 with great success. M-CEITA was of great assistance in helping get providers to achievement of MU. There is no longer a need for M-CEITA services for purpose of the Medicaid PI program, however MDHHS would certainly look at their technical assistance model again should there be a future need for similar technical assistance.

Additional Planned Support

MDHHS plans to continue to update its HIT/E infrastructure in order to bridge gaps in Behavioral Health participation, LTC adoption, and greater HIE participation. By having a more robust ACRS infrastructure, more non-traditional types of providers at Skilled Nursing Facilities (SNFs) and nursing home/Long Term Care (LTC) facilities will be recognized as part of an individual's care team. These providers have valuable information to contribute and play a vital role in providing care. In addition to making the Active Care relationship (ACRS) infrastructure more robust, there will be a push in Michigan to make ACRS information more transparent to the beneficiary, giving them the ability to add, modify, or contest members of the care team (see As-Is Criterion 11). Currently, beneficiaries do not have access to a web interface that allows them to view all members of their care team. A planned interface along these lines will allow consumers to make any necessary corrections and updates directly.

There may be resistance to the system in its current state because of the lack of transparency with information sharing rules and a lack of trust that information is only going to members of the appropriate care team. These issues will be addressed over the next five years.

The statewide eConsent activity ensures that consent has properly been stored and is easily retrievable with the State, regardless of which consent repository is used. This, coupled with a robust ACRS system, will confidently ensure that sensitive Behavioral Health information is handled appropriately and delivered at the point of care when it is needed the most.

These two activities alone add a tremendous amount of value to the HIE environment and should have a significant impact on connecting more providers to HIEs in Michigan.

Criterion 8: Plans to Address Populations with Unique Needs

MDHHS has many systems planned or in place to ensure that populations with unique needs are appropriately addressed by the Promoting Interoperability program and beyond. Notable examples include Michigan's public health reporting systems, data warehouse functionality and aspects of Admit/Transfer/Discharge (ADT) usage. All these systems are under active development and will be expanded and improved significantly over the next 5 years.

Public Health Reporting Systems

Michigan's vast array of public health reporting systems (see MMIS-CHAMPS Enhancements IAPDU Activity 10) rely largely on EHR data collected from incentive program participants. Many of these systems have functionality that serves to support populations with unique needs.

High Risk Indicator for Influenza from MCIR

The Michigan Care Improvement Registry (MCIR) includes a high-risk indicator for influenza. The implementation of the MCIR high-risk indicator was put into operation for the 2006-07 influenza season. When accessing a MCIR record for a beneficiary with a high-risk condition, a notice will automatically remind the Medicaid provider to evaluate the beneficiary for influenza vaccination eligibility. If the beneficiary has already received the vaccine for the current influenza season, the message will not display. Through this data analysis, over 59,000 beneficiaries with one or more high-risk conditions have been identified. This is especially valuable for children and older adults, who are more vulnerable to overall health complications from influenza. Over the next five years, this process will incorporate other diagnoses, chronic conditions, or environmental exposures into the indicator. These factors impact the recommended vaccine forecast schedule. Messaging and query capabilities related to influenza will also improve; MCIR has implemented MCIR Query Version 2.5.1, which allowed eligible professionals and hospitals to attest to Stage 3 Promoting Interoperability query capabilities for health information exchange. As providers transition to this updated query capability over the next few years, MDHHS will also be working to incorporate the high-risk indicator notification as part of the query response. Already by the end of Calendar Year 2017, monthly volume of queries had risen above 1 million.

MCIR Data Exchange for Border and Migrant Populations

Over the next five years, MCIR will also begin to explore and implement state-to-state immunization data exchange with border states and states that retain immunization records for the migrant population that works in Michigan, and actively to receive immunization information for specialized

populations. As of FY2018, Michigan had executed data sharing agreements with seven states for state-to-state sharing of immunization records. Especially for Medicaid beneficiaries in border regions, or for migrant populations who may themselves be beneficiaries or come in close contact with Michiganders who are beneficiaries, having up-to-date immunization forecast information available for and from other states will help mitigate the chance of missed vaccinations. This is especially critical for disease prevention among children especially in schools and day care facilities.

Michigan is in the final stages of a project with the CDC that will more standardize interstate immunization exchange and make it so one to one state connections are not necessary. The project is connecting our MCIR system with the federal IZ Gateway via MiHIN. Once the project goes live, Michigan will evaluate the current data sharing agreements to see if they should be migrated over to being transmitted via the IZ Gateway.

Gap and Outcome Analysis from MSSS
The Michigan Syndromic Surveillance System (MSSS) is a real-time surveillance system that tracks the chief presenting complaints from emergent care settings, allowing public health officials and providers to rapidly detect unusual outbreaks of illness. With timely and complete submissions to MSSS, the identification of outbreaks will be prompt, and Medicaid providers will be notified when cases are identified in their practice areas or county. Over the next five years, development of use cases related to this system, including a quality assurance tool for HL7 Clinical Data Architecture messages flowing as part of these use cases, will allow for increasingly advanced follow-up analyses, including assessment of impacts across the Medicaid population, gaps in care, and outcomes. The gaps in care analysis will help ensure that vulnerable populations are not falling through the cracks.

