

AMENDMENT #005 TO CONTRACT

**CS160685001 Home State Health Plan
CS160685002 Missouri Care Health Plan
CS160685003 United Healthcare Health Plan**

CONTRACT TITLE: MO HealthNet Managed Care – Central, Eastern, Western, and Southwestern Regions

CONTRACT PERIOD: July 1, 2018 through June 30, 2019

Secure Exchange Solution (SES) Missouri Medical Passport Program (MMPP)

The State of Missouri, with the goal of improving the overall quality and efficiency of healthcare, is implementing an eighteen (18) month project for the Missouri Medical Passport Program (MMPP) through the attached Implementation Advanced Planning Document (IAPD) with the Centers for Medicare and Medicaid Services (CMS). Therefore, the State of Missouri hereby desires to amend the contract to add the following requirements for the MMPP pilot program:

1. The contractor shall participate in the MMPP pilot program for Medicaid managed care beneficiaries.
2. The contractor shall participate in the development of a data source to interface between health systems and related Electronic Health Records (EHRs) for the MMPP pilot program.
3. The contractor agrees that funding for this program shall be used solely to fund the development of the interface and implementation of the pilot. Funds are not available as an additional payment to the contractor.
4. Missouri Care shall be the fiscal agent representing all Managed Care contractors for the Missouri Medical Passport pilot program.

If the contract for MO HealthNet Managed Care – Central, Eastern, Western, and Southwestern Regions is not renewed for the core services, the State of Missouri reserves to renew the contract solely for the completion of the MMPP pilot program.

All other terms, conditions and provisions of the contract, including all prices, shall remain the same and apply hereto.



State of Missouri
Department of Social Services
MO HealthNet Division
Implementation Advance Planning
(I-APD) Appendix D

Submitted: March 5, 2018
Updated per CMS Review: May 11, 2018

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Section I – Executive Summary

The Missouri Department of Social Services (DSS), MO HealthNet Division (MHD) is submitting this Implementation Advanced Planning Document Update (IAPD) Appendix D to request Federal Financial Participation (FFP) under the Health Information Technology for Economic and Clinical Health (HITECH) and Health Information Exchange (HIE) funding from the Centers for Medicare & Medicaid Services (CMS). This IAPD Appendix D aligns with MHD's strategy for advancing Health Information Technology (HIT) and health information exchange in Missouri by supporting the design, development, testing, and implementation of core infrastructure and technical solutions promoting the Missouri Medical Passport Program (MMPP) for Medicaid Eligible Professionals (EPs) and Eligible Hospitals (EHs) aligned with Missouri's Medicaid Electronic Health Record (EHR) Incentive Program authorized by the American Recovery and Reinvestment Act of 2009 (ARRA).

This IAPD (IAPD) Appendix D builds upon MHD's previous HIT IAPD-U for FFY 2018 originally submitted on April 10, 2017 and approved June 8, 2017. Additionally, this IAPD Appendix D builds upon MHD's State Medicaid HIT Plan (SMHP), submitted on January 19, 2017 and approved on February 23, 2017. The SMHP is scheduled to be updated in October 2018 to reflect the activities of this IAPD Appendix D. This IAPD includes the following topics that contribute to implementing the MMPP's Patient Centric Medical Solution (PCM) in Missouri for review and approval by CMS:

- MHD's MMPP approach, including background, current status, and future vision of the new program
- Statement of needs, including the value proposition and link to Meaningful Use (MU) for interoperability and care coordination
- MCO/provider investments and legal agreements
- Benchmarks and performance goals
- Cost allocation methodology
- Funding request breakout

By submitting this IAPD Appendix D, MHD requests enhanced federal funding for this project totaling \$5,952,033 (FFP \$5,356,830 at 90% and state match \$595,203 at 10%) for the Design, Development, and Implementation (DDI) of MMPP programs and services only.

The MHD believes the MMPP program meets the CMS guidance contained herein. CMS clearly states that Health Information Exchange (HIE) can be a useful tool for improving care and reducing cost for Medicaid and CHIP beneficiaries whose care is delivered via a managed care system. The objective is to leverage existing efficiencies, not only from a technological standpoint, but from an administrative and oversight perspective as well. This approach benefits all the stakeholders involved by simplifying administrative oversight tasks, aligning with existing federal guidelines, reducing administrative cost and burden placed on resources. All of these benefits can potentially allow the state to more aggressively encourage MCOs, with the support of CMS and ONC, to pursue more experimental proposals, such as: requiring encounter reporting via HIE with the Meaningful Use Summary of Care data elements; requiring the MCOs connect to each other for purposes of coordinating care for patients moving between plans and provider networks; integrating HIEs with HEDIS reporting requirements; and so on. This approach, with proper implementation, is intended to help Medicaid providers adopt and meaningfully use electronic health records to improve health in the state of Missouri.

Present State of HIE

The Missouri HIT and HIE landscape is characterized by a variety of public and private initiatives that are increasingly moving toward more integration and collaboration. This section describes MHD's commitment to a collaborative approach to supporting health IT adoption and HIE for the population of Missourians they serve. This section also briefly describes a variety of public, private and public-private entities around the state committed to providing statewide HIE support or HIE services to different regions of the state. Many of the private and public-private initiatives are robust while some are in relatively nascent stages of development, and limited information is being exchanged among unaffiliated providers or provider organizations.

From a HIE perspective, Missouri's current environment consists of several Health Information Networks (HINs) operating independently to facilitate the exchange of health care data among each of their respective participating organizations. The three HINs operating in the state of Missouri are: Missouri Health Connection (MHC) who is a HIE member of SHIEC; the Tiger Institute for Health Innovation; and the Lewis and Clark Information Exchange (LACIE-HIE). As an influential figure in HIE, MHD recognizes its prominent role as the Medicaid agency in Missouri and is working closely with its partners in the Missouri Medicaid Enterprise (MME) to identify opportunities to improve program administration through the exchange of health information within the MME, Medicaid providers, the state's HIEs and the MO HIT.

MHD has worked with MHC to improve the HIN and to connect providers, hospitals, and other health care organizations to critical medical record information to improve patient care and increase efficiency. MHC stated its primary objectives as the following:

- Improve the quality of medical decision-making.
- Provide accountability in safeguarding the privacy and security of medical information.
- Reduce preventable medical errors and avoid duplication of treatment.
- Improve the public health.
- Enhance the affordability and value of health care.
- Empower Missourians to take an active role in their own health care.

Mo Health Net Division (MHD), Missouri's Department of Mental Health (DMH), and Department of Health and Senior Services (DHSS) have been engaged since their last SMHP in the following projects:

- Development of an enterprise strategy and technical architecture to support the exchange of health information between the state agencies and healthcare service providers through a HIN.
- Development and implementation of a connection between MHD and MHC to support the distribution of Medicaid claims data to healthcare service providers.
- Development and implementation of a connection between DHSS and MHC to support the exchange of public health information between DHSS and Missouri healthcare service providers.

Summary of Health Information Exchanges

The Missouri Health Information Organization (MHIO) became an independent entity and rebranded as **Missouri Health Connection (MHC)**. MHC is a 501(c) 3 private non-profit organization with a Board of Directors representing health care leaders from across Missouri including members from private health care organizations, private practice physicians, professional organizations, and consumer advocacy groups. MHD previously subscribed to the MHC and will be working towards subscribing again in the future. When connected MHD submitted claims data for Medicaid members in response to patient queries received through MHC from Missouri healthcare service providers. MHC is an HIE member of the Strategic Health Information Exchange Collaborative (SHIEC). SHIEC recently announced the nationwide launch of health information exchange model Patient Centered Data Home (PCDH). PCDH is a cost effective, scalable method of exchanging patient data among health information exchanges (HIEs). On June 26, 2017 MHC in its PCDH Pledge stated that it planned to participate in the PCDH program in the future when financial, governance, staffing, or other constraining issues get resolved.

