



# Behavioral Health MITA

## Concept of Operations Document Version 2.0



Developed for  
**Centers for Medicare & Medicaid Services**

**Behavioral Health MITA**

**Concept of Operations Document**

**Version 2.0**

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## Section 1 Introduction

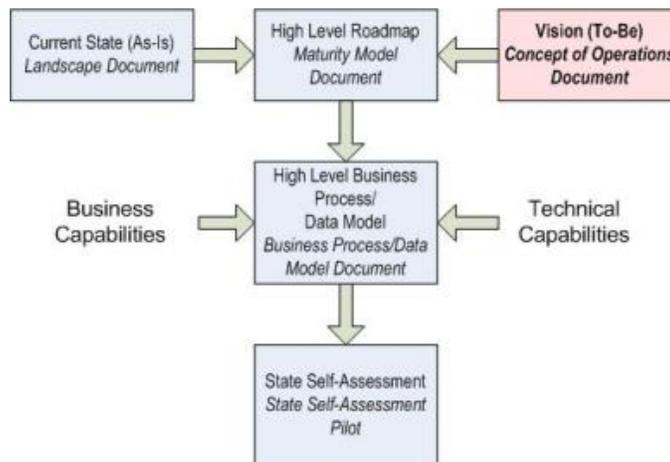
This document presents the Behavioral Health Medicaid Information Technology Architecture (BH-MITA) Concept of Operations (COO) and explains its role in the overall BH-MITA Framework. The BH-MITA framework provides a tool and potential guidance to State mental health (MH) and substance abuse (SA)—herein both referred to as behavioral health (BH)—agencies as they seek to improve their business operations and build systems that interoperate with each other and with Medicaid systems. Medicaid programs may also find the BH-MITA tool instructive regarding integration of data with BH agencies. This document draws extensively on previous work done by the Centers for Medicare & Medicaid Services (CMS) on the Medicaid Information Technology Architecture (MITA) Framework 2.0, March 2006.

**The BH COO builds on the CMS MITA Framework 2.0, available at [http://www.cms.hhs.gov/MedicaidInfoTechArch/04\\_MITAFramework.asp](http://www.cms.hhs.gov/MedicaidInfoTechArch/04_MITAFramework.asp).**

Based on the MITA Business Area/Business Process model, the BH-MITA model captures:

- Current business and technical capabilities (the As-Is state, in the Landscape document),
- A broad vision of future business and technology (the To-Be state, in this COO), and then
- Presents a series of snapshots in a high-level roadmap, called the Maturity Model, that projects how business and technology will change in between.

Figure 1-1 below shows the documents developed for this phase of the BH-MITA project, depicting the purpose of each document and relationships between them. The COO is in pink.



**Figure 1-1 Document Relationships in the BH-MITA Project**

The COO establishes the framework boundaries for the BH-MITA model and sets the foundation for developing the Maturity Model. The Maturity Model provides both a high-level roadmap for further business and technical transformation and a general measure for progress along the path to the ultimate vision. The MITA Business Area/Business Process model was the foundation for

developing the vision, grounded in the BH business processes of today. Like the MITA model/framework, the BH-MITA framework is dynamic and must be updated as changes occur.

### 1.1 *What Is the Concept of Operations Document and Purpose?*

**The COO documents the BH vision and the projected impact of improvements on stakeholders, information exchanges, BH operations, and health care outcomes. It is business and technology solution neutral.**

A COO document presents a well-thought-out vision of the future and projects the impact of planned improvements on stakeholders, information exchanges, BH operations, and health care outcomes. The COO document communicates to stakeholders the major technical and programmatic issues related to core IT asset development/acquisition. This COO document is also designed to introduce the COO framework and its concepts to State BH leaders to facilitate understanding and assist their participation in future stages of this BH-MITA project.

### 1.2 *What Is the Concept of Operations?*

The COO structure helps organizations document their current state of operations, envision desired operational changes, and describe anticipated improvements in stakeholder interactions, the quality and content of data exchanges, and business capabilities. The COO also defines the roles of the various stakeholders involved and identifies the general transformation path for leveraging technical solutions to improve business operations. The COO sets out two points:

- 1) A beginning (the As-Is state) where BH agencies are today
- 2) A future vision (the To-Be state) where BH agencies would like to be.

The COO creates a transformation pathway through a series of stages that set the foundation for the Maturity Model. The COO is **not** a roadmap, implementation, or transition plan, as it does not contain detailed steps involved in planning for the transition. It does not prescribe or limit the solutions or technologies that may be used to reach that vision. However, it does offer a clear methodology to assist further planning to realize the goals and objectives needed to reach the vision, including development and enhancement of core technical assets and systems.

**The COO is NOT a roadmap, but does describe the destination. The Maturity Model outlines the process for a high-level roadmap and sets progress points along the way from the current state to the future vision.**

Table 1-1 below summarizes the key components of the COO document.

**Table 1-1 Summary of Key Components of the BH COO**

Summary of Key Components of the BH COO		
Component	Description	Impact on Transformation
Vision for BH Agencies	Describes a future that meets BH goals as State BH agencies and SAMHSA envision them. The vision draws from a visioning session with States, Federal agencies, and national associations. It includes a statement about the BH mission and goals and BH- MITA mission, goals, and objectives.	The vision lays the foundation for the transformation of BH agencies by setting targets for the BH-MITA Maturity Model and business capability improvements.
Stakeholders	Identifies major stakeholders (e.g., clients, providers, other agencies, advocates, legislators, and the public) and describes their roles now and in the future	Stakeholders and their roles are transformed, and new stakeholders emerge. Some changes may bring paradigm shifts in how individuals and organizations participate in BH programs and services.
Information and data	Addresses data exchanges that occur among stakeholders now and that will occur in the future. It includes all data required by the BH enterprise for its operations and all data shared or exchanged with other parties. It includes not only BH agency data but also MH/SA service data from Medicaid.	Information and data continuously undergo change. The BH-MITA Framework presents a structure for ensuring that evolving data standards and new requirements for information meet objectives of higher levels of business maturity.
Accelerators and Constraints	Summarizes accelerators that propel and support the transformation (e.g., new legislation and regulations, new standards and technology, and shifts in demographics and funding), as well as constraints that inhibit or slow the transformation	Accelerators and constraints are external to the business operations but are major drivers for or major barriers against change.
As-Is Operations	Describes some current operations to establish a baseline and common ground across all States. As-Is operations are those found in most States today. (Not all States are at equal levels of maturity.)	As-Is operations are the “ground zero” for the transformation.
To-Be Operations	Describes the target vision over a 10+ year time frame. Graphics supplement the narrative description.	To-Be operations reflect changes expected over the next few years and dramatic changes — paradigm shifts —expected over the next 10+ years in the way BH agencies do business.
Transformation Plan	Lays out the incremental roadmap for the transformation	The Transformation Plan describes how States and SAMHSA can realize the objectives of the transformation.

### 1.3 Background for the Vision

The content of this COO document was gathered from a visioning session, from information in the previous landscape document, and from state surveys on technology and systems. In February 2008, SAMHSA/CMS hosted a facilitated session with representatives from several States, Federal agencies, Federal BH contractors, and national BH associations (National Association of State Alcohol and Drug Abuse Directors, Inc. (NASADAD) and the National Association of State Mental Health Program Directors (NASMHPD)) to brainstorm on how the BH enterprise might look in the future, with particular emphasis on enhancing operations through technology. Six States were specifically invited because of their progress towards greater automation of BH operations and integration with other State agencies, such as Medicaid. State participants represented each State’s mental health, substance abuse, and Medicaid agencies, providing a broad perspective to explore how these various entities might merge goals and visions in the future. While much good information was captured in the visioning session, it is impossible to include everything in this document. The session is fully documented in the session notes, which are available to State BH agencies from SAMHSA on request. This COO document synthesizes the session results and lays out a vision for improvements in BH agency operations in the future.