Newborn Screening from BoL
The Bureau of Laboratories (BoL) analyze newborn screening lab results collected from hospitals. As part of the Promoting Interoperability Program, eligible hospitals are required to submit lab orders electronically and incorporate lab results into their EHRs. To help eligible hospitals meet their Promoting Interoperability requirements to incorporate electronic lab results into their EHRs, the BoL is developing messaging capabilities to receive the initial lab orders and deliver the results back to the hospitals via the MDHHS Data Hub, MiHIN, and finally the hospital's HIE. Newborns are a particularly vulnerable population, and this screening process is used for their protection. Tests that are logged electronically include Newborn Dried Blood Spot (NDBS) screening, Newborn Screening Early Hearing Detection and Intervention (EHDI) and Newborn Screening Critical Congenital Heart Disease (CCHD).
Although basic versions of these services are up and running now, active development continues to expand and improve these messages according to Promoting Interoperability program standards promulgated by the Office of the National Coordinator for Health IT.

Additionally, over the next 5 years, Newborn Admission Notification Information (NANI) messages will be incorporated to further support infant health in Michigan. Based on the "Integrating the Healthcare Enterprise" (IHE) profile of the same name, this uses ADT messages for a timely newborn admission notification to public health newborn screening programs. NANI messages will optimize and standardize the transfer of basic patient admission data on a newborn to a public health program, eliminating the time and cost of manual data entry. Automating the delivery of these basic data will reduce the errors currently producing a challenge to state programs providing services and evaluating quality of care

delivered. As of FY20, this particular project has been put on hold to be reviewed annually and potentially updated in future APDs.

<u>Blood Lead Results Reporting to Childhood Lead Poisoning Prevention Program</u>

As a requirement for Promoting Interoperability, Eligible Hospitals are required to transmit reportable labs to a disease registry. The MDHHS Data Hub and interfaces facilitate MU reporting and validation for incentive payments. The MDHHS Childhood Lead Poisoning Prevention Program (CLPPP) would like to leverage the Michigan Health Information Exchange environment to electronically receive blood lead test results via the Michigan Disease Surveillance System (MDSS) Electronic Reportable Labs HL7 message, which contains blood lead result information. These results messages would be consumed by the Michigan Childhood Lead Poisoning Surveillance (MICLPS) system for required annual reporting to the Michigan Legislature and notification of the local public health department regarding blood lead levels received that are 10 micrograms of lead per deciliter of blood or higher. This capability would benefit the monitoring of very vulnerable children who live in areas with high concentrations of environmental lead.

Data Warehouse Functionality

The MDHHS vision for the next 5 years continues to include the use of ad-hoc analytic, Online Analytical Processing (OLAP), and data mining tools (see Decision Support System IAPDU Activity 2). The OLAP and data mining tools are needed to examine data from multiple perspectives. This allows MDHHS to generate hypotheses to then test and answer complex questions by performing multi-dimensional analysis across data sets and programs; and to drill up and down through successive layers of detail to uncover trends, relationships, and patterns for improved decision making. This will help MDHHS understand the extent to which programs that serve populations with unique needs are being administered effectively. Symmetry software will be used as part of an effort to improve utilization of administrative data for the purposes of quality-of-care monitoring, program reporting, risk assessment and coordination of care for beneficiaries, such as Healthy Michigan Plan, Medicaid, Children's Special Health Care Services and MI Health Link. The State will be able to more efficiently calculate and report quality of care measure rates for a wider selection of chronic and episodic conditions, as well as preventive activities (e.g., screenings) using evidence-based specifications produced and updated annually by national quality organizations. Michigan is planning to load care plan data received electronically via the health information exchange architecture into the Data Warehouse for children in Michigan's foster care system (part of Decision Support System IAPDU Activity 3). This work, as well as adding foster care-related functionality to Michigan's CareConnect 360 care coordination tool (completed in FY18 as part of Decision Support System IAPDU Activity 5), will enable more effective treatment plans for foster care children, a vast proportion of which are Medicaid-eligible or Medicaid beneficiaries. In FY19 and FY20 as part of Decision Support System IAPDU Activities 3 and 7, data regarding Social Determinants of Health (SDOH) was added to the Data Warehouse to further enrich the analytical capabilities for populations dealing with health, transporation, housing, and other access obstacles.

ADT Usage

Admit/Transfer/Discharge (ADT) messages go hand in hand with the data warehouse functionality

described above. Within 5 years, MDHHS intends for electronic ADT message transmission and logging to be ubiquitous for Medicaid beneficiaries. This important patient tracking information will be the backbone for advanced data analytics that will be used to help ensure that each subgroup within the Medicaid population is receiving the quality of care they need. A particular focus will be ADTs focusing on Behavioral Health and Substance Use Disorder care coordination between State of Michigan Psychiatric Hospitals, Medicaid, Michigan's Medicaid behavioral health care plans, and the relevant Medicaid providers around the state. During FY2020, specific COVID-19 test results were added to ADT messages to help providers identify patients being treated for COVID-19. This facilitated reporting, analysis, and care coordination for COVID-19 patients, especially for Medicaid beneficiaries who tend to fall into population groups that are more vulnerable to the effects of the virus. MDHHS will also work with Emergency Medical Services (EMS) folks within the department to see how ADT messaging can be incorporated into their workflow.

Criterion 9: Future of Grants Impacting Promoting Interoperability Program

Newborn Screening Grant

As described in Section A, MDHHS is the recipient of a NewSTEPs 360 program grant, a collaboration between the Colorado School of Public Health (Colorado SPH) and the Association of Public Health Laboratories (APHL), supported by the Health Resources and Services Administration (HRSA). This grant sets an ambitious target to achieve timely reporting of results in 95% of newborns that receive dried-blood spot (DBS) newborn screening. This will boost the effectiveness of an important public health aspect of the Promoting Interoperability Program in Michigan. The granting organizations define "timely" based on three criteria[10]:

- Presumptive positive results for time-critical conditions should be communicated immediately to the child's healthcare provider but no later than the fifth day of life.
- All presumptive positive results for all other conditions should be communicated to the child's healthcare provider as soon as possible but no later than seven days of life.
- All NBS results should be reported within seven days of life.