The Tiger Institute Health Alliance, a division of the Tiger Institute for Health Innovation is a coalition of health care organizations dedicated to improving the efficiency and quality of care delivery. The TIHA Health Information Exchange provides access to and retrieval of patient information to authorized users in order to provide safe, efficient, effective, and timely patient care. The University of Missouri and Cerner have had an existing relationship since 1996. The Tiger Institute for Health Innovation, supported by a strategic alliance between Cerner and the University of Missouri was formed to promote innovative health care solutions to drive down cost and increase quality of care for the State of Missouri. The TIHA Health Information Exchange continues to seek partnership in expanding the exchange of data by collaborating with the Lewis and Clark Information Exchange (LACIE).

The Lewis and Clark Private Information Exchange (LACIE) is a 501(c) (3) not-for-profit entity that is governed by a perpetual collaborative Board of Directors that consists of hospitals, providers, large employers, consumer advocates and Federally Qualified Health Center (FQHC). LACIE operates both a traditional Public Health Information Exchange (LACIE 1.0) and a Private Health Information Exchange (LACIE 2.0). LACIE is one of the first fully operational, multiple-state HIE's in the country, providing patient information to prominent healthcare systems and providers in the Midwest. On May 15, 2017 MPact Health, a multi-state Clinically Integrated Network (CIN) currently comprising over 4,000 physicians, 250 clinic locations and 51 hospitals with participating organizations in Missouri, Kansas, Arkansas and Oklahoma, selected Lewis and Clark Private Information Exchange (LACIE 2.0) for data extraction and quality measure reporting from an array of electronic medical records (EMRs) utilized by participating hospitals and clinics within the MPact Health network.

Future Vision for HIE

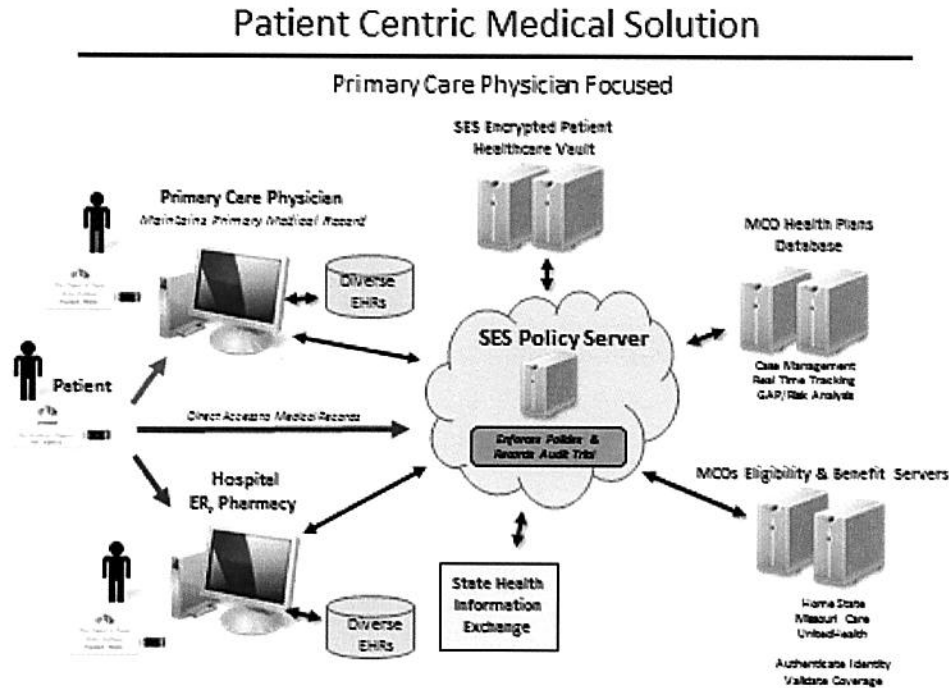
MHD is committed to working collaboratively with HINs and its stakeholders—physicians, hospitals, consumers, laboratories, pharmacies, health plans, and others—to create a consensus-based approach to secure exchange of health information. MHD recognizes the importance of improving HIE across the state of Missouri to enhance interoperability and improve care coordination, which will significantly reduce healthcare costs and improve patient outcomes. With the passage of the HITECH Act in 2009, MHD can be supported by 90% FFP to assist providers in becoming meaningful users of EHRs. The planned approach for executing the MMPP by utilizing the Patient Centric Medical Solution links directly to the Missouri Medicaid EHR Incentive Program helping providers become meaningful users. This IAPD Appendix D will support the DDI necessary for interoperability to take place utilizing MHD Divisions' phased approach described below.

The new Patient Centric Medical (PCM) Solution will support and complement MHD's technological needs now and in the foreseeable future through implementation of an innovative, technologically robust, solution that is financially beneficial to MHD. Over time, the goal is to implement the Missouri Medical Passport Program (MMPP) with long-term capabilities that have the potential to expand and cover more Medicaid members in Missouri.

The PCM solution works by interfacing different health systems having different EHRs for primary care physicians. The complete medical record of the MCO plan member is managed by the PCM tool within the primary care physician's practice. It contains the member's complete medical history that would be required by any medical healthcare system. In addition, it provides alerts, directives and instructions that are not usually contained on healthcare history forms. Since this information is created by the member's primary care physician, the information is accurate and updated in real time.

A graphic visualization depicting how the PCM solution will function and create the interfaces between the member's primary care physician and the other Health IT systems is shown below in Figure 1

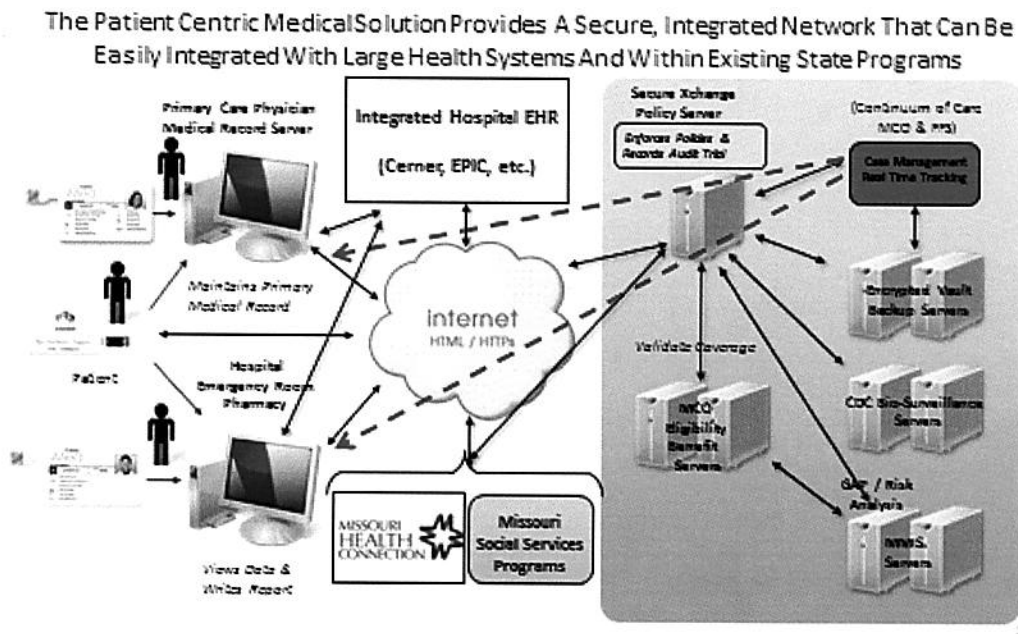
Figure 1: Patient-Centric Medical Process Model Overview



As shown in Figure 2, the Patient Centric Medical token¹ will be capable of connecting to existing large-scale healthcare systems which, in many cases, have different EHRs, using Application Programmable interfaces (APIs). A physician can use his/her EHR System (Cerner, EPIC, etc.) to transfer information bi-directionally between the PCM token and the physician's EHR. This will enable member's health information located in PCM token to synchronize across disparate EHR systems.