## Section 2 Current State (As-Is)

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This section provides a high-level view of the BH enterprise in the present to define the start point for the transformation possibilities the BH-MITA framework envisions. An earlier BH-MITA deliverable, the Behavioral Health Landscape, provides a more detailed description of State BH agencies and Medicaid business operations and information systems today. The Landscape document emphasizes those States that have made significant progress towards greater automation, integration, and interoperability.

The current BH enterprise involves numerous entities whose relationships and information exchanges have evolved over the years. Major participants are SAMHSA, State BH agencies, Medicaid, providers, counties, BH organizations, clients, other State and local agencies, and other payers. Federal funding augments State and local resources for BH services. State BH and Medicaid agencies administer various BH programs, and may fund local intermediaries, who contract for BH services or directly pay providers, counties, BH organizations, and others to deliver a range of treatment and recovery support services. Primary influences on the BH enterprise are: Federal, State, and local legislation; Federal and State BH and health care initiatives; provider and consumer advocate concerns; courts and correctional facilities, the current American health care delivery and technology environment; funding and reporting requirements; and vendor solutions. The BH enterprise is part of a loosely structured local, State, and national BH and health care infrastructure that shares providers, consumers, treatment protocols, data standards, health improvement objectives, and other related information.

**Currently, automation in State BH agencies ranges from simple systems capturing the necessary reporting data to fledgling interoperable systems with EHR capability and connections to Medicaid and other State systems.**

### 2.1 BH Mission and Goals

The BH Mission and Goals statements provide direction for the vision and the foundation for all components of the BH-MITA Framework. SAMHSA recently adopted a broad “public health” context for MH and SA treatment and recovery support services as the extent of the problems and impacts from lack of care, not just on the individual but also on the community and the health system, become clearer. Failure to address MH and SA disorders has a ripple effect across the entire community, yet numerous studies show that SA treatment is cost effective, paying for itself many times over. However, treatment for BH disorders is increasingly dependent on public funding, primarily from SAMHSA and Medicaid programs.

SAMHSA’s public health approach is focused on *recovery-oriented systems of care* (ROSCs), which support person-centered and self-directed approaches to care that build on the personal responsibility, strengths, and resilience of individuals, families, and communities to achieve sustained health, wellness, and recovery from alcohol and drug problems. ROSCs offer a comprehensive menu of services and supports that can be combined and readily adjusted to meet the individual’s needs and chosen pathway to recovery. ROSCs encompass and coordinate the operations of multiple systems, providing responsive, outcomes-driven approaches to care. ROSCs require an ongoing process of systems improvement that incorporates the experiences of

those in recovery and their family members. (This is distinguished from *recovery support services* (RSSs), which are non-clinical services that assist individuals and families to recover from alcohol or drug problems. They include social support, linkage to and coordination among allied service providers, and a full range of human services that facilitate recovery and wellness contributing to an improved quality of life. These services can be flexibly staged and may be provided prior to, during, and after treatment. RSSs may be provided in conjunction with treatment, and as separate and distinct services, to individuals and families who desire and need them. RSSs may be delivered by peers, professionals, faith-based and community-based groups, and others. RSSs are a key component of ROSCs.)

SAMHSA’s public health approach is also:

- Population-based (improving BH indicators for an entire population, not just for a single individual)
- Prevention/health-promotion oriented (not focused solely on treating a problem after it occurs)
- Comprehensive and holistic, in terms of an individual’s needs and the community’s needs, recognizing the interplay between BH, physical health, and other aspects of well-being (e.g., social connectedness, education, housing, criminal justice)
- Works across systems and professions

Given this, BH agencies are working to coordinate BH care and recovery support services across a broad range of health agencies, providers, and services, and with primary medical care and Medicaid in particular, to improve care and provide the best overall outcomes for BH clients. A consensus of the participants in visioning session crafted the BH mission statement in Figure 2-1 with this comprehensive approach in mind. Since the session involved a limited number of participants, these mission/goals may be subject to further consensus building

**Figure 2-1 BH Mission and Goals Derived from Interviews with States**

<b>BH Mission</b>	To foster individual and community health, safety and wellness through a coordinated, effective, culturally responsive continuum of prevention, intervention, treatment, recovery, and support services.
<b>BH Goals</b>	<ul style="list-style-type: none"> <li>▪ To improve health and life outcomes for individuals and communities.</li> <li>▪ To ensure efficient and effective management of BH programs.</li> <li>▪ To ensure individuals have access to quality, timely and affordable services.</li> </ul>

The COO establishes an initial time frame of current operations (present, plus the next 2 years), and then projects To-Be operations in the short-term (approximately 5 years) and in the long-term (approximately 10+ years). Table 2-1 illustrates how the BH mission is demonstrated in the As-Is time frame, and projected for the short-term and the long-term.

**Table 2-1 The BH Mission Realized Now and in the Future**

<b>Behavioral Health Mission: Foster Individual and Community Health, Safety and Wellness Through a Coordinated, Effective, Culturally Responsive Continuum of Prevention, Intervention, Treatment, Recovery, and Support Services</b>	
<b>As Is</b>	<b>Long-term</b>
Agency complies with State and Federal regulations to maintain an adequate MH/SA provider network and support and pay for provision of services to encourage provider participation and ensure access to care. Many steps require paper rather than electronic intervention. Data content is nonstandard. Outcomes are assessed retrospectively.	Agency directly accesses clinical and administrative information nationally through a network of health information exchanges (HIEs), or the National Health Information Network (NHIN). Agency makes informed, automated decisions regarding most service, treatment, and payment interactions, and assesses outcomes in real time. Agency compares services and outcomes across a broad spectrum of providers, agencies and States. Access to clinical data increases efficiency and effectiveness of decision making.

**2.2 BH-MITA Mission and Goals**

Federal, State, and local governments, as well as service providers and consumers, need reliable and timely data to inform policy, program, and service decisions for BH. Evidence-based practices and other care and payment initiatives increasingly require decisions that are data-based and data-driven. SAMHSA has a formal Data Strategy that supports data and system efforts to improve data access and exchange. As some States are already integrating MH and SA data into interoperable electronic health records and data systems, one of the key goals of the data strategy is to:

*Promote the use of interoperable electronic health records and health information technology to improve quality and safety of care, increase administrative efficiencies, and encourage consumer and family driven health care.*

The BH-MITA project itself was developed to improve greater coordination and integration with Medicaid data and systems in particular. BH-MITA is a starting point for that goal, and is designed to be a primary technology enabler for the BH mission. It therefore has its own mission, goals, and objectives, also developed with the consensus of visioning session participants, as shown in Figure 2-2. Since the session involved a limited number of participants, these mission/goals may be subject to further consensus building

**Figure 2-2 BH-MITA Has a Mission, Goals, and Objectives**

<b>BH-MITA Mission</b>	To establish a national framework of enabling technologies and processes that support improved program administration for the behavioral health enterprise.
<b>BH-MITA Goals</b>	To promote integration, interoperability, and coordination with Medicaid and other partners to improve overall health, data supported analysis, and decision making.

The Medicaid and BH mission/goals are quite compatible; in fact, the BH Mission is expansive enough to accommodate the Medicaid mission as stated in the MITA Framework. The MITA and BH-MITA Mission and Goals are almost identical. These similarities should facilitate



BH-MITA Concept of Operations Document  
BH-MITA Technical Support Services 2007-2008

coordination, collaboration, and integration between BH and Medicaid systems over time, and help direct technology efforts towards an even broader goal of an integrated public sector health enterprise. Medicaid is already a pivotal funder of MH/SA services in this country and thereby is a key partner in any effort to improve the BH enterprise.