State Innovation Model (SIM) Grant

As noted in To-Be Criterion 1, the SIM grant utilized systems related to the Promoting Interoperability Program. The output of SIM, Michigan's Blueprint for Health Innovation, guides the State as it pursues better coordination of care, lower costs, and improved health outcomes. Best practices and Lessons learned from this work will inform systems enhancements impacting the Promoting Interoperability Program in the future. The SIM Grant itself was brought to a close at the end of January 2020.

State Government Health Systems Grants

The remaining 11 grants described in As-Is Criterion 15 support the State Government Health Systems in a variety of ways. They will help ensure that the public health objectives of these systems are met and that the State Government Health Systems infrastructure goals described in To-Be Criterion 2 can be accomplished.

_____

[10] https://www.newsteps.org/newsteps-360

Michigan Health Endowment Fund

On November 6, 2017, the Michigan Department of Health and Human Services received a $500,000 grant from the Michigan Health Endowment Fund (MHEF) to support the development of Customer Relationship Management Tools for Coordinating Care Coordinators through Activity 3 of the Health Information Exchange IAPD. Michigan intends to use these funds as its 10% match for that Activity. Half of these funds were available as a $250,000 payment available as of December 15, 2017. The other half was made available as of January 2019, and all grant funding was set to expire September 30, 2019. Due to delays in IAPD approval and the subsequent reformulation of the project schedule (Third quarter of FY19 through Second quarter of FY21), Michigan sought and obtained a MHEF no-cost extension to obtain sufficient matching funds to complete the CRM Tools for Coordinating Care Coordinators Activity before the end of Fiscal Year 2021. As of Winter 2020, the no-cost extension is through 9-30-2020 (End FY2020). This funding is used as the match to Activity 3 in the HIE IAPD for Fiscal Years 2019 through 2021; any wrap-up FY21 funding requests would require a further MHEF no-cost extension beyond the end of FY20.

In the latest round of funding announced by the MHEF under their Community Health Impact grant program, one of the focus areas that they are looking to fund is Health Related Transportation Services. MDHHS was awarded $100,000 to make system enhancements to the myHealthButton and myHealthPortal to allow Medicaid beneficiaries the ability to electronically request non-emergency medical transportation. MDHHS was awarded a second round of funding of $59,000 to handle some additional scope items related to the original request. We have requested and have been awarded CMS 90/10 funding for this project as well via the MMIS-CHAMPS Enhancements IAPDU Activity 31 described in Section B, Criterion 2. This will be enough funding to properly plan, design and develop the technology solution as well as to properly educate users on the new functionality, all while utilizing no state general fund dollars. The projected go-live for this project is September 2022.

Criterion 10: Future State Legislation Needs for Promoting Interoperability Program

There are no State legislation needs at this time.

Criterion 11: Other Issues to Be Addressed Over Next 5 Years

EHR Certification Testing

The State of Michigan has identified value for ONC, CMS and The National Institute of Standards and Technology (NIST), along with their testing and certifying partners, to focus EHR certification testing on more real-world scenarios. Currently, many of the EHR vendors can only achieve truly interoperable messages under an ideal test environment and the products often fail to achieve truly interoperable messages once deployed in the real-world. It may be helpful to have the entire process from data entry to outbound messages completed live during the certification testing. For example, add a new patient to the EHR, collect demographic data, assign problems and allergies, receive lab results via HL7 (that is generated by the testing body and meets the certification requirements), add to the record administrated procedures and immunizations, and discharge the patient. The output of this scenario would be a complete CDA for the discharge/episode of care and an HL7 VXU message for the immunizations administered. The output could then be tested for completeness based on the various interoperable requirements for each output. Live data entry and real-time message/document

generation would better represent the real- world and result in a better test.

MDHHS Information Technology Budgets

In recent years, the allotted General Fund match for IT projects in MDHHS from the State of Michigan has come under pressure due to competing legislative and departmental priorities. Shortfalls of matching funds have meant mid-year re-prioritizations of IT projects across the department, including ones related to advancing Health IT and health information exchange. Michigan is attempting to address this by obtaining allowable matching funds from other sources such as the Michigan Health Endowment Fund, but there is still a persistent amount of risk that projects will be delayed or even halted due to a lack of available matching funds for projects funded through Advance Planning Documents. The budgets for FY 22 as well as FY 23 appear to be trending in a more positive direction. MDHHS will continue to apply the IT Governance process that will evaluate IT projects and approve them with respect to its financial support from the State, federal partners, and other funding sources.

Section C: Oversight of the Promoting Interoperability Program

Criterion 1: Process for Verifying that Providers Are Not Sanctioned, Are Properly Licensed/Qualified Providers

Michigan's eMIPP system is fully integrated with its MMIS, the CHAMPS Medicaid Provider Enrollment system. eMIPP integrates with the Provider Enrollment system to verify that all providers registering for the Promoting Interoperability Program have valid licenses and certificates. A provider without a valid license or certificate is notified at the point of program registration and is unable to register for the Promoting Interoperability Program until the issue has been resolved.

Criterion 2: Process for Verifying Whether EPs Are Hospital-Based

At the eligibility point of the registration process, providers that see patients in a hospital-based setting are asked to report their Total Inpatient and ER encounters and their Total Encounters at all locations. The system uses these numbers to calculate the provider's hospital-based percentage and displays that number on the Review tab that is used by staff to process registrations. Hospital-based percentages at 90% or above are displayed in red so Promoting Interoperability Program staff know the provider is not in compliance.