Figure 2: Integrated Health Systems

The Patient Centric Medical Solution Overview



Moreover, the implementation of this solution is critical in positioning the state to meet the following Meaningful Use (MU) Stage 3 measures and objectives:

1. **Bi-Directional Secure Messaging: Secure Electronic Messaging to Communicate with Patients on Relevant Health Information**
 - The PCM solution offers secure messaging because the data is encrypted on the PCM passport/Token (at rest), in transit, and in the cloud, and allows for communications between and among the Medicaid providers.
2. **Patient Electronic Access: Provide Patients with a Summary of Care Record for Each Transition of Care or Referral and Electronically Transmit Such Summary**

¹ The Patient Centric Medical Passport and the Patient Centric Medical Token terms can be used interchangeably and refers the physical device the Medicaid patient will be provided to share and update health information. An example of the device is in Figure 3 of this document.

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- The PCM solution creates a Medical Passport for each patient. The Medical Passport contains all relevant information for each participant and is controlled by the patient and can be accessed by the patient at any time.

3. Health Information Exchange: Perform Medication Reconciliation for any Patient Received from another Setting of Care

- The PCM solution's Medical Passport provides critical healthcare information that can be transferred between diverse healthcare systems. It allows patients to control the information, and share with other providers via Continuity of Care Documents (CCDs) to sensitive Mental Health Reports, alert notifications for primary care providers regarding hospital admission, transfer and discharge (ADTs) and summary of care information.

Secure Exchange Solutions' Patient Centric Medical (PCM) solution will provide foster children, women with high risk pregnancies, and their providers a model for improving the interoperability between diverse healthcare systems as well as the resulting benefits to the overall quality of care. The MMPP's objective for improving interoperability and care coordination will produce quantitative results such as:

- Improve wellbeing and health of population
- Improve accuracy/quality of data including key data elements required at the point of service
- Demonstrate value of a federated identity model for the Medicaid program
- Address HIPAA and transparency concerns
- Address policy levels/access controls granted to providers
- Increase provider adoption through an intuitive and easy- to-use design
- Provider and patient evaluations
- Provide better outcomes and value to the foster children and foster parents
- Improve Healthcare Effectiveness Data and Information Set (HEDIS) and Clinical Quality Measures (CQM) scores

Funds in this IAPD are being requested to assist in the connection of providers to the PCM Solution Network. At a high level, the future vision of the HIE encompasses the following objectives:

- Expand reach/connect healthcare providers throughout the three MCO's in the state.
- Maintain and enhance a partnership with all the MCOs to coordinate HIE related efforts and better serve MHD's needs and the needs of Missouri Medicaid beneficiaries.
- Support Value Based Purchasing (VBP) and Managed Care Organizations (MCO) models of care.
- Maximize enhanced Federal Funding Participation (FFP) 90/10 to support future Design, Development, and Implementation (DDI).

Between now and Federal Fiscal Year (FFY) 2020, MHD will implement a phased strategy for the adoption and widespread use of the Missouri Medical Passport Program by providers serving Medicaid beneficiaries. Based on previous pilots and studies this is expected to contribute significantly to statewide improvements in patient outcomes and reduction of healthcare costs. A full-scale roll out of this program to all Medicaid beneficiaries and providers will produce an annual saving potential to MHD within the range of \$1 to \$3 Billion. This Estimate is based on Secure Exchange Solutions focus groups, pilot programs and healthcare industry & government reports which have estimated that the costs of Medicaid inefficiencies consume between 10%-15% of Medicaid expenditures today causing the average cost of care per member to rise, relative to what has been budgeted by the Federal and State governments. Findings from the initial phase of the MMPP will be used to extrapolate the savings Medicaid program wide and future updates will be included in subsequent IAPD updates.

Key Stakeholders

The following subsections provide a summary of key stakeholders involved in MMPP project.

Secure Exchange Solutions

Secure Exchange Solutions (Company) is a Maryland-based Corporation that provides portable patented solutions using a secure IT framework to manage, classify, protect and control digital content and data, enabling collaboration across multiple enterprises on a worldwide basis. The Company's primary family of products centers around an integrated system using a Virtual Java Machine on a dedicated token, a secure internet policy server working as both an identification/control service, which produces the key to sophisticated cloud-based content control services, and is the foundation of the Patient Centric Medical Solution. In addition, the Company has developed and markets, under several U.S. patents, a fully integrated transaction system that delivers the trusted means for producing electronic transactions that are unique, secure and reliable for all business and legal purposes in the cyber-security and financial business sectors.

MO HealthNet Division

The Medicaid program was enacted by the Federal government through Title XIX of the Social Security Act in 1965 as a federal-state partnership to provide public health insurance coverage to low-income people. Missouri established its Medicaid program, now called MO HealthNet, in 1967. The Department of Social Services (DSS), MHD Division (MHD) is the state agency that administers the Missouri Medicaid program. The American Reinvestment and Recovery Act of 2009 (ARRA) included a \$19.2 billion provision titled the Health Information Technology for Economic and Clinical Health Act (HITECH). HITECH is administered by the Office of the National Coordinator for Health Information Technology (ONC). The MHD monthly enrollment as of June 2016 reached 982,776 with 95% of members belonging to following six programs:

- MO HealthNet for the Aged, Blind or Disabled (MHABD)
- Qualified Medicare Beneficiary (QMB)
- Medicaid MHD for Kids
- SCHIP MHD for Kids: Funded by CHIP
- MHD for Families (MHF)
- MHD for Pregnant Women

Historically, MHD has utilized MHC for HIE services to exchange clinical data with healthcare service providers. The MHC connects public and private health care providers via bi-directional and/or uni-directional service offered through its HIN to participating hospitals and clinics that utilize an array of EHRs. Representatives from MHD, the local HIE initiatives, and the Missouri HIT Assistance Center were active participants in developing a governance strategy for MHC, which has been the primary HIE in Missouri.

For several years, MHD shared Medicaid claims data with healthcare service providers participating in MHC allowing them to view and/or consume this data in their certified EHRs. During this the same time, DHSS established the option of exchanging required public health information electronically between its registries and providers through MHC. Both MHD and DHSS, in this strategic partnership with the MHC, sought to promote the value gained from the products and services related to health information exchange as a means of achieving meaningful use and improving outcomes.

As mentioned in Missouri's SMHP 2.0 dated January 2017, MHD, DMH, DHSS, and other strategic partners are actively engaged in the development of an enterprise strategy and technical architecture to

support the exchange of health information between the state agencies, payers and healthcare providers through all functioning HIEs in the state.

Missouri Health Information Technology Assistance Center (MO HIT)

Missouri HIT Assistance Center was established in April 2010 as the federally designated Health Information Technology Regional Extension Center for the State of Missouri. Missouri HIT Assistance Center operates in collaboration with the University of Missouri, through the Department of Health Management and Informatics and the Center for Health Policy. Funded through 2016, the MO HIT Assistance Center provided training, support, technical assistance, outreach, and collaboration to providers. The goal of the Missouri HIT Assistance Center was to facilitate successful implementation of electronic health records as an initial step in supporting the use of health information technology across the state, and ultimately to participate in a statewide health information exchange system for providers and patients to improve the quality and safety of health care and, consequently, the health of the citizens of Missouri. While no longer in operation, a webpage continues to provide information to the provider community.

The Children's Division of DSS Foster Care Program

The Foster Care program within the Children's Division, under the Department of Social Services umbrella, is designated to direct and supervise the administration of child welfare services. The division works in partnership with families, communities, the courts and other governmental entities to ensure the safety, permanency, and well-being of Missouri children. These foster care services are administered statewide within a centralized organizational framework. Children involved in the child welfare system have unique medical needs and should be referred to the most appropriate health care provider in a timely and coordinated fashion. Missouri has long recognized the high psychotropic medication utilization rates for children in out-of-home care and has measures in place to reduce, review, and monitor prescriptions. However, the challenges to permanency inherent in foster care system often present greater challenges to coordinated care, which is why Children's Division is participating in the MMPP as part of Missouri's phased approach to improving interoperability and health information exchange.