**The key goal of the BH-MITA project is to promote integration, interoperability, and coordination with Medicaid in particular to improve overall health, data supported analysis, and decision making.**

## Section 3 Visioning (To-Be)

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This section presents a high-level vision of the BH enterprise of the future (approximately 10 years) that inspires the transformation the BH-MITA Framework helps realize.

The BH enterprise of the future is one in which BH stakeholders (policy makers, all levels of government, advocates, consumers, providers, and others) participate in achieving improved population health outcomes by fostering individual and community health, safety, and wellness through a coordinated, effective, culturally responsive continuum of prevention, intervention, treatment, and recovery support services. Stakeholders benefit from improved information access and exchange that allows providers, payers, and clients to view key clinical information in real time and use it to make care decisions. Providers and funders can then focus on providing treatment and recovery support services, as burden of information capture, processing, and reporting is largely replaced by direct exchange between data partners or direct access to a health exchange network.

Achieving the vision depends on accelerators and constraints over the next 5 to 10+ years. The future vision is realized through forward-thinking legislation, generous treatment funding, enlightened program policies, convergence of data standards and exchange protocols, enabling technology, and empowerment of stakeholders to ensure a healthier future for all. The BH-MITA Framework is evolving as the health care industry is making a quantum leap spurred on by the adoption of the Electronic Health Record (EHR), the maturing of Service Oriented Architecture (SOA), the development of Web services, and the President's 2004 Executive Order to develop an interoperable health information technology infrastructure including a National Health Information Network (NHIN) by 2014.

### 3.1 BH Vision

A key step in the COO is to frame the vision. The vision scenario provides the foundation for all components of the BH-MITA Framework. The BH vision scenario below was developed in the COO visioning sessions, incorporates a range of variables and includes:

- Interactive, consumer-centered and controlled data and systems
- Standardized, streamlined, interoperable and automated processes that eliminate complexity and redundancy and facilitate timely and appropriate care
- Real-time, fully automated reporting and exchange mechanisms
- Elimination of administrative and programmatic barriers to care
- A seamless and transparent integration of treatment programs and recovery support services across not just health related entities, but across other sectors as well, such as the courts system, housing and employment services, correctional institutions and probation offices, the child welfare system, social services and disability, and any other systems and services that impact individual health and wellness.

## BH Vision Scenario

*A pregnant woman presents for prenatal services at a “one-stop shop” community agency, and a partner in a Health Information Exchange (HIE). She does not speak English, so agency staff use an interpreter to walk through the intake questions online, along with a short screening for general health, mental health and addiction issues. The woman is at risk for mental illness and addiction problems and is immediately scheduled for further assessment. She is assigned to a care manager, and all necessary consents are obtained and registered in a system, along with her language and literacy level.*

*The online application assigns her to a high-risk pregnancy group and produces a list of specialist obstetricians with other pregnancy-related services she qualifies for, and simultaneously she receives preliminary approval of eligibility or services. All collected information is compared to the client’s profile in the HIE, and automatically added if new or different.*

*The case manager and counselor review her up-to- date information prior to meeting the client and learn the woman is on medication for clinical depression, has a child in foster care, and has difficulties with medication compliance. The counselor sees if the woman is currently receiving mental health services from other providers in the HIE network.*

*The woman visits her care manager, who asks about needed services and helps the woman create a personal health record (PHR), which is automatically updated from the HIE (e.g., weight, diet, living and employment situations, medication compliance, and risk factors) whenever she visits another service provider. Using the Internet she gains access and appropriate interactive education. She can limit which providers see what information. The limits are honored and passed along in each HIE exchange of information. All this information is accessible to both the woman and her providers as appropriate to foster shared decision making. Her physicians, care manager and other service providers can regularly review her PHR and prompt her remotely to improve compliance, schedule appointments, and refer or recommend additional services. The PHR system contains rules to automatically route any information subject to mandatory reporting requirements to the appropriate agency.*

*Her online information and assessment results yield a comprehensive list of providers and services geared to the specific nature and level of her mental health and substance abuse needs. The new list contains mental health and addictions service providers as well as other recovery support services specific to her needs, such as for income supports and housing, all merged with the pregnancy services list. The list is customized for the woman’s address, linguistic and cultural preferences, and any complicating diagnoses and co-occurring disorders.*

*The woman receives printed confirmation of each appointment with date, time, and address, and any additional information needed for the visit including vouchers or approvals for the other services. This information is coded onto a card or other transportable media for any provider to use to activate, pay, or arrange for services. Additional services include a pill box that automatically dispenses her medications and monitors compliance. She may choose to implant a monitoring device which checks blood pressure, tests for gestational diabetes and pre-eclampsia, and adjusts her medication dosages accordingly.*

*After the visit, the care manager reviews the woman’s PHR and intake information and convenes a virtual treatment team for the woman and child. The treatment team interacts online or via teleconference to discuss the most appropriate set of treatment and recovery support services, builds a treatment plan, and helps remove any barriers to services. The team adjusts the treatment plan accordingly as the PHR registers changes to her condition and situation.*

### 3.2 BH-MITA Vision

The BH-MITA project serves to direct greater coordination and integration with other data and IT systems, Medicaid in particular, with an eye on a larger long-term vision of a comprehensive public sector health IT system enterprise that brings all public sector health, wellness, and support programs under a single umbrella. This new approach would provide the data, networks, and system functionalities to operate health programs and services as a continuum, and aid collaboration and coordination of care and recovery support services across the health spectrum and each individual’s life to support optimum physical, mental, and emotional health for the whole person and whole communities as needs change over time.

**The BH-MITA project is intended to promote greater coordination and integration with other data and IT systems, Medicaid in particular.**

Interoperability of health systems combined with personal health care records (PHRs) are envisioned as core capabilities that can drive more active consumer participation in their care, facilitate more provider-to-provider sharing of client-specific clinical information to improve coordinated recovery-oriented systems of care, and enable consumer-centric care and treatment planning across public sector health agencies and the broader health industry. Table 3-1 shows examples of how BH-MITA can help achieve the health system delivery changes using technical and data goals of today to support BH technical and data changes in both the short- and long-term.

**Table 3-1 Examples of BH-MITA Goals in As-Is and Long-term Scenarios**

<b>Promote integration, interoperability, and coordination with Medicaid and other partners to improve overall health, data supported analysis, and decision making.</b>	
<b>As Is</b>	<b>Long-term</b>
Multiple stand-alone state and provider systems and networks in various stages of integration exist. Data content is non-standard and other data standards are in limited use. Data exchanges are mostly point-to-point (i.e., not interoperable).	Agencies seamlessly integrate clinical and administrative information. Clinical information is available for instant decision making through the NHIN. BH and Medicaid goals merge with national health care goals and those of public health and public safety.

## Section 4 Transformation

This section identifies State BH agency business areas and participants impacted by the vision, and highlights examples of the transformations expected to occur. BH-MITA challenges State BH and Medicaid agencies to look into the future to achieve a vision of BH transformation. In reality, many obstacles can derail the plans for transformation, including funding shortfalls, lack of resources, and failure of accelerators to meet expectations. However, the BH-MITA principles provide a track for continued progress despite occasional setbacks.

The transformation from the As-Is state to the To-Be state involves evolving technologies and business models towards seamless integration and convergence of processes and services. The BH and BH-MITA Mission and Goals provide the platform for predicting certain transformations. Examples of how operational transformations may unfold are in Table 4-1 below.