Criterion 3: Process for Verifying the Overall Content of Provider Attestations

Process for verifying the overall content of provider attestations

From an eligibility perspective, the eMIPP system calculates the encounter information submitted by the provider and displays it on the registration review tab for staff reviewing the registration. Any calculations that do not meet program requirements (for example, Medicaid threshold, FQHC predominance, Hospital-Based percentage) are displayed in red text to alert the staff of non-compliance. If a provider's eligibility numbers meet compliance, all percentages are displayed in green text.

Further, the Promoting Interoperability Program staff use the department's data warehouse system to pull Medicaid encounter information for the providers registering for the program. A provider's Medicaid encounters are pulled by using the provider's NPI and reported eligibility date range. EHR Program staff use the encounters pulled from the data warehouse to verify the Medicaid encounters submitted by the providers.

For the Meaningful Use portion of the provider attestations, the system displays green check marks next to compliant objectives/measures. For non-compliant objectives/measures, the system displays a red exclamation point to alert the staff of non-compliance. In addition, providers are instructed to upload their EHR Meaningful Use Reporting Dashboard into the eMIPP system at the time of attestation. This allows EHR Program staff to verify that the Meaningful Use information submitted on the registration matches the reports produced by the provider's Certified EHR Technology.

Criterion 4: How the SMA Will Communicate to its Providers Regarding their Eligibility, Payments, etc.

All program changes, updates, and important provider deadlines will continue to be posted to the MichiganHealthIT.org website and communicated to our provider email listserv by the Promoting Interoperability Program Outreach Coordinator. In addition, the Michigan EHR team works closely with their Regional Extension Center, M-CEITA, to communicate important information pertaining to the

program. M-CEITA provides helpful resources and hosts webinars for the provider community during times of change.

Criterion 5: Methodology to Calculate Patient Volume

EPs are required to enter their total and Medicaid encounters for the eligibility reporting period they selected. Patient volume is determined by dividing the Medicaid encounter number by the Total encounter number.

Criterion 6: Data Sources Used to Verify Patient Volume for EPs and Acute Care Hospitals

The eMIPP system requires EPs to upload their patient volume detail at the time of attestation. Promoting Interoperability Program staff review the uploaded patient volume and use the state Medicaid Data Warehouse system to verify that the Medicaid encounters reported by the provider match the Medicaid encounters submitted to the state.

Criterion 7: Process Used to Verify that EPs at FQHC/RHCs Meet the Practices Predominantly Requirement

The eMIPP system requires EPs that attest to practicing in an FQHC/RHC to report total and Medicaid encounters that took place in an FQHC/RHC, in addition to the total and Medicaid encounters rendered in all other settings. The system calculates the EP's predominance based by comparing the FQHC/RHC encounters to the encounters in all other settings. The predominance percentage is displayed on the system's Review tab for EHR staff review. If the percentage of encounters rendered in all other settings is higher than those in an FQHC/RHC, the system will display the predominance percentage on the Review tab in red to alert EHR staff of non-compliance. If the predominance is in compliance, the percentages will be displayed in green.

Criterion 8: Process to Verify AIU of CEHRT by Providers

The eMIPP system requires EPs to enter in their CEHRT number at the time of attestation. eMIPP interfaces with ONC CHPL to verify that the product number and edition the EP/EH is using to meet AIU matches a certified product and edition that corresponds with the program year CEHRT requirements.

Criterion 9: Process for Verifying Meaningful Use of Certified Electronic Health Record Technology for Providers' Second Participation Years

eMIPP will require providers to complete the MU requirements reflective of the stage of MU to which that provider is attesting. eMIPP verifies that providers meet MU objectives and required thresholds, and the system displays red check marks next to areas of non-compliance for the Promoting Interoperability Program staff to review. In addition to eMIPP validation, providers are required to upload a copy of their MU dashboard report generated by their EHR at the time of attestation.

Promoting Interoperability Program staff review the MU dashboard report to ensure MU compliance as needed.

Criterion 10: Process to Propose State Changes to the MU Rule Making

Process for SMA to propose state changes to the MU rule making

Michigan does not plan to propose any state changes to the MU rule making at this time.

Current tail period and determining if it should be extended

For the 2020 program year, Michigan utilized a 90-day tail period and have attestations due by 3/31/2021.

Program Year 2021 Registration and Attestation Timelines

The following chart depicts Michigan's Promoting Interoperability Program schedule and registration availability for Program Year 2021:

eMIPP Program Availability for 2021	MU Reporting Period	CQM Reporting Period	Start	End
Stage 3 Registrations - ALL Eligible Professionals (EPs)	Minimum of any continuous 90 days	Minimum of any continuous 90 days	4/2/2021	9/30/2021 at 11:59 PM

Criterion 11: Process to Verify Providers' Use of CEHRT

The eMIPP system requires providers to enter in their CEHRT number at the time of attestation. eMIPP interfaces with ONC CHPL to verify that the product number and edition the EP/EH is using to meet AIU/MU matches a certified product and edition that corresponds with the program year CEHRT requirements.

Beginning in 2015, providers attesting using the Michigan eMIPP system are required to upload their EHR MU Dashboard report for MU compliance. Promoting Interoperability Program staff can use that dashboard to verify that the information on the Certified EHR reports are the same as the provider's attestation.

In the case of a post-payment audit, providers are required to submit their CEHRT contract that states the CEHRT number, the provider or office name, when the system was purchased, or when the system was updated and the new system was put into use.

Criterion 12: How the SMA Will Collect Providers' MU Data, Including the Reporting of CQMs

There are currently three ways to collect provider's MU data using the Michigan eMIPP system: 1) providers can manually enter information for each provider into the system, 2) providers can download a PDF reporting template, complete the document and upload the file into eMIPP; the system will populate the data from the PDF into the system, 3) providers can upload a QRDA III file to electronically report their CQMs.