The Children's Division is responsible for the administration of child welfare services and works in partnership with families, communities, the courts and other governmental entities toward ensuring the safety, permanency, and well-being of Missouri children. During calendar year 2017, the number of children reported as suspected of being abused or neglected was 102,368. Of those children 21,104 did not receive or refused services from a children's division program. A total of 6,715 received services and of those 3,914 were removed from their families during the year by court order. On average, the State of Missouri has 13,000 children in the foster care system and last year, 1,435 were adopted.

Managed Care Health Plan (MCHP); Home State Health

Home State Health is a MHD Managed Care Organization and a wholly-owned subsidiary of Centene Corporation Health, a Fortune 500 company with over 27 years of experience in the Medicaid industry and a robust portfolio of specialty health solutions. Home State Health was designed to deliver high quality, locally-based healthcare services to its members with healthcare providers benefiting from its enhanced collaboration and strategic care coordination programs.

Managed Care Health Plan (MCHP); Missouri Care

Missouri Care Health Plan is a MO HealthNet managed care organization. Missouri Care serves 54 counties in Eastern, Central and Western Regions of Missouri. Their stated mission is to provide access to quality health care for its members.

Managed Care Health Plan (MCHP); United HealthCare Community Plan (Missouri)

United HealthCare is one of the largest providers of Medicaid coverage on behalf of states across the nation. United HealthCare plan is available Statewide.

There are currently approximately 955 MCO Providers as of December 2017 (see Table 1).

Table 1: MCO Provider Statistics

Missouri Medical Passport Program (MMPP) Counties	Managed Care Organizations (MCO) Participating Provider Count ²		
	United HealthCare	Missouri Care	Home State Health
Audrain	35	25	30
Callaway	36	36	25
Boone	236	370	162
Totals	307	431	217

² Providers types include: Family Practice, Internal Medicine, Pediatric Physicians, General Practice, Federally Qualified Health Centers, OB/GYN, Provider-based Rural Health Clinics, Primary Care Physicians

Section II – Results of Activities Included in the Advanced Planning Document (APD) and SMHP

This section is not applicable for this IAPD Appendix D.

Section III – Statement of Needs and Objectives

MU objectives established in 42 Code of Federal Regulations (CFR) Parts 412 and 495, finalized on October 16, 2015, support advanced clinical processes, promoting interoperability and health information exchange, continuing progress in electronic public health reporting, and expanding the scope and methods for provider and patient engagement. Additionally, the following four of the eight objectives are focused on the electronic exchange of health information through interoperable systems:

- Patient electronic access
- Coordination of care through patient engagement
- Health Information Exchange

As detailed in State Medicaid Director (SMD) Letter #16-003, CMS will support the DDI to support interoperability and care coordination if doing so will support EPs' abilities to meet MU. The funding requested by MHD will specifically facilitate the ability to meet MU objectives related to health information exchange.

This funding request is to support the Missouri Medical Passport Program's DDI effort to enhance the exchange of health information to support MHDs goals. These goals include enhancing care coordination and interoperability to support Missouri Medicaid providers' abilities to meet MU, as well as support the state's broader HIE initiatives. MHD is progressing toward enhancing its' HIE capabilities in a phased approach. At a high-level, Phase 1 will consist of reaching consensus on scope of work details and contract modifications with the MCOs. Concurrently, in phase 1, the Missouri Medical Passport Program is will perform an assessment of the current state of interoperability and determine what course of action is necessary for optimal health information exchange and interoperability. Phase 2 will consist of establishing the baseline functionality, development, and onboarding of the MCO's new platform PCM solution. Phase 3 will add the enhanced functionality for full optimization of the MMPP program. Phase 4 will be to assess the efficacy of the MMPP based upon program milestones, objectives and benchmarks related to interoperability, care coordination, patient access, HIE, and clinical data reporting established in Phase 1. Also included in Phase 4 is the DDI required for addressing gaps discovered by the assessment in Phase 1.

After careful review and analysis, MHD, operating within its purview granted by DSS in partnership with the MCOs, have determined that the best course of action to meet the health information exchange needs of Missouri and continue to support MU through enhanced interoperability, bi-directional exchange, and transitions of care, is to connect providers and patients across Missouri utilizing Secure Exchange Solutions' (SES) software as service (SAS) platform. SES intends to utilize Application Program Interfaces (APIs) to integrate the MMPP with various systems such as: provider EHRs, HIEs, Maintenance Decision Support Systems (MDSS), and pertinent MCO databases. MHD through a contract with the MCOs will use the funds requested in this IAPD Appendix D to begin the implementation of its core functional requirements, as part of the design and development phase that is necessary to connect eligible EPs and EHs to the Patient Centric Medical (PCM) Solution.

The Missouri Medical Passport Program specifications document was developed to clearly layout the technical functionality required to ensure alignment with MHD and Missouri's broader HIT strategy, accounting for barriers to EHR/HIE adoption among the current population of Medicaid EPs and EHs. MHD will continue to coordinate with all the stakeholders on this project to assess the landscape of MMPP participants and systems functionality across the MCOs. This will enable the MHD to deploy a state-of-the-art Patient Centric Medical (PCM) Solution fully capable of satisfying Medicaid Healthcare provider demands well into the future. The PCM tool will satisfy the 3 stages of the meaningful use criteria with Phase 2 and 3 in accordance with Table 22 below.

Table 2: MMPP Link to Meaningful Use

Missouri Medical Passport Program Phases	Meaningful Use Criteria Satisfied by Missouri Medical Passport Program Functionality		
	Stage 1 Data Capture and Sharing	Stage 2 Advance Clinical Processes	Stage 3 Improved Outcomes
Phase 1	N/A	N/A	N/A
Phase 2	Electronically capturing health information in a standardized format	More rigorous health information exchange (HIE)	Improving quality, safety, and efficiency, leading to improved health outcomes
	Using Information to track key clinical conditions	More Patient Controlled Data	Patient access to self-management tools
	Communicate information for care coordination processes		
	Using information to engage patients and family members in their care		
Phase 3	Initiating the reporting of clinical quality measures and public health information	Increased requirements for e-prescribing and incorporating lab results	Decision support for national high-priority conditions
		Electronic transmission of patient care summaries across multiple settings	Improve population health
Phase 4	N/A	N/A	N/A

MMPP Program

As part of the targeted and phased approach, the Missouri Department of Social Services' Children Division is requesting funding for implementation of the "Missouri Medical Passport Program" (MMPP) within all three of Missouri's Medicaid Managed Care Organizations (MCOs). The three MCOs are:

- Home State Health, a wholly-owned subsidiary of Centene Corporation Health
- Missouri Care, a wholly-owned subsidiary of WellCare Health Plans, Inc.
- United HealthCare Community Plan, a wholly-owned subsidiary of United HealthCare Services, Inc.

As part of this phased approach, the MMPP will initially implement a health information exchange tool developed by Secure Exchange Solutions (SES) named the Patient Centric Medical Solution (PCM) for the foster care children and high-risk pregnancy women served by all the three MCOs in Boone, Callaway and Audrain County. These counties were selected because they have three highest psychotropic prescription usages by foster care children. By providing an integrated mobile healthcare record at the point of service, the MMPP has the promise to deliver a robust level of interoperability and care coordination for two underserved and vulnerable subpopulations within Missouri Medicaid; foster care children and women with high risk pregnancies. The goal of the MMPP is to improve care coordination by providing an enhanced, interoperable model of care ultimately improving the overall quality of care for this underserved population. MMPP effectively leverages existing public and private efficiencies presently found in Missouri's HIE/HIT environment. The MMPP's functionality is designed to track each care event by service, patient and provider using a combination of patients and healthcare provider tokens (e.g. cards, mobile phones, etc.) and lightweight technologies. Furthermore, it captures information from diverse systems that can be trusted individually and/or in aggregate to fully validate each service, and then proceed to the integration of those services into the continuum of care. Service validation does not interfere with provider/patient interaction, and can enhance communications through new or existing patient information systems, such as portals and HIEs. MMPP provides a longitudinal and latitudinal view of the "continuum of care" across organizations, delivery networks and regions. It complements multi-organization initiatives by providing a straightforward account of care events that does not require a large amount of user intervention.