**Table 4-1 Examples of Transformation from As-Is to To-Be**

As Is	To-Be
<b>Providers and Clients Interact with Behavioral Health Agencies</b>	
Clients often go to several different offices and fill out multiple forms to receive benefits and services from various programs and providers. States have difficulty accounting for quality, outcomes, efficiency, and effectiveness of health services. Funding "follows the program, not the client."	One stop shopping allows any service to be accessed through any service center. Automated information exchange between client and agency initiates appropriate services. Business rules set optimal service and benefit hierarchies; eliminate language and cultural barriers; and accommodate functional challenges. Funding follows the client.
<b>Clinical Information Is Required to Complete the Business Process</b>	
Clinical information, treatment histories and outcomes arrive in multiple formats to support care decisions, payment, and review or audit of the services rendered. Information is nonstandard and the process is labor intensive, inconsistent, and slow. Data to meet administrative, financial, and public health requirements are reported (redundantly) to secondary users (e.g., public health, DHS, immunization registry), reducing data quality and timeliness.	Clinical, administrative, and financial information generated from the point of care is standardized and immediately accessible to authorized parties via exchange networks to improve outcomes and reduce reporting burdens.  All clients have PHRs/EHRs connected to clinical protocols and business rules to determine appropriate services and outcomes. Immediate access to clinical data allows providers to focus on treatment and enables greater client participation.
<b>Collaboration Improves Health Outcomes</b>	
Behavioral health, Medicaid, public health, and other agencies communicate ad hoc, with little or no interoperability. Providers report service information for multiple purposes (e.g., payment, disease and federal reporting) independently and often redundantly. Lack of communications means services may overlap; treatments may be contraindicated; opportunities for interventions and health improvements may be missed.	Information entered into a PHR/EHR connected to an HIE network automatically notifies payers, registries, alert systems, and reporting systems that new information is available. Behavioral health, Medicaid, and other public agencies collaborate on coordinating care, improving health outcomes, promoting public safety, and increasing process efficiencies.

### 4.1 General Process Transformation

BH operations have evolved a great deal over the years. Currently, State BH agencies are often small operations that oversee a wide range of programs and contracts with a complex variety of providers, funding intermediaries, and support organizations. The use of automation varies widely across States, some with simple systems that collect only required reporting information, while others are moving into interoperable technologies that support the use of electronic health records (EHRs) and/or personal health records (PHRs). Reporting, claims and other payments, and contracting are the most commonly automated business processes. However, the US Postal

Service (USPS), telephone, and fax services are still widely used, particularly at the provider and intermediary level, for client admission/discharge, information exchange, and some payment and contract processes.

Three key areas of transformation are discussed in the COO: business process, stakeholder, and data/communications. Each section includes tables with examples of how technology (or lack thereof) impacts these areas in the present compared to how technology might change them in the future. The health industry is undergoing a major paradigm shift that will play out over the next 10+ years, so the future To-Be may not map back exactly to the As-Is operations of today. More complete tables for each area are in the Attachments section at the end of the document.

- The process transformation table provides examples of how high-level BH business process operations, such as client management and provider/contract management, might change with increasing automation, integration, and access to data.
- The stakeholder transformation provides examples of how different stakeholder roles could change with improved access to more and better quality data.
- The data/communications transformation provides examples of how data content, quantity, timeliness, availability, and integration, along with automating data collection, access, and uses, change the overall business of BH.

#### 4.2 Business Process Transformation

Table 4-2 contrasts the As-Is and To-Be states for high-level BH business process categories. The table is aligned with the current BH agency business process model, and would be used as in the actual planning process for a State BH agency technology project. The table contains a few business process examples to show the approach, content, and level of detail a State BH agency would use for its own development process. The complete Table A-1 outline is in the Attachments section at the end of the document.

**Table 4-2 Example Comparisons of As-Is and To-Be Operations (Under Construction)**

As-Is Operations	To-Be Operations
<b>Client Management (CM)</b>	
What CM operations do now: <ul style="list-style-type: none"> <li>• CM operations receive client demographic data, establish client and service criteria via contract, and conduct analysis using client level data. CM may oversee the care management process.</li> <li>• CM operations focus on assuring access to care, establishing service criteria for contracts, and monitoring outcomes.</li> </ul>	How CM operations can change in the future: <ul style="list-style-type: none"> <li>• CM operations has reduced data collection burden with information availability through EHR/PHR data via HIEs</li> <li>• CM operations focus program and service outcomes analyses: are clients receiving better care, are health trends improving, etc.</li> <li>• Determination of client eligibility for an array of services is done seamlessly and offered to client</li> <li>• CM is accountable for health improvements for the BH population</li> </ul>
Deficiencies in As-Is operations: <ul style="list-style-type: none"> <li>• Most CM functions are supported by automated but often non-integrated systems.</li> <li>• There is little outcome or medical information readily available; conclusions are based on surveys and claim or reporting data.</li> <li>• It is time consuming and difficult for the client to find information on providers and services</li> </ul>	Improvements in To-Be operations: <ul style="list-style-type: none"> <li>• CM accesses client EHR/PHR to monitor trends, progress, and outcomes</li> <li>• CM has access to service history and outcomes to assess impact of treatment plans; information is timely, accurate, comprehensive</li> <li>• CM staff collaborate with other agencies and payers to ensure optimal services for BH clients</li> </ul>

As-Is Operations	To-Be Operations
<p>Summary of As-Is operations:</p> <ul style="list-style-type: none"> <li>As-Is operations concentrate on the maintenance and analysis of limited client data that is not connected to services used.</li> <li>CM lacks time, tools, and data to assess quality of care, consumer satisfaction, population BH status and trends, and improvements in BH status and program services.</li> </ul>	<p>Summary of To-Be operations:</p> <ul style="list-style-type: none"> <li>CM operations monitor and assess services received by clients, improvements in population BH outcomes, and enhancements to services</li> <li>CM collaborates with other health agencies to provide enriched, non-redundant, continuous, and high performing programs and services</li> <li>Many As-Is processes are no longer needed; attention shifts to evaluating and improving client services</li> </ul>

For all areas, improved data availability and access streamlines functions, improves communications, reduces manual activity, improves analyses, comparability, and performance/outcome measures, and facilitates care, treatment, recovery support services, administrative, regulatory, and reporting processes. Embedded business rules and automated functionalities speed up a variety of state agency and provider program activities, reduce human intervention and errors, facilitate client involvement, and support quicker and more effective policy and practice changes based on real-time knowledge. All of these changes impact the operations, processes, and functions of State BH agencies, and significantly alter what these agencies might achieve.

### 4.3 Stakeholder Transformation

This section illustrates how the transformation of the BH enterprise affects stakeholders (e.g., clients, providers, the State BH agency, the State Medicaid, and other State and local agencies, Federal agencies, other payers, legislators, and the general public). Currently, State BH agencies interact with stakeholders through both traditional and new channels, including EHRs and Web portals. These point-to-point transactions differ from State to State, but stakeholders in these transactions typically maintain a passive relationship with BH agencies. In the future, however, stakeholders become more active participants. Clients, for example, are able to make more treatment and recovery support service choices and maintain PHRs they can access any time. Providers communicate directly with other providers to initiate referrals and receive client and outcome information. Other agencies and payers become true partners in a collaborative environment in which they share and jointly act on information to the benefit of the client.

Table 4-3 summarizes the impact of transformation on the roles of State BH agencies over the next 10+ years. A more extensive stakeholder list and the impacts on those stakeholders can be found in Table A-2 in the Attachments section at the end of the document.

**Table 4-3 Example of Transformation of Key Stakeholder Roles**

Roles of Stakeholders — As-Is, Short-term, and Long-Term	
As Is	Long-term
<p><b>State BH Agency.</b>            State agency outsources client level treatment management to providers, counties, and other entities. The mix of different funding mechanisms and reporting requirements is not the same for MH and SA. Some procedures are manual.</p> <p>Data, services, and care management approaches are non-standard and often siloed. Culture, focus, and priorities of BH agencies are distinct from that of Medicaid. Within BH, MH follows more of a claims based encounter model, while SA follows more of a care management/program "grants" model.</p>	<p>State agency has automated almost all routine operational processes and requires minimal human intervention. Clinical data improves accuracy of information and supports decisions. Agency's focus is on strategic planning and performance monitoring. Prevention, early intervention, and predictive modeling reduce the need for services. Agencies can effectively show ROI for services delivered.</p> <p>Data, services, and care management approaches are fully integrated. BH agencies, Medicaid, and other health payers of related services operate in a fully integrated manner, and all operate from a customer driven focus. BH agencies have full parity policy with Medicaid.</p>

**4.4 Information and Communication Transformation**

Figure 4-1 shows how information exchanges among stakeholders might look in the future. This picture shows all stakeholders accessing, adding, exchanging, analyzing, and performing business operations with data and information in a virtual environment. One possible exchange mechanism is through virtual networks, previously called Regional Health Information Organizations (RHIOs), but now referred to as Health Information Exchanges (HIEs). A number of these are under development in various areas around the country, with the long-term national vision that these HIEs will eventually interconnect to form a national network, the National Health Information Network (NHIN).