Beginning with program year 2018, Michigan began accepting QRDA III file submission for eCQM reporting via electronic submission through a sub-state HIE or DIRECT.

Criterion 13: How the Data Collection and Analysis Process Will Align with the Collection of other Clinical Quality Measures Data

Through the electronic submission of QRDA III files via CQMRR, MDHHS hopes to make the process of CQM reporting more efficient and promote electronic submission to improve the data quality. By improving the data quality, it should be possible to use the CQM data in a meaningful way that aligns with the data collection/analysis goals of CHIPRA and other quality-driven initiatives.

Criterion 14: IT, Fiscal and Communication Systems that Will Be Used to Implement the Promoting Interoperability Program

Information Technology (IT)

The state reviews and analyzes changes related to MU and works closely with their eMIPP product vendor, CNSI, on a plan to implement any changes that apply.

Fiscal

A new system named SIGMA has replaced MAIN beginning in fiscal year 2017 and is seamlessly integrated into eMIPP. Any MU changes that impact payments or payment system are included in the state's plan with CNSI and implemented accordingly.

Communications

Updates, changes, and other important program information can be found on the MichiganHealthIT.org website. This information is also communicated through mass emails sent out to providers and others signed up for our email listserv. Provider notifications related specifically to provider attestations will be generated through the eMIPP system (for example, audit notifications, approval/denial notifications, etc.).

Criterion 15: IT Systems Changes that Are Needed by the SMA to Implement the Promoting Interoperability Program

Depending on the extent of the MU changes at hand, several eMIPP system changes could be required. MU stage changes can impact MU and CQM reporting periods, MU objective requirements/verbiage, objective calculations based on new compliance thresholds, etc.

The state reviews and analyzes MU changes and works closely with their eMIPP product vendor, CNSI, on a plan to implement any updates that apply. Once CNSI has updated the system to reflect the MU changes, the state team completes a period of User Acceptance Testing to ensure that all regulatory requirements have been included and the system is functioning as expected before the system is open for provider attestation. CNSI and the state use CMS-issued specifications sheets and resources to ensure that the MU data is captured specific to CMS expectations and guidelines.

Criterion 16: IT Timeframe for Systems Modifications

The state works with CNSI to coordinate required system changes with production release schedules. For a major release, when large MU changes are usually addressed, the timeframe is typically 4-5 months. This is a multi-step process from the initial pre-planning starting point to when the updates release for production.

Criterion 17: Interface with the CMS National Level Repository (NLR)

eMIPP is fully set up for the NLR interface. When a new provider comes in and completes their federal level registration, a B6 update is sent through the interface to the state eMIPP system, and an email is sent to the provider notifying them of this. After 24 hours from completing the federal level registration, providers can come into the state eMIPP system and complete their attestation. Provider information sent over through the interface is stored in the eMIPP system provider registration's Federal Information tab.

In addition, when an existing provider makes an update to their information at the federal level, there is also a B6 update that is sent from CMS to eMIPP to update the new information accordingly.

Criterion 18: Accepting Registration Data for Medicaid Providers from the CMS NLR

There is current or planned interoperability between the SMA's HITECH systems and:

- Transformed Medical Statistical Information System (T-MSIS)
- Medicaid and Children's Health Insurance Program (MACPro)
- National-Level Repository (NLR)

There is currently an interface between the National-Level Repository and our state eMIPP system. Promoting Interoperability Program registration data is sent from the NLR to the state eMIPP team when there is a new provider registration coming in or an update to an existing provider's information.

Criterion 19: Website for Medicaid Providers

Michigan hosts the MichiganHealthIT.org website through a vendor, MPHI. This is where important updates and information about the Promoting Interoperability Program are posted. Through the MichiganHealthIT.org website, providers are able to subscribe to our mass emails. The Promoting Interoperability Program Outreach Coordinator sends important information about the program to providers through these channels.

Michigan also works closely with their Regional Extension Center, M-CEITA. M-CEITA works with their clients to communicate important information about the program. M-CEITA also hosts webinars to educate providers when there are changes to MU.

Criterion 20: Modifications to the MMIS

DDI is ongoing for Michigan's MMIS. Please refer to the FY19-FY20 MMIS-CHAMPS Enhancements IAPDU (and to the FY19-FY20 Decision Support System IAPDU, especially for information on the Master Person Index) for the most up-to-date list of planned modifications.

Criterion 21: Call Centers and Help Desks

There is a help desk available for providers with MU questions that is managed by the EHR Provider Outreach Coordinator. In addition, providers can send email questions to the EHR Provider Outreach Coordinator through the MichiganHealthIT.org website. The EHR Provider Outreach Coordinator answers provider questions about the program and consults with the Promoting Interoperability Program Manager as needed.

Criterion 22: Provider Appeal Process

When the state receives an appeal, the Promoting Interoperability Program Team reviews the provider's reason for appeal; reviews the documentation retained from the original determination; and then communicates with the provider that has filed the appeal to educate them on why the state's original determination stands or if another determination has been made based on further review.

Criterion 23: Process to Assure that all Federal Funding Is Accounted for Separately for the HITECH provisions

Specific coding has been established in the state of Michigan accounting system in order to ensure that

the proper amounts are displayed on the CMS 37 form as well as on the CMS 64 form.

Criterion 24: Anticipated Frequency for Making Promoting Interoperability Payments

Michigan processed payments on a weekly basis.

Criterion 25: Process to Assure that Medicaid Provider Payments Are Paid Directly to the Provider

eMIPP determines the provider payment amount based on the provider's year of program participation and stage of MU. eMIPP is integrated with the state payment processing systems so that it accurately processes payment for providers based on the amount determined in eMIPP.