It's important to distinguish the difference between the MMPP and the PCM. The Missouri Medical Passport Program (MMPP) is the name of the program that is administered by Secure Exchange Solutions (SES), the technology vendor contracted by the Medicaid MCOs. The Patient Centric Medical Solution is the name of the tool/technology that will be implemented by Secure Exchange Solutions in to the Medicaid MCOs health IT ecosystem. The Patient Centric Solution (PCM) is the technology solution utilized by the Missouri Medical Passport Program (MMPP).

The MMPP will focus on collecting data across diverse medical systems. The MMPP program will be conducted in partnership with all three MCOs which will consist of approximately 955 providers, 53 Missouri Foster Children Case Managers, and enrolling a statistically reliable sample size of approximately 535 foster children and an estimated 500 to 1000 women with high risk pregnancies in Boone, Callaway, and Audrain County over a 16-month period. The funding request will be used to cover the following DDI cost:

- Project design and stakeholder coordination
- Program training
- Software development
- Technical infrastructure
- Interoperability assessment
- Service provider consultation

Assessment

The first step in this process will be to do an assessment of the current state of interoperability to establish a baseline of the target state. A gap analysis between the current state and the target state will inform future program modifications and activities that support achieving target state goals. The assessment will measure data interoperability and help create the goals and objectives that will define the criteria used to monitor the MMPP's progress and what the target state should look like.

Phase 1: Program Initiation and Implementation

A high-level strategy will be created to drive a detailed operational plan in developing the use cases, one with providers and one with guardians for this program, which will be used to finalize processes and data placement before deployment.

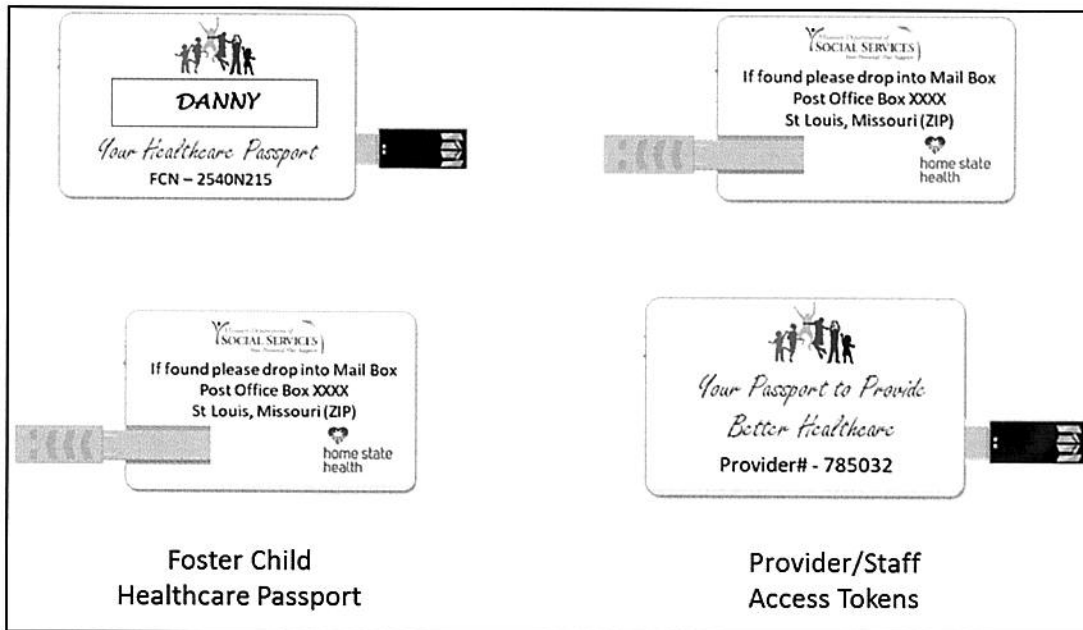
Establishing High-Level Evaluation Criteria

Given the short duration of this program, it is important that all stakeholders understand the principal success factors at the outset. These may be adjusted during the Phase Reviews.

Finalize Design of Missouri Medical Passport/Token

It will be necessary to finalize the design and information that will be contained on Missouri Medical Passport, also known as the PCM Token, before manufacturing and distribution. Figure 3 is an initial design.

Figure 3: Design Example of PCM Passport/Token



HIPAA compliant and appropriate agreements will be signed with the patients, and healthcare professionals, with appropriate training, during the development phase of the program.

Phase 2: Initial Operations: Baseline Functionality

Scope

With the cooperation of the State of Missouri Department of Social Services and Missouri's MCO, the SES team will activate the Patient Centric Medical System in accordance with the detailed planning performed during Phase 1.

Deploying SES Support

One of the objectives during deployment is to integrate and not interfere with the existing workflows of the participating healthcare systems and providers.

Eligibility Database and Token Issuance

It will be the responsibility of Department of Social Services Children Division case managers to provide the eligibility information to the MCOs and to register the children and their families. Women with high risk pregnancies will be offered a choice to participate at the primary care physician sites once their eligibility has been verified. At the present time, it is envisioned that the PCM tokens will be issued by the MHD, the Children's Division, or other designated representatives of the project.

Providers Healthcare Assessment and Creation of Initial PCM EHR

The entire purpose of the PCM program is to create a portable healthcare record at the front-end of the healthcare continuum throughout the system. This is the responsibility of the member's primary care physician (PCP) and ensures the record is updated through the process.

Support PCM Token Use

As the program progresses, emphasis will shift from token issuance to intensive assessment of token practice and use. In particular the value of increased information through reporting and process analysis will be undertaken. Metrics will be gathered across populations in multiple areas:

- Initialization of the PCM Token
- Accuracy of data throughout the process
- Ease of use in physician practices and integrated hospital environments
- Consult, review and interface with token
- Security functionality/PIN testing in operational environment
- Use by participants (providers/children/guardians)
- Replacement token procedures
- Data functionality for user population
- Satisfaction of selected meaningful use standards
- Durability of token-based system
- Overall evaluation of usefulness of a "Health Information Exchange of ONE"
- "AS IS" process model evaluation against the "TO BE" PCM process model
- SWOT analysis (Strengths, Weakness, Opportunities and Threats)
- Health outcomes
- Ease of integration
- Use Case modification
- Case management opportunities
- Continuity of Care Record use through the healthcare system

Phase 3: Enhanced Functionality

Scope

While Phase 2 established the basic functional operational capabilities of the PCM Application, Phase 3 will expand its functionality and add new participants. However, the main function of this phase is correct/upgrade the functionalities deployed in Phase 2.

Additional Functionality

At the monthly reviews, additional functionality will be examined and discussed besides the functionalities described in the Meaningful Use criteria. The following are several potential features that might be considered during this phase if time and funds permit:

- Providing more customized views of the data (administrative, provider, guardian, pharmacists, EMT, nurses, etc.)
- Providing a mental health supplement
- Interfacing to a voice transcription system for medical data
- Providing multiple PCM Tokens at different locations (school and home)
- Evaluating GAP analysis at the point of service
- Prescription bidding
- Evaluating data contained in PCM Token-based verses cloud-based data

Phase 4: Evaluation and Assessment

Scope

The scope of Phase 4 is to determine the overall value of PCM system in providing interoperable healthcare data between diverse systems and examine inefficiencies associated within the current system. More specifically, SES will evaluate interoperability of the PCM Solution a series of qualitative and quantitative approaches. Several meaningful statistics will be derived through comparisons with similar data sets to meet both qualitative and quantitative criteria. The qualitative evaluation criteria will seek to determine the overall improvement in quality of care. The quantitative evaluation criteria will be focused on the ability to actively exchange information with other systems, improve processes, and reduce cost.