**Figure 4-1 The COO Describes a Possible To-Be Scenario for the Future**

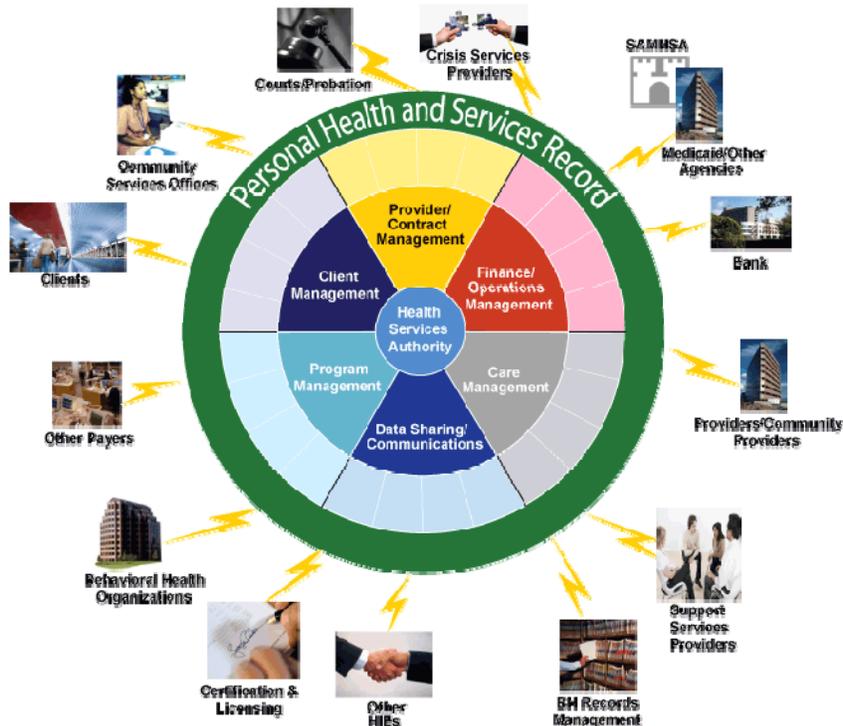


Table 4-4 summarizes the changes and improvements in information exchanges and data content within the BH enterprise. The major changes are:

- Data is standardized for exchange purposes, and client level data is linked across all state agencies
- Information is client controlled; consumers and providers access and use information to improve coordinated treatment, recovery support services and outcomes
- Routine manual operations are replaced by automated processes using SOA, and data shared via the Web lowers burdens of reporting
- Information is transformed into a knowledge base so the State BH agency can focus on strategic planning, improving services, performance and outcomes, and collaborating across sectors and nationally to improve health and public safety

In the As-Is environment, limited data is available and accessible to support BH operations at all levels. Reporting and administrative data are the primary sources. Data content is standardized only internally and in those transactions that comply with HIPAA. Most State BH agencies generally have no external interoperability outside of their provider/contractor network. Information retrieval can be time consuming and expensive.

Table 4-4 summarizes the impact of transformation on data and communications over the next 10+ years. The complete table that details the effects of transformation on different types of data and communications can be found in Table A-3 in the Attachments section at the end of the document.

**Table 4-4 Data and Communications Are Transformed over Time Summary**

Data Content and Interchanges — As-Is and Long-term Scenarios	
As Is	Long-term
General characteristics of As-Is data content and exchanges: <ul style="list-style-type: none"> <li>• Based on Federal reporting requirements</li> <li>• Provider or funding stream focused</li> <li>• Mostly electronic, but still often siloed and lacking clinical detail</li> <li>• Barriers to reporting additional information on client from other health or social services providers exist.</li> <li>• Data not real time</li> <li>• Widespread use of less secure mail, fax, and telephone by intermediaries and providers</li> <li>• Additional clinical data supplied on paper on request or through audits and surveys</li> <li>• Slow and inefficient data analysis process (data is often incomplete and not comparable to data from other systems)</li> <li>• Provider data is often still manually input into the system</li> </ul>	Possibilities for data content and exchange in the long-term: <ul style="list-style-type: none"> <li>• EHR-like data replaced by full EHR access brokered through local HIEs</li> <li>• Primarily consumer focused and controlled. Consumer can control personal health information at a granular level.</li> <li>• Interoperable data systems include additional client information from other health and social services systems that can easily be linked and collected</li> <li>• A significant portion of the data is real time</li> <li>• Electronic capture of clinical data becomes the norm as manual exchange of information is obsolete and exceptional</li> <li>• Clinical data readily available to authorized users and used for regular feedback to providers and payers at all government and other stakeholder levels.</li> </ul>

In the To-Be scenario, technical, semantic, and process interoperability facilitates data sharing on a national scale. Requesters can view data integrated from many sources while the data remains “at home.” Extensive clinical data supplements reporting and administrative data. Operations “run themselves,” as provider systems communicate directly with other provider and BH agency systems, and those systems communicate with other State and local agencies and other payers.

#### **4.5 *Aligning the BH and Medicaid Technical Transformations***

The BH-MITA and Medicaid MITA visions have some similarities, but arose from different objectives. The focus of MITA vision is to improve Medicaid systems through facilitating business IT transformations. The MITA Framework in general includes extensive drill downs into the detailed operations of Medicaid programs around the country in order to encourage more flexible, modular, and comparable State systems. The core of the MITA Framework, however, is an approach and processes that are generally applicable regardless of the agency or organization in question. BH-MITA was conceived not only to confirm the extensibility of the MITA Framework approach and strengthen the relationship with Medicaid as an important funding and service partner, but also to advance the BH-MITA framework and focus more on system capabilities that support interoperability and PHRs/EHRs, and less on State agency operational details. Therefore, the BH-MITA vision includes the notion of interoperability and interconnectedness across all partners and processes, and focuses on integrating technology and automation into all aspects of the recovery-oriented systems of care delivery continuum.

The BH-MITA COO presents a broader vision that incorporates more variables than the MITA vision, for several reasons:

- The current SAMHSA BH approach that recognizes the need for a recovery oriented systems of care focus to have a greater impact on BH disorders, involving a broader perspective on prevention, treatment, and recovery support services for the entire population and requiring greater access to, monitoring, and use of client and clinical information
- The reality that effective recovery-oriented systems of care for BH disorders encompasses a far more comprehensive set of treatment and community services to recognize and address not just the BH disorder but also physical health conditions, housing and support needs, court, child welfare, correctional and law enforcement connections, and other issues that impact care and long-term recovery
- The current SAMHSA BH data strategy that advocates implementation and use of interoperable EHR/PHR systems, including provision of free open-source technology that supports such systems
- Greater knowledge of and evidence for new and upcoming technologies that were less obvious when the MITA vision was developed

CMS and State Medicaid agencies are also undergoing their own transformation in how they view and operate their programs and services. Increases in Medicaid spending (creating a great strain on many State budgets) have caused a great deal of creative thinking in how to improve care and outcomes while also saving money. This has resulted in initiatives such as pay for



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performance, disease management, evidence-based practices, outcomes measures, and other activities that require greater oversight, coordination, and management of beneficiary care. The evidence is that the Medicaid focus and approach are evolving to be more like the BH focus and approach, such as in moving towards care coordination, and development of EHRs and integrated systems, among others, and Medicaid IT systems must evolve as well to support those initiatives.