Criterion 26: Process to Assure that Medicaid Payments go to an Entity Promoting the Adoption of Certified EHR Technology

At this point in time, Michigan does not intend to designate any entities who could receive incentive payments on behalf of a provider for promoting the adoption of certified EHR technology.

Criterion 27: Process to Assure that Incentive Payments Through Medicaid Managed Care Plans Do Not Exceed 105% of the Capitation Rate

At this point in time, Michigan does not intend to disburse incentive payments through Medicaid managed care plans.

Criterion 28: Process to Assure that all Hospital Calculations and EP Payment Incentives Are Consistent with the Statute and Regulation

Out of all the post payment audits completed for EPs there have been approximately 10% negative audit findings. No negative audits have been entered for EHs. Most negative audits were related to providers struggling with the Security Risk Analysis, proving "true" PA leadership as defined within the final rule, or enabling all Core Measure functionality within their EHR prior to the MU reporting period.

Criterion 29: Role of Existing SMA Contractors in Implementing the Promoting Interoperability Program

In terms of direct program implementation, there are two SMA contracted analysts on the Promoting Interoperability Program team that are contracted through the Michigan Public Health Institute. These analysts review Promoting Interoperability Program registrations and assist with program administration. The EHR Provider Outreach Coordinator is also contracted through MPHI.

There are additional contractors from Michigan State University and MPHI who support the Promoting Interoperability Program in a variety of ways. For more information, see Activities 1 and 2 of the HIT APD.

Criterion 30: Assumptions and Dependencies

Execution of the state's Promoting Interoperability Program plan has several dependencies.

In order for providers to successfully attest to meeting Meaningful Use, providers must have access to certified EHR technology that is accurate and up to date in accordance with CMS program requirements.

A provider's success in meeting Meaningful Use is largely dependent upon their access to a properly functioning CEHRT.

Providers are dependent on the assistance of the EHR help desk and Regional Extension Centers to ensure they have access to resources that allow them to achieve Meaningful Use.

The state is dependent on CNSI to ensure that the eMIPP system is compliant based on CMS requirements.

To ensure state level program compliance, the state is dependent on CMS for program updates and guidance.

The state is dependent on the National Level Repository to capture and send important provider information updates, such as provider type, address, tax ID numbers, and payee NPIs. The state relies on receiving this information for the incentive payment process.

The state also depends on providers who have access to their eligibility and Meaningful Use reports, so it can verify the data submitted on Promoting Interoperability Program Registrations.

Section D: The State's Audit Strategy

Michigan will submit its Audit Strategy as a separate document to CMS.

Section E: The State's HIT Roadmap

Criterion 1: SMA 5 Year Pathway

The Promoting Interoperability Program continues to layer the overlapping goals of conducting Promoting Interoperability Program administration and oversight, encouraging EHR adoption, enabling meaningful use, and enabling health information exchange in order to improve outcomes. This is illustrated by the ascending pyramid diagram below:

Figure 11: Success Factors and Goals
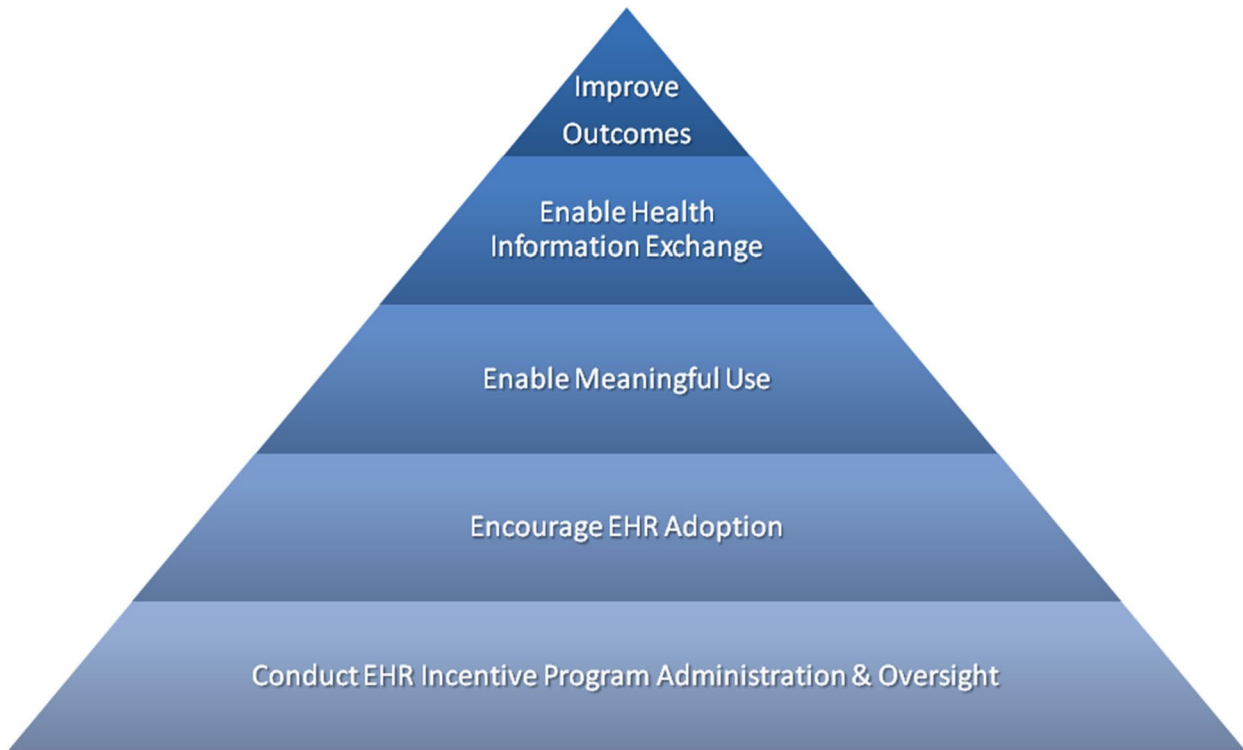
These five success factors build the foundation necessary for improving outcomes in the realms of individual care, population health, and cost management. Later in this section, Criterion 3 will elaborate on time-specific targets for each of these goals.