Specifically, SES will collect information and form conclusions based on the following criteria, measured outcomes and methodologies:

Table 3: Program Evaluation Report Information

Program Evaluation Report		
Criteria	Measured Outcomes	Methodology
Patient Quality of Care	The change in the perceived quality of care as measured by patients	HEDIS scores prior to and after the IAPD period for sample sizes within the participant group.
Interoperability	System's ability to consistently and accurately exchange information with diverse EHR systems.	100% of patient transactions requiring/attempting interoperability with diverse EHR systems will be tracked and tabulated to precisely measure this outcome.
Cost Reduction	Extrapolated system savings assuming a state-wide implementation using statistically significant ³ sizes.	Four sample sets will be analyzed: previous claims data for the catchment area, sample sets elsewhere in state not participating in the program, claims data of the participants during the program, and a survey of 10% of program participants before and after the program related to quality and services used.

System Reliability	Frequency of dysfunctional tokens, USB ports or other technology components	100% of transactional attempts will be tabulated to measure this outcome.
System Capacity & Responsiveness	Maximum number of active patients for a given amount of computing power and bandwidth.	Actual average and peak load usage statistics will be generated for a detailed contention analysis of the system.
System Process Efficiencies	Degree that office processes are streamlined	A statistically significant ³ sample of participating office staff surveys.
Physician Adoption	Physicians' adoption of the system and its imposed process.	A statistically sample ³ of participating physicians' surveys.

Conduct Program Evaluation

Evaluation criteria will be primarily qualitative. It is likely that several meaningful statistics can be derived through comparisons with similar data sets, such as:

- Duplicate services
- Proper medication level
- Reduction of medical errors
- More time spent with the patient
- Providing an accurate "Continuity of Care Record" at all points of service
- Less administrative burden for providers and guardians
- Use of medical directives
- More accurate billing
- Interactive case management
- Fraud

³ Truven Health Analytics (division of IBM) has published that a sample size of 1063 out of a total population set of 258,000 provides a 95% confidence level and 3% error rate. The SES project is well within these parameters since this program will have approximately 1,500 participants within a three-county catchment area with a total population of approximately 230,000 and a Medicaid population of significantly less.

SES will focus on improving system security and usability and compatibility with existing workflows by strengthening authentication and robust logging. The evaluation of the program will consider both through the following processes:

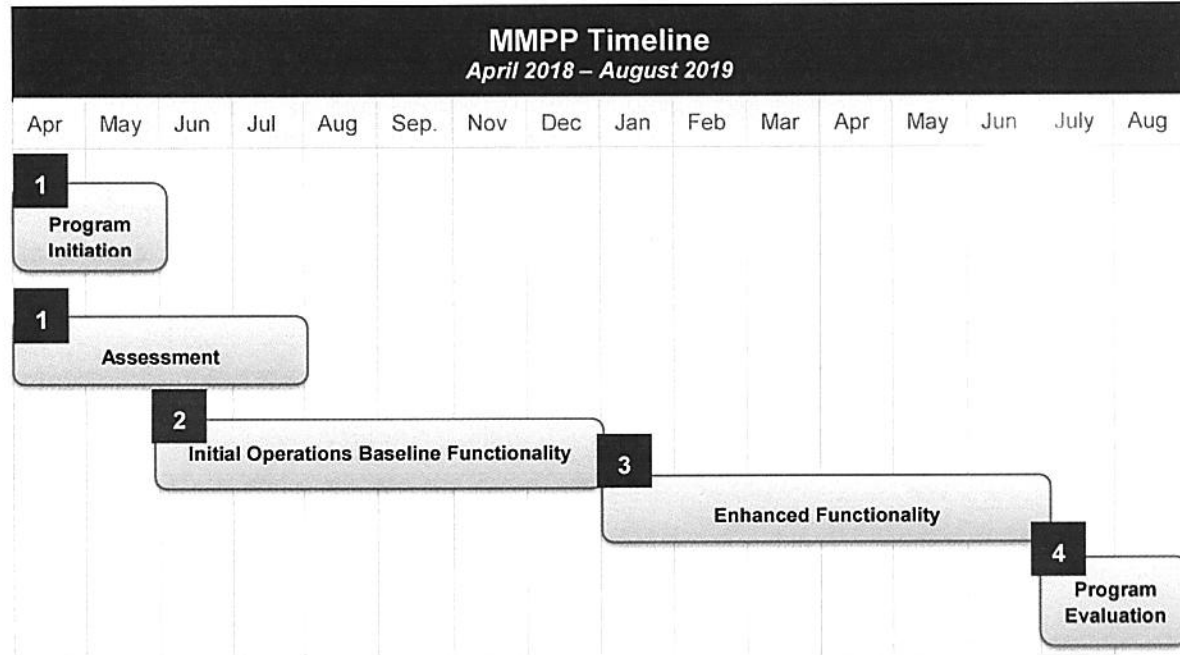
- Speed and reliability of eligibility determination for current and new patients
- Usability on behalf of patients and staff including accuracy of identification likelihood of token loss and patient understanding of privacy preferences
- Usability of business intelligence regarding patient encounters across the system
 - A final report will be drafted discussing tendencies to visit certain facilities in terms of frequency and cost, as well as identifiable anomalous behaviors such as prescription shopping among several providers in a short period of time
- Assessment of uses for patient shared information for clinicians and the need (if any) for routine updates by patients
- Patient, staff and clinician surveys for assessing usability and the value of analytics

There may also be an impetus to expand the breadth of PCM capabilities to cover other eligibility criteria in healthcare or in social services. The PCM Token can be applied across multiple sectors and use cases. It can be used to process and store documentation, interactive Web applications and multi-factor authentication for numerous state application. With information sharing and security requirements with meaningful use and healthcare reform, PCM can accommodate complex public/private eligibility and benefits programs while also meeting stringent security and HIPAA privacy requirements with the MCO's.

Expanded Rollout Planning

Based on the success of this program, SES and Missouri will begin the planning necessary for the expanded implementation of these services. The scope, functionality, and timeframe associated with this expansion will be determined after Phase 4 is completed.

Figure 4: MMPP Timeline



Provisional Planning

Beginning in April 2017, SES began preparing extensively for the pending Missouri Medical Passport Program (MMPP). During this pre-planning period, SES assembled several teams of personnel to be

responsible for program management, training, software development and technical infrastructure. The SES team met extensively with Missouri health agency stakeholders to define the program's target Medicaid population, scope, and geography. Additionally, SES coordinated and communicated with each of the three Managed Care Organizations (MCOs) to develop program interoperability requirements. SES is in the process of finalizing the contract language with this group of MCOs. During this 13-month preplanning period, SES began to customize its PCM Solution software to meet the unique governance needs pertaining to roles and permissions inherent to healthcare services provided to foster children. The SES team has also begun to prepare hosting services, temporary office space and Medical Passport token production. The provisional planning activities performed thus far will enable the MMPP to meet the timeframe referenced in the project timeline.

Sustainability Model

MHD and the stakeholders on this project have determined, based on the amount of applicable information available, it would be best to postpone sustainability model development for the MMPP. MHD understand how critical it is to develop a well-planned and successful sustainability model. Therefore, Missouri and its stakeholders have decided to develop a sustainability model based on the evidence and outcomes presented in the phase 4 evaluation and assessments. Additionally, project stakeholders plan to use the information gathered from the DDI effort undertaken throughout all project phases to inform the sustainability effort. Through this effort Missouri expects to yield a successful and achievable plan for sustainability and include it in future APDs and SMHPs.

Section IV – Statement of Alternative Considerations

MHD believes in consistently improving the level of service and functionality anticipated by its participants. In looking to improve the processes undertaken in health information exchange, MHD considered alternative strategies such as making additional investments in the HIE. However, MHC, the prominent HIE in Missouri, had already held focus groups with hospitals, hospital systems, and individual providers to gain an understanding of their expectations for Health Information Network (HIN) products, services, and pricing. They leveraged the results of these sessions to refine their products, service offerings and pricing model. MHD, the State Medicaid Agency (SMDs), determined that repeating a similar approach to HIE would be redundant and leave existing efficiencies within the MCOs untapped. Furthermore, MHD has concluded that MCO's and their framework are not being utilized enough to advance interoperability at the state level. With HITECH funding sun setting soon, MHD decided that any alternative considerations could put in jeopardy an opportunity to try this unique approach, by not allowing enough time to challenge this technology in a risk mitigating phased approach.