## Section 5 Accelerators and Constraints

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This section discusses technical, legislative, and policy enablers (also called accelerators) and other drivers that facilitate the transformation of the BH enterprise and support the vision of the future. It also describes the countervailing forces, or constraints, that hinder or slow this transformation.

### 5.1 Accelerators

States respond to many accelerators and drivers that help or cause BH agency and program change. Some come from SAMHSA strategic plans and directives. Others come from State initiatives and political and consumer pressures. Still others come from external sources, such as Federal initiatives and legislation, changes in revenue, demographic shifts, new technologies, medical and pharmacological breakthroughs, pandemic threats, and public safety/public opinion. Accelerators considered in the BH-MITA Framework include the following:

- Legislation, such as “no wrong door” or the New Freedom initiative, and presidential initiatives, such as the President’s Information Technology Advisory Committee (PITAC)
- Demand for services outstrips growth of funding in public agencies, which increase the need for administrative efficiencies and shifting funds to pay for benefits and services to get better outcomes for the money spent. IT initiatives must now support greater process efficiencies, share resources and systems across programs and agencies, and integrate and consolidate data and systems to reduce costs.
- Federal and other national initiatives which provide frameworks to improve collaboration and integration for health, such as the Consolidated Health Initiative (CHI), FEA (Federal Enterprise Architecture), FHA (Federal Health Architecture), Federal Bridge Certification Authority (FBCA), Medicaid Information Technology Architecture (MITA) and ONC (which establishes policy frameworks for the architecture of the future)
- Existing national and industry standards, codes, technical architectures, open-source web systems, and data models that provide building blocks for further progress
- Increasing focus on initiatives to increase collaboration among Federal agencies, among State agencies, and across State and Federal agencies
- State initiatives, such as single portal, no wrong door, EHRs/PHRs, cross-agency collaboration, integrated care models, expanding health care coverage to the uninsured, and successful State models for implementing such initiatives
- Strong national momentum in, and Federal support for, the health care industry to adopt EHRs/PHRs and develop and use electronic HIE networks, and demonstrated cost savings from successful implementers
- Demographic shifts (e.g., aging populations, new immigrants), which continue to bring new pressures on the BH and health care services and delivery system to provide more services for less cost
- Technological breakthroughs, particularly web communication and EHRs. (While these look most viable today, new technologies may arise at any time that could provide even greater benefits.)

- Public safety/public opinion associated with violent incidents perpetrated by individuals with histories of BH problems, calling for better monitoring, accountability, and incident prevention

The improvements forecast for the future BH enterprise are accelerated by enabling technologies and standards that reach a point of maturity after several years of evolution. Collectively, these accelerators influence the progressive transformation of the BH enterprise.



## 5.2 Constraints

States also must deal with the realities of factors that hinder or prevent BH agency and program change. Some constraints come from Federal funding and program requirements and directives. Others come from State initiatives and political and consumer pressures. Still others come from external sources, such as Federal initiatives and legislation, changes in revenue, demographic shifts, and public safety/public opinion. Constraints considered in the BH-MITA Framework include the following:

- Both the public and private health care sectors primarily view and operate health care services in a narrow, compartmentalized fashion with a focus on acute-care episodic treatment, rather than managing overall health and acknowledging that some conditions need chronic care management over a long time. Substance abuse treatment, in particular, is often seen as separate from medical care.
- Revenue limitations for public agencies, which reduce spending on IT projects and deter major system and operational changes. When dollars are scarce, it is difficult to divert funds from health services to IT and other administrative improvements. Cost/benefit to States is often difficult to understand and quantify.
- Federal funding streams often have divergent program and operational requirements. These silos do not always support standards, integration, or interoperability. Federal funding or designated IT set-asides for State and community systems and infrastructure development are few.
- State and Federal intra and interagency turf and political issues create barriers to agency, program, and system collaboration. Existing legacy systems are largely incompatible.
- The move to automation, PHRs/EHRs, electronic exchange, and interoperability is a significant paradigm shift, which requires new skills, processes, and ways of working at all levels in the health care industry. Fears of change, lack of appropriate skills and training, and business process change require time, effort, resources, and organizational commitment.
- The costs of moving to fully automated and interoperable systems are high; benefits are delayed, are variable for different players, and are not always clear or well understood.
- National and industry standards, codes, and technologies are still in development and are not always sufficiently mature or robust enough for easy adoption in all care sectors.

- Privacy and security concerns are elevated in an electronic environment, as is assuring that confidentiality protections and consumer rights to control access to their information are maintained and strengthened.
- Provider and public fears related to electronic health information sharing include loss of treatment control, costs of conversion to IT platforms without enhanced payments, increased reporting mandates, liability, and client discrimination.

Accelerators for, and constraints upon, the visionary end-state must be understood, addressed, monitored, and balanced along the way to continue to make progress towards the vision. Many accelerators and constraints are ongoing factors that State BH agencies regularly incorporate into their technology change considerations. However, there are some potent accelerators, such as Federal directives and industry momentum that at this particular point in time are available that can greatly assist State BH automation efforts. During this window of opportunity, these should be recognized and utilized to their maximum extent while they retain their effectiveness. There are also some significant constraints, such as funding, political will, and lack of comprehensive national standards that need to be overcome to move forward.

It is clear that State BH agencies will need to monitor, manage, and minimize or maximize the effects of forces working both for and against health automation, interoperability, and electronic information exchange to continue to make progress towards the vision.

### **5.3 Summary**

The BH and BH-MITA Mission, Goals, and Vision in this COO provide the context for planning the transformation from the operations of today to the vision of the future. This document describes the current As-Is environment, the future To-Be state, and a projected high level transformation pathway, establishing the framework boundaries for the BH-MITA model and setting the foundation for development of next step, the Maturity Model. This COO document sets the stage for the overall framework and future BH-MITA documents, defining the parameters for the Maturity Model. The Maturity Model informs the development of a BH-MITA Business Process/Data Model as a framework for the development of BH IT architectures that will help achieve the capabilities documented in the vision.

BH-MITA is designed to be a primary technology accelerator for the BH Mission: to foster individual and community health, safety, and wellness through a coordinated, effective, culturally responsive continuum of prevention, intervention, treatment and recovery support services. This creates an expansive vision of recovery-oriented systems of care that includes:

- Interactive, consumer-centered and controlled data and systems
- Standardized, streamlined, interoperable and automated processes that eliminate complexity and facilitate timely and appropriate care
- Real-time, fully automated reporting and exchange mechanisms
- Elimination of administrative and programmatic barriers to care
- A seamless and transparent integration of programs and recovery support services across not just health related entities, but across other sectors as well, such as the courts system, housing and employment services, correctional institutions and probation offices, the

child welfare system, social services and disability, and any other systems and services that can impact individual health and wellness.

To achieve this vision, transformations of key areas of the BH enterprise must occur. These key areas include BH business processes, BH stakeholder groups, and BH data and communications systems, including those supported by Medicaid state agencies. Projections for how short- and long-term transformations would impact each area provide a high-level foundation for planning the stages of change, which are more fully documented in the Maturity Model.

The BH-MITA project serves to drive greater coordination and integration with Medicaid data and systems in particular, with an eye on a larger long-term vision of a comprehensive public sector health IT system enterprise that brings all public-sector health, wellness, and support programs under a single umbrella. This new approach would provide the data, networks, and system functionalities to support health and recovery support services as a continuum of recovery-oriented systems of care, and would aid collaboration and coordination of care across the health spectrum and each individual's life to support optimum physical, mental, and emotional health for the whole person, responding to an individual's evolving needs over time.