As described in Section A: Criterion 11, Michigan's Promoting Interoperability Program is being complemented by an Enterprise-wide technology initiative called Integrated Service Delivery (ISD). ISD uses Michigan's HIT/E infrastructure, along with other current or in-development Enterprise systems, to create a more integrated, holistic care experience for Michigan residents who are beneficiaries of Medicaid and other state programs. This is expected to result in improved quality of care for Medicaid beneficiaries, which complements and supports the objectives of the Promoting Interoperability Program. The key components of this initiative are depicted below:

Figure 12: Transformation Initiatives
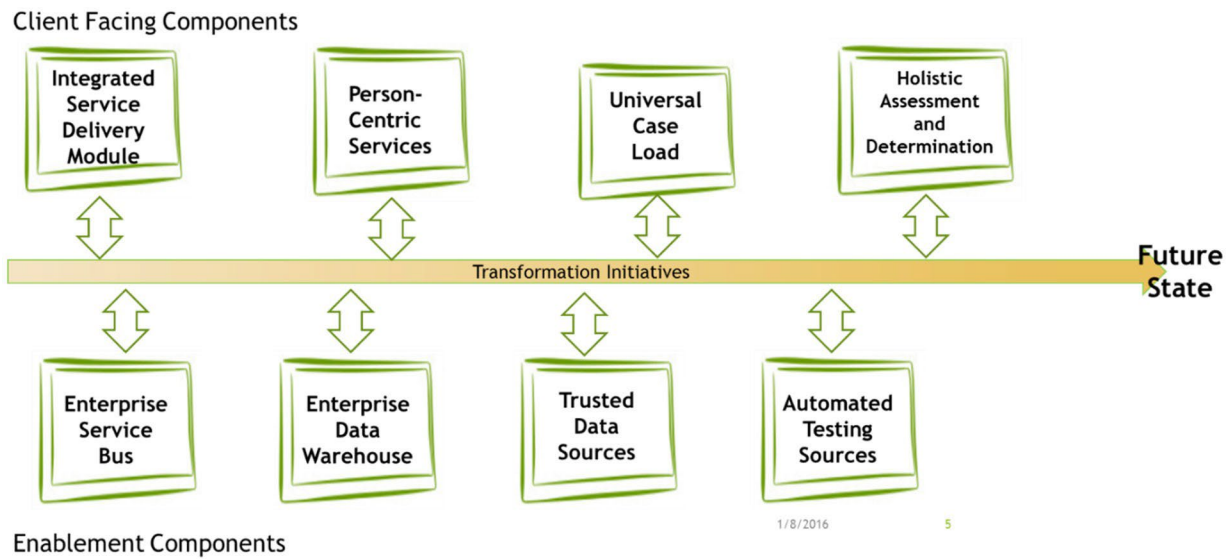
ISD will continue to function to streamline the beneficiary experience and will also introduce new information pathways into the state's HIE infrastructure that are expected to benefit the Promoting Interoperability Program by creating opportunities for more complete quality measurement collection and analytics.

Table 4: Incentive Payments Disbursed to Eligible Professionals

Provider Type	EP												
	2011	2012	2013	2014	2015		2016	2017	2018	2019	2020	2021
					"Old MU"	"Modified MU"						
AIU - Year 1	1409	1124	1316	1115	1021		1248	N/A	N/A	N/A	N/A	N/A
MU - Year 1	N/A	N/A	N/A	53	12	130	158	N/A	N/A	N/A	N/A	N/A
MU - Year 2	N/A	497	842	672	340	504	657	821	168	59	58	34
MU - Year 3	N/A	N/A	426 (*60)	602 (*51)	N/A	638	654	484	613	83	82	58
MU - Year 4	N/A	N/A	N/A	52	N/A	441	531	487	405	291	111	84
MU - Year 5	N/A	N/A	N/A	N/A	N/A	116	381	359	443	174	247	114
MU - Year 6	N/A	N/A	N/A	N/A	N/A	N/A	98	303	316	198	188	205
Unique #					7859							
Total #					21406							
Grand Total ($)					$274,564,159							

Table 5: Incentive Payments Disbursed to Eligible Hospitals

Provider Type	EH							
	2011	2012	2013	2014	2015	2016	2017	2018
AIU - Year 1	81	12	16	3	1	N/A	N/A	N/A
MU - Year 1	N/A	1	N/A	2	1	2	N/A	N/A
MU - Year 2	N/A	42	42	20	6	3	2	N/A
MU - Year 3	N/A	N/A	38	42	19	7	2	2
MU - Year 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MU - Year 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MU - Year 6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unique #	120							
Total #	344							
Grand Total ($)	$165,363,811							

Provider enrollment rates have exceeded the State's expectations. To date, Michigan has disbursed over $439 million in incentive payments to 120 unique eligible hospitals and 7,859 eligible professionals, meeting the original program goals from 2011. Upon program completion, 1308 professionals and 110 hospitals have completed the program.