Additionally, here are a few challenges within the most commonly used HIE models that are addressed by the PCM model of HIE. Data sharing, for example, is intended to reduce administrative costs associated with manual data and paper-based systems; reduce costs related to information access by decreasing redundant testing; avoid unnecessary hospitalizations; increase the efficiency; improve coordination of patient care across providers; and provide more effective treatments. However, to date, much of the data continues to reside in silos and is not always available to providers and or controlled by the patient. This new system has the potential and capacity to integrate disparate healthcare provider databases and allow for the patient to securely control them across the entire State healthcare system. Another common characteristic found in most HIE models require stakeholders to settle differences of healthcare standards which can often become a barrier to integration. While the PCM system does not solve the problem of establishing standards across the healthcare system, it does provide a single API of the data in a form that is easy to use by any healthcare provider in the world. Another common challenge is building consensus around governance and sustainability. Even when achieved; it can often be more difficult to execute, sometimes consuming time and money. Circumventing this challenge, the PCM system is minimalistic since it utilizes Software as a Service (SaaS). This agile offering can be built into existing MCO contracts saving Medicaid; time, resources and capital expended during a robust planning stage.

Section V – Personnel Resource Statement

This IAPD will require State staffing. Personnel identified in this resource statement encompass staff employed by DSS as well as those under contract to complete the services outlined in the budget request.

*Table 4: State Personnel Resource Statement**

State Staff Title	# of Personnel	% of Time	Project Hours	Cost with Benefits	Description of Responsibilities
Managed Care Director	1	25%	520	\$28,208	Program Management
Children's Division Case Managers	53	15%	11,177	\$423,825	Onboard children to the foster care state system and provide technical assistance to family and child on how to use the Medical Passport card/Token. Responsible for coordination of care through patient engagement. For example, case managers will have access to the MMPP to enter notes that the physician will be able to see and will help coordinate their care to understand and communicate the needs of the child in foster care.
State Resource Total Cost	54		11,697	\$452,033	

*Resources reflected are based on a 12-month (annual) calculation.

Table 5: Contractor Resource Statement

Contract	% of time	# of Personnel⁴	Cost Category	Total	Total 90% FFP	FFY 2018	FFY 2019
Pending Contract Secure Exchange Solutions	100%	8.25	Program Management	\$1,500,000	\$1,350,000	\$563,000	\$937,000
		6.50	Program Training and Assessment	\$875,000	\$787,500	\$583,000	\$292,000
		2.75	Software Development	\$650,000	\$585,000	\$600,000	\$50,000
		2.50	Technical Infrastructure	\$600,000	\$540,000	\$234,000	\$366,000
	n/a	n/a	Operating Costs	\$1,875,000	\$1,687,500	\$901,000	\$974,000
			<ul style="list-style-type: none"> • Travel and Lodging 	\$660,000	\$594,000	\$248,000	\$412,000
			<ul style="list-style-type: none"> • Service Provider Consultation 	\$500,000	\$450,000	\$384,000	\$116,000
			<ul style="list-style-type: none"> • General and Administrative 	\$715,000	\$643,500	\$269,000	\$446,000
		20	Total	\$5,952,033	\$5,356,830	\$3,031,678	\$2,920,355

⁴ The numbers presented are averages based on the number of personnel by phase and varying project schedule needs. See Table 10 for more detail.

Section VI – Proposed Activity Schedule

MHD proposed schedule for the design and functional requirements gathering to support MMPP health information exchange program as described in Section III – Statement of Needs and Objectives is provided in Table 2. MHD has worked closely with its partners, including the Foster Care Children's Division and SES, to determine a realistic and achievable project schedule that coordinates with MHD's funding schedule.

Table 6: Proposed Activity Schedule

Project Schedule	Estimated Start Date	Estimated Finish Date
Program Management	4/1/18	7/31/19
Program Training and Assessment	4/1/18	7/31/19
Software Development	4/1/18	11/30/18
Technical Infrastructure	4/1/18	5/31/19
Travel and Lodging	4/1/18	7/31/19
Service Provider Consultation	4/1/18	5/31/19
General and Administrative	4/1/18	7/31/19

Section VII – Proposed Budget

MHD presents the following budget to CMS for this HIT IAPD Appendix D. This budget includes the proposed vendor costs to design, develop, and implement the strategy described in Section I and Section III of this HIT IAPD Appendix D. The proposed budget represents a total amount of \$5,952,033 through Q4 FFY 2019, of which, \$5,356,830 (90%) is proposed to be funded by FFP and the remaining \$595,203 (10%) will be funded by MHD.

Table 7: Total Cost of Services Statement

Cost by Category	Total	90% FFP	10 % Share	FFY 2018	FFY 2019
State Personnel	\$452,033	\$406,830	\$45,203	\$150,678	\$301,355
Contractor	\$5,500,000	\$4,950,000	\$550,000	\$2,881,000	\$2,619,000
TOTAL	\$5,952,033	\$5,356,830	\$595,203	\$3,031,678	\$2,920,355

Table 8: Total Projected Cost by Fiscal Quarter and Federal Fiscal Year

Year/Quarter	Month	State Costs	Contractor Cost	Total	90% FFP	10% State Share
FFY 2018 Q3	Apr-Jun	\$75,339	\$1,997,000	\$2,072,339	\$1,865,105	\$207,234
FFY 2018 Q4	Jul-Sep	\$75,339	\$884,000	\$959,339	\$863,405	\$95,934
Total FFY 2018		\$150,678	\$2,881,000	\$3,031,678	\$2,728,510	\$303,168
FFY 2019 Q1	Oct-Dec	\$75,339	\$858,000	\$933,339	\$840,005	\$93,334
FFY 2019 Q2	Jan-Mar	\$75,339	\$808,000	\$883,339	\$795,005	\$88,334
FFY 2019 Q3	Apr-Jun	\$75,339	\$747,000	\$822,339	\$740,105	\$82,234
FFY 2019 Q4	Oct-Dec	\$75,339	\$206,000	\$281,339	\$253,205	\$28,134
Total FFY 2019		\$301,355	\$2,619,000	\$2,920,355	\$2,628,320	\$292,036
Total Project Cost		\$452,033	\$5,500,000	\$5,952,033	\$5,356,830	\$595,203

Table 9: Proposed Budget Detail by Phase

Category Cost by Phase	Total	90% Federal Share	10% State Share
Phase 1	\$1,584,943	\$1,426,449	\$158,494
State Personnel	\$0	\$0	\$0
Program Management	\$275,000	\$247,500	\$27,500
Program Training & Assessment	\$153,125	\$137,813	\$15,313
Software Development	\$500,000	\$450,000	\$50,000
Technical Infrastructure	\$208,000	\$187,200	\$20,800
Misc. Operating Costs	\$448,818	\$403,936	\$44,882
Phase 2	\$2,097,349	\$1,887,614	\$209,735
State Personnel	\$226,016	\$203,414	\$22,602
Program Management	\$525,000	\$472,500	\$52,500
Program Training & Assessment	\$309,375	\$278,438	\$30,938
Software Development	\$150,000	\$135,000	\$15,000
Technical Infrastructure	\$235,504	\$211,954	\$23,550
Misc. Operating Costs	\$651,454	\$586,309	\$65,145
Phase 3	\$1,868,342	\$1,681,508	\$186,834
State Personnel	\$226,017	\$203,415	\$22,602
Program Management	\$525,000	\$472,500	\$52,500
Program Training & Assessment	\$309,375	\$278,438	\$30,938
Software Development	\$0	\$0	\$0
Technical Infrastructure	\$156,496	\$140,846	\$15,650
Misc. Operating Costs	\$651,454	\$586,309	\$65,145
Phase 4	\$401,399	\$361,259	\$40,140
State Personnel	\$0	\$0	\$0
Program Management	\$175,000	\$157,500	\$17,500
Program Training & Assessment	\$103,125	\$92,813	\$10,313
Software Development	\$0	\$0	\$0
Technical Infrastructure	\$0	\$0	\$0
Misc. Operating Costs	\$123,274	\$110,947	\$12,327
Total	\$5,952,033	\$5,356,830	\$595,203