Criterion 2: Benchmarks for SMA Goals

As stated above, SMA goals for the Promoting Interoperability program are to improve outcomes by pursuing four key objectives: conducting Promoting Interoperability Program administration and oversight, encouraging EHR adoption, enabling meaningful use and enabling health information exchange. Time-bound benchmarks for each of these objectives are described in the following four subsections.

Conduct Promoting Interoperability Program Administration and Oversight

MSA will continue to oversee the Promoting Interoperability Program until it sunsets in 2023. This program is an essential piece of the puzzle for assuring that beneficiary data is handled in the most efficient possible way, supporting Enterprise-wide objectives to improve automation and information sharing. Specific participation targets for the Promoting Interoperability Program are listed in Criterion 2 above. MDHHS also views the continued support and development of its MMIS, CHAMPS, as a component of Promoting Interoperability Program administration.

Over the next 5 years, MDHHS will continue to encourage providers to leverage the capabilities of their certified EHRs. In addition to finalizing program audits, appeals and reporting, MDHHS will continue to maintain the MichiganHealhIT website, will continue to monitor the meaningful use and public health reporting mailboxes, will continue to support the HSTR public health onboarding application and will continue to support health IT and health information exchange activities in Michigan. As the MMIS enterprise continues to mature, more and more activities will become sustainable and/or transition to the MMIS Operations APD, some of which will be sustained via a subscription fee based on fair share principles. For a comprehensive list of planned HIT oversight tasks, MMIS enhancements and corresponding timelines, see the HIT and MMIS-CHAMPS Enhancements APDs.

Encourage EHR Adoption

EHR adoption remained at the core of the Promoting Interoperability Program and beyond. MSA agrees that the use of electronic records and sharing is an essential step in improving beneficiary outcomes. As of 12/31/2021, 7,859 professionals were incentivized under the Promoting Interoperability Program. Efforts now are focused on continuing the momentum created by the incentive program and continuing to increase the adoption of use cases. For more detailed information on benchmarks related to this goal, please refer to Criterion 2 in this section.

Enable Meaningful Use

Meaningful Use of EHRs is a key strategy toward improving beneficiary outcomes. MDHHS remains committed to continuing to promote using certified EHR systems in a meaningful way and onboarding providers to new use cases. MDHHS will continue to track any new legislation related to further promoting interoperability and will implement any changes in a timely manner.

Enable Health Information Exchange

When the right people have the right information at the right time, beneficiary outcomes can be improved. At the heart of Health Information Exchange in Michigan are Use Cases, which are prescribed situations where health information is exchanged to meet a specific need. Operating through Use Cases helps ensure that information sharing has the appropriate boundaries while still allowing providers and beneficiaries to receive the information they need. Through its partnership with MiHIN, Michigan is constantly developing new Use Cases when business cases are identified. The chart below includes a sample of Use Cases for health information exchange that are currently either in production or in development. MDHHS intends for all the Use Cases in the below chart to be in full production within 5 years.

Conceptual	Planning & Development	Implementation (Operational Adoption)	Mature Production (>65% Utilization)
Statewide Clinical Decision Support	Computable Knowledge/KGRID	Common Key Service	Admission, Discharge, Transfer Notifications (senders)
Immunization for Care Team	Michigan Opioid Poisoning Surveillance System	Active Care Relationship Service	Health Information for State: Immunizations Syndromic Surveillance
Use Case Factory	Interstate Immunizations	Health Directory – Send/Find Provider Data	Care Plan (KBR)
Population Health – Disease Registry	Newborn Screening – Hearing Test Results	Lab Orders-Results: Disease Surveillance	
	Find Patient Data	Admission, Discharge, Transfer Notifications (receivers)	
	Consumer Consent eConsent	Exchange C-CDA	
	Information For Consumer	Quality Measure Information Commercial Payers (PPQC): APS	
	Telehealth	Quality Measure Information State Medicaid Meaningful Use	
	Population Health	Newborn Screening: Blood Lead	
	Death Notifications	Cancer Pathology	
	Electronic Case Reporting	Cancer Notification	
		Immunization History Forecast	
		Lab-Orders-Results: Newborn Screening-CCHD	
		Statewide Lab-Orders-Results	
		Quality Measure Information: Commercial Payers (PPQC): Gaps in Care	
		System for Opioid Overdose Surveillance	
		Social Determinants of Health	
		Transcribed Document Delivery	
		Orders & Results Delivery	
		Radiology Studies	
		Closed Loop Referrals	
		Diagnostic Imaging	
		Longitudinal Record	
		Advanced Care Documents	

The above Use Case benchmarks will be complemented by the development of increasingly sophisticated HIE infrastructure. MDHHS will continually monitor use case adoption by each specific use case to ensure a steady rate of growth and utilization.

Criterion 3: Benchmarks for Audit and Oversight

Eligible Hospitals (EHs)

The State of Michigan will conduct Eligibility and Meaningful Use audits for both the dual eligible as well as the Medicaid only hospitals. The State of Michigan conducts a representative sample of dual eligible hospitals each year for audit and conducts audits on all Medicaid-only hospitals every year.

Eligible Professionals (EPs)

EPs are placed into one of three strata based on their determined risk level: High, Medium, and Low.

All providers categorized within the High stratum will be selected for an audit. A random representative sampling of providers falling within the Medium and Low risk strata will be selected as well.

The Promoting Interoperability Program breaks down oversight into three categories. The first is provider eligibility verification that includes random eligibility verification audits. This process kicks off concurrently with registration.

The second category is meaningful use verification. This process begins when providers apply for their second participation year or for those providers that choose to bypass AIU in the first year.

The third category includes several related goals, including monitoring for waste, fraud, and abuse. For more on Michigan's audit strategy, see Section D, submitted separately.