Table 10: Detailed Budget by Phase, Cost, and FTE

Category Cost by Phase	Total	Number of Personnel
Phase 1	\$1,584,943	38
State Personnel	\$0	n/a
Program Management	\$275,000	10
Program Training & Assessment	\$153,125	10
Software Development	\$500,000	10
Technical Infrastructure	\$208,000	8
Misc. Operating Costs	\$448,818	n/a
Phase 2	\$2,097,349	74
State Personnel	\$226,016	54
Program Management	\$525,000	8
Program Training & Assessment	\$309,375	6
Software Development	\$150,000	4
Technical Infrastructure	\$235,504	2
Misc. Operating Costs	\$651,454	n/a
Phase 3	\$1,868,342	70
State Personnel	\$226,017	54
Program Management	\$525,000	8
Program Training & Assessment	\$309,375	6
Software Development	\$0	n/a
Technical Infrastructure	\$156,496	2
Misc. Operating Costs	\$651,454	n/a
Phase 4	\$401,399	14
State Personnel	\$0	n/a
Program Management	\$175,000	8
Program Training & Assessment	\$103,125	6
Software Development	\$0	n/a
Technical Infrastructure	\$0	n/a
Misc. Operating Costs	\$123,274	n/a
Total	\$5,952,033	49

Section VIII – Cost Allocation Plan for Implementation Activities

All costs requested in this IAPD will be claimed direct without cost allocation as those funds are 100% applicable to benefiting Medicaid providers and do not require fair share cost allocation per SMD#16-003: "...State costs of facilitating connections between Eligible Providers and other Medicaid providers (for example, through an HIE or other interoperable systems), or costs of other activities that promote other Medicaid providers' use of EHR and HIE, can also be matched at the 90 percent HITECH matching rate; ...and be able to claim 90 percent HITECH match for expenditures related to connecting Eligible Providers to other Medicaid providers, including behavioral health providers, substance abuse treatment providers, long-term care providers (including nursing facilities), home health providers, pharmacies, laboratories, correctional health providers, emergency medical service providers, public health providers, and other Medicaid providers, including community-based Medicaid providers."

Section IX – Assurances, Security, Interface Requirements, and Disaster Recovery Procedures

Table 11 through Table 14 demonstrate how MHD and the other state agencies involved in the project comply with all applicable Code of Federal Regulations (CFR) and State Medicaid Manual (SMM) citations.

Table 11: Procurement Standards (Competition/Sole Source)

Citation	Yes	No
42 CFR Part 495.348	X	
SMM Section 11267	X	
45 CFR Part 95.615	X	
45 CFR Part 92.36	X	

Table 12: Access to Records, Reporting, and Agency Attestations

Citation	Yes	No
42 CFR Part 495.350	X	
42 CFR Part 495.352	X	
42 CFR Part 495.346	X	
42 CFR Part 433.112(b)(5) – (9)	X	
45 CFR Part 95.615	X	
SMM Section 11267	X	

Table 13: Software and Ownership Rights, Federal Licenses, Information Safeguarding, HIPAA Compliance, and Progress Reports

Citation	Yes	No
42 CFR Part 495.360	X	
45 CFR Part 95.617	X	
42 CFR Part 431.300	X	
42 CFR Part 433.112	X	

Table 14: Security and Interface Requirements to be Employed for All State HIT Systems

Citation	Yes	No
45 CFR 164 Securities and Privacy	X	

Appendix E - Conformance with Seven Standards & Conditions

Missouri is committed to complying with the seven standards and conditions outlined in 42 CFR §433 Subpart C and SMD Letter 16-008 Appendix A and as shown in the following subsections.

Use of Systems Development Lifecycle methodologies

SES uses a COTS solution from "YouTrack" to manage and track its software development cycle for the PCM solution software. PCM went through all phases of a SDLC (i.e. plan, define, design, develop/configure, test and deploy). Wherever possible, industry standards were used in the development of the PCM solution software and it's HL7/FHIR compliant API's to connect to other siloed EHR/EMR solutions.

Submission of business rules to an HHS-designated repository

MMPP solution is a Roles/Rules based system that is controlled by granted permissions according to state and federal laws to each Role. As an example, a MMPP Role could be an admin/nurse/provider/patient /etc. with the patient controlling and granting access to their medical information. Viewing, transaction or deleting data elements in the MMPP is controlled by the state and federal laws (e.g., HIPAA). MMPP documentation covers how Roles/Rules and Permissions are used within the MMPP.

Its conformance with the seven standards and conditions was a major contributing factor in the state's decision to adopt The PCM Solution.

Standard 1: Modularity Condition

Use a modular, flexible approach to systems development, including the use of open interfaces and exposed application programming interfaces (API); the separation of business rules from core programming; and the availability of business rules in both human and machine-readable formats.

Yes	No
✓	

Standard 2: MITA Condition

Align to and advance increasingly in MITA maturity for business, architecture, and data. Complete and continue to make measurable progress in implementing MITA roadmaps.

Yes	No
✓	

Standard 3: Industry Standards Condition

Ensure alignment with, and incorporation of, industry standards: the Health Insurance Portability and Accountability Act of 1996 (HIPAA) security, privacy, and transaction standards; accessibility standards established under section 508 of the Rehabilitation Act, or standards that provide greater accessibility for individuals with disabilities, and compliance with federal civil rights law; standards adopted by the Secretary under section 1104 of the Affordable Care Act; and standards and protocols adopted by the Secretary under section 1561 of the Affordable Care Act.

Yes	No
✓	

Missouri's HIT Landscape

As with any HIT-related project, MDSS and MHD ensures the Missouri Medical Passport Program is in alignment with and incorporates the applicable industry standards, including but not limited to HL7/FHIR, and open APIs. The Public Health registries will comply with MU Stage 3 specifically HL7 standards in all areas covered under this agreement.

Standard 4: Leverage Conditions

Promote sharing, leverage, and reuse of Medicaid technologies and systems within and among states. MMPP is a COTS application that uses software and hardware to control the security of beneficiaries' medical information and can be tailored to meet various state Medicaid requirements. The software presents various "Views" of the Medical data based on the User's Role. With this approach there is little to no customization, however the system does allow for "personalization" of the Views to support various User needs.

Yes	No
✓	

Standard 5: Business Results Condition

Degree of automation

MMPP is a cloud-based solution that uses the concept of "Record of Truth" that when deployed insures that through automation, only the eligible patient is receiving the medical care they are entitled too via a "Trusted Transaction". This process requires little to no human interaction to reduce "noise" in the system.

Customer service

MMPP is a state of the art application that provides the patient the ability to carry their medical record with them for life. Educational programs have been developed and deployed via YouTube supported by system alerts workflows that send alters via email, text or voicemail to all stakeholders. MMPP is also supported through web applications and call center capabilities.

Performance standards and testing

MMPP was developed and deployed using proven SDLC methodologies.

Yes	No
✓	

Standard 6: Reporting Condition

Solutions should produce transaction data, reports, and performance information.

The MMPP application writes all transactions to a transaction log that can be used to produce various types of performance reports to system stakeholders. MMPP can produce transaction data, reports, and performance information that would contribute to program evaluation, continuous improvement in business operations, and transparency and accountability.

Yes	No
✓	

Standard 7: Interoperability Conditions

Ensure seamless coordination and integration with disparate EHR/EMR systems, and is capable of being interoperable with health information exchanges, public health agencies, human services programs, and community organizations providing outreach and assistance services.

Yes	No
✓	