CMS and State Medicaid programs are moving in a similar direction. Therefore, the Mission, Goals, and vision of both MITA and BH-MITA must be dynamic and continue to evolve as technology, care models, and business processes change and are reengineered. It is clearly feasible and reasonably inevitable that not only MITA and BH-MITA, but also other health IT systems, will coordinate and converge into a single network and continuous care system over time.

## Attachment A Tables

**Table A-1 Example Outline for Comparisons of As-Is and To-Be Operations (Under Construction)**

As-Is Operations	To-Be Operations
<b>Client Management (CM)</b>	
<p>What CM operations do now:</p> <ul style="list-style-type: none"> <li>CM operations receive client demographic data, establish client and service criteria via contract, and conduct analysis using client level data. CM may oversee the care management process.</li> <li>CM operations focus on assuring access to care, establishing service criteria for contracts, and monitoring outcomes.</li> </ul>	<p>How CM operations can change in the future:</p> <ul style="list-style-type: none"> <li>CM operations has reduced data collection burden with information availability through EHR/PHR data via HIEs</li> <li>CM operations focus program and service outcomes analyses: are clients receiving better care, are health trends improving, etc.</li> <li>Determination of client eligibility for an array of services is done seamlessly and offered to client</li> <li>CM is accountable for health improvements for the BH population</li> </ul>
<p>Deficiencies in As-Is operations:</p> <ul style="list-style-type: none"> <li>Most CM functions are supported by automated but often non-integrated systems.</li> <li>There is little outcome or medical information readily available; conclusions are based on surveys and claim or reporting data.</li> <li>It is time consuming and difficult for the client to find information on providers and services</li> </ul>	<p>Improvements in To-Be operations:</p> <ul style="list-style-type: none"> <li>CM accesses client EHR/PHR to monitor trends, progress, and outcomes</li> <li>CM has access to service history and outcomes to assess impact of treatment plans; information is timely, accurate, comprehensive</li> <li>CM staff collaborate with other agencies and payers to ensure optimal services for BH clients</li> </ul>
<p>Summary of As-Is operations:</p> <ul style="list-style-type: none"> <li>As-Is operations concentrate on the maintenance and analysis of limited client data that is not connected to services used.</li> <li>CM lacks time, tools, and data to assess quality of care, consumer satisfaction, population BH status and trends, and improvements in BH status and program services.</li> </ul>	<p>Summary of To-Be operations:</p> <ul style="list-style-type: none"> <li>CM operations monitor and assess services received by clients, improvements in population BH outcomes, and enhancements to services</li> <li>CM collaborates with other health agencies to provide enriched, non-redundant, continuous, and high performing programs and services</li> <li>Many As-Is processes are no longer needed; attention shifts to evaluating and improving client services</li> </ul>
<b>Provider and Contract Management (P/CM)</b>	
<p>What P/CM operations do now:</p> <ul style="list-style-type: none"> <li>P/CM operations capture provider/contractor demographic data, establish and monitor provider/contractor contracts, and monitor provider/contractor compliance.</li> <li>P/CM operations fund a range of providers and contractors that offer a wide variety of treatment, outreach and prevention, and support services</li> <li>P/CM operations generally use a combination electronic and paper processes</li> </ul>	<p>How P/CM operations can change in the future:</p> <ul style="list-style-type: none"> <li>Applications and communications are largely automated</li> <li>Effective services packages are based on a rich source of information: claims, encounter, EHR/PHR, vital statistics, and many other sources</li> </ul>
<p>Deficiencies in As-Is operations:</p> <ul style="list-style-type: none"> <li>Many processes are manual, labor intensive, and time consuming</li> <li>Data needed for analyzing provider/contractor performance is untimely, incomplete, and lacking in clinical information</li> <li>It is difficult to monitor and compare different providers/contractors</li> <li>Interactive communications are regional and limited</li> </ul>	<p>Improvements in To-Be operations:</p> <ul style="list-style-type: none"> <li>Performance monitoring improves services for clients and provider/contractor satisfaction</li> <li>Effective practices and service packages are determined rationally</li> <li>P/CM operations focus on monitoring provider/contractor performance, identifying problems in access and the service delivery system, enhancing client outcomes, and improving provider/contractor satisfaction</li> </ul>
<p>Summary of As-Is operations:</p> <ul style="list-style-type: none"> <li>Focus is on establishing and monitoring provider/contractor contracts and contract compliance.</li> </ul>	<p>Summary of To-Be operations:</p> <ul style="list-style-type: none"> <li>Focus is on assessing services and service delivery system, improving client outcomes</li> </ul>

As-Is Operations	To-Be Operations
<ul style="list-style-type: none"> <li>Difficult to compare across contracts and across providers/contractors</li> </ul>	<ul style="list-style-type: none"> <li>Many As-Is processes are no longer needed; attention shifts to evaluating and improving P/CM services</li> </ul>
<b>Operations/Finance Management (O/FM)</b>	
What O/FM operations do now: <ul style="list-style-type: none"> <li>Perform billing/invoicing/reimbursement activities, support IT systems to assist provider/contractor billing; support provider information reporting</li> </ul>	How O/FM operations can change in the future: <ul style="list-style-type: none"> <li>Administrative tasks of billing and determining client eligibilities for range of human services is performed as a backend to the EHR system.</li> </ul>
Deficiencies in As-Is operations:	Improvements in To-Be operations:
Summary of As-Is operations:	Summary of To-Be Operations:
<b>Business Relationship Management/Data and Information Exchange (BM/IE)</b>	
What BM/IE operations do now: <ul style="list-style-type: none"> <li>Establish and monitor interagency and data sharing agreements.</li> </ul>	How BM/IE operations can change in the future: <ul style="list-style-type: none"> <li>Interagency and data sharing agreements are a component of an EHR based system.</li> </ul>
Deficiencies in As-Is operations:	Improvements in To-Be operations:
Summary of As-Is operations:	Summary of To-Be operations:
<b>Care Management/Decision Support (CM/DS)</b>	
What CM/DS operations do now: <ul style="list-style-type: none"> <li>Population based care management support, training and technical assistance, review and address client grievances</li> </ul>	How CM/DS operations can change in the future: <ul style="list-style-type: none"> <li>A client controlled PHR allows client choices to determine treatment and sharing of this data.</li> </ul>
Deficiencies in As-Is operations:	Improvements in To-Be operations:
Summary of As-Is operations:	Summary of To-Be operations:
<b>Program Integrity (PI)</b>	
What PI operations do now: <ul style="list-style-type: none"> <li>PI operations perform contract monitoring via site visits, conduct performance evaluations and review performance measures</li> </ul>	How PI operations can change in the future:
Deficiencies in As-Is operations:	Improvements in To-Be operations:
Summary of As-Is operations:	Summary of To-Be operations:
<b>Program Management/Strategic Planning (PM/SP)</b>	
What PM/SP operations do now: <ul style="list-style-type: none"> <li>Internal program and services administration activities such as accounting, budget, planning, and establishing performance measures</li> </ul>	How PM/SP operations can change in the future: <ul style="list-style-type: none"> <li>Real time monitoring and reporting by state on providers, client outcomes and for clinical research</li> </ul>
Deficiencies in As-Is operations:	Improvements in To-Be operations:
Summary of As-Is operations:	Summary of To-Be operations:

**Table A-2 Transformation of Stakeholder Roles**

Roles of Stakeholders		
As Is	As-Is, Short Term, and Long Term	
	Short Term	Long Term
<p><b>Clients.</b> Individuals seek BH services in person at multiple assessment center locations or through providers, complete assessments, and provide information through an intake process. Assessment unit or providers determine the type of treatment service and the payer. Client may not consider treatment choices or know payer source.</p>	<p>Clients access service information via a “no-wrong-door” consumer portal and directly enter intake information and self-administer initial assessments. Individuals are then routed to a care manager and may select services from a multi-agency menu. Agencies and programs collaborate to meet client needs. Substance abuse clients are eligible for SSI/SSDI income support.</p>	<p>Clients access PHRs, select providers, make treatment decisions, connect with a care manager, report on their progress, and track their health outcomes through a nationally interoperable HIE network that provides access to client information regardless of payer or provider. Clients are self-advocating in a consumer-oriented system.</p>
	<p>Multiple agency collaboration improves efficiency for providers and payers. Provider funding streams and payment processes are consolidated, simplified and standardized, and utilize a single system and process. Payments are associated with client identified services and outcomes. The IMD exclusion is removed, allowing greater coverage of certain MH and SA conditions.</p> <p>Reporting requirements are consolidated, simplified and standardized, captured via a single system and process. Additional clinical data meets some provider business needs, and supports evidence based practices.</p> <p>Provider processes are largely electronic and capture more clinical information. Many providers have EHR/PHR access. Analyses by states, providers and researchers are faster and better inform future treatment decisions. Confidentiality and data sharing are radically simplified.</p> <p>Providers obtain a National Provider Identifier (NPI) from a central system that captures the provider’s cultural, linguistic, and clinical competencies. Other credentialing processes are also automated, such as applications to health plan networks, licensure, etc.</p>	<p>Provider funding and payment are standardized and tracked by the system. Providers update EHRs/PHRs electronically and systems automatically inform the payer, who quickly validates the service and transfers payment.</p> <p>Screening and brief intervention for MH/SA conditions is commonplace among all care providers. Extensive clinical data is accessible and reporting requirements automatically extracted. Data are easily linked, and multi-disciplinary care management is possible.</p> <p>All providers’ clinical and administrative records are fully automated with interoperable PHRs/EHRs. Business intelligence, such as for evidence-based practice, is integrated into systems. Care models anticipate client care needs and provide decision support.</p> <p>Providers’ credentials are fully automated and nationally validated. Provider credentials, competencies, client outcomes, complaints or legal actions, services, usual charges and other data are available to consumers.</p>
<p><b>State BH Agency.</b> State agency outsources client level treatment management to providers, counties, and other entities The mix of different funding mechanisms and reporting requirements is not the same for MH and SA. Some procedures are manual.</p> <p>Data, services, and care management approaches are non-standard and often siloed. Culture, focus, and priorities of BH agencies are distinct from that of Medicaid. Within BH, MH follows more of a claims based encounter model, while SA follows more of a care</p>	<p>State agency automates many procedures and shifts focus to program analysis, monitoring, managing care and recovery support, and client decision making. There is more emphasis on prevention and early intervention, on paying for outcomes. Agencies can compute ROI for services delivered.</p> <p>Data, services, and care management approaches are more standard, evidenced based and aligned. Culture, focus, and priorities of BH agencies begin to blend with those of Medicaid, and client level data is easily shared across the agencies. BH agencies and Medicaid both follow a care management</p>	<p>State agency has automated almost all routine operational processes and requires minimal human intervention. Clinical data improves accuracy of information and supports decisions. Agency’s focus is on strategic planning and performance monitoring. Prevention, early intervention, and predictive modeling reduce the need for services. Agencies can effectively show ROI for services delivered.</p> <p>Data, services, and care management approaches are fully integrated. BH agencies, Medicaid, and other health payers of related services operate in a fully integrated manner, and all operate</p>

Roles of Stakeholders As-Is, Short Term, and Long Term		
As Is	Short Term	Long Term
management/program “grants” model.	model, develop interdisciplinary treatment plans and share resources and information on quality improvement and outcomes management. There is better integration of BH client data with physical health, foster care, disability, aging, housing, social services, criminal justice and other client-related programs and services.	from a customer driven focus. BH agencies have full parity policy with Medicaid.
<b>SAMHSA.</b> SAMHSA oversees State Agency adherence to Block Grant and discretionary grant program compliance for service delivery, reporting and client outcomes. SAMHSA’s role is largely convening and monitoring, translation and dissemination of research findings for the field, focusing on compliance in funding requirements and identifying national performance and outcomes measures. SAMHSA administers grants (block and discretionary), but has a low emphasis on supporting IT infrastructure. SAMHSA does provide technical assistance for BH IT systems, has a data strategy with IT goals, and is a strong advocate for BH issues and national studies.	SAMHSA collaborates with States and CMS to implement BH MITA and promote interagency collaboration within States; State alignments with national standards and initiatives, such as the FHA, DHHS, and ONC; implementing EHRs and PHRs, and adoption of national standards for data content and exchange. SAMHSA’s role becomes proactive — to establish the vision and new floor for improvements in care and efficiency. SAMHSA has a detailed and funded national BH data and IT strategy, which includes standard performance measures, promotion of EHR adoption and interoperability, and a public health approach.	SAMHSA, CMS and States become partners in the rollout of HIEs across the country. SAMHSA benefits as a data exchange partner with direct, virtual access to State, Medicaid, and other related data. Direct access to client level clinical information through HIEs replaces reporting requirements. SAMHSA, CMS and States join with other entities nationally to establish a single approach to U.S. health care, prevention, and service delivery.
<b>Health Information Exchange Network.</b> HIEs are sponsored through states and other organizations such as the Indiana Network for Patient Care (INPC). Clearinghouses value-added networks, and chartered value exchanges. Few State BH agencies are partners in HIE networks.	Numerous HIEs exist and operate within the National Health Information Network (NHIN) framework. Partial connectivity across HIEs exists. HIEs operate primarily via the web and web interfaces. Most BH agencies are partners in HIE networks.	The NHIN is a fully operational national network connecting regional HIEs. All BH agencies are partners in HIE networks.
<b>Medicaid.</b> Another key payer of BH services includes Medicaid. BH services paid for by Medicaid may not be well integrated with those paid for by state BH agencies.  <b>State</b> State Medicaid agencies have a health plan/payment focus. The agency usually operates several systems, and uses many manual processes. Systems operations and Medicaid functions such as eligibility are often outsourced. Individual states determine coverage and data collection. States have incentives to obtain Federal match in upgrading and building new systems, and to justify waivers.  <b>Federal (CMS)</b> CMS Medicaid has a health plan/beneficiary focus. CMS funding to states is based on several sub-systems, and does not support the MITA model. Matching requirements set at Federal level do not match MITA and state needs. Mechanisms are set up to charge services through waiver, but regions differ in interpreting what is allowed in	BH services paid for by Medicaid are better integrated with those paid for by state BH agencies. Medicaid focus shifts to care management, and begins to align with the BH approach.  <b>State</b> States develop a more consumer centric focus, and move to an active care management approach. Systems are integrated and aligned, and manual processes are reduced. As processes are automated and simplified, some are brought back in house. Integration results in a better capability to identify high-risk, high-cost, multi-system consumers, and better manage both acute and chronic care. Data collection across Medicaid systems is more standardized, and states are beginning to build and use PHRs/CHRs. There is greater use of evidence based practices.  <b>Federal (CMS)</b> CMS will move more toward a care management model. Funding formulas and requirements are changed to better support state and future system needs. Waiver structure is reworked to support	BH and Medicaid services, funding and approach are integrated and fully centered on consumer needs and care management across a continuum of needs, care and services.  <b>State</b> States move away from a provider payment model to self-directed care. State systems are seamlessly integrated, and manual processes are minimized or eliminated. Care management and cross program integration results in better consumer care, better client satisfaction, reduced duplication of services, and reduced costs to the states. States work with communities to develop strategies using integrated data. Patient advocates are engaged to support consumers in navigation of care systems, choice of services, choosing providers, and using their PHRs/CHRs effectively. Evidence based practices drive care approaches.  <b>Federal (CMS)</b> CMS supports and funds complete

Roles of Stakeholders As-Is, Short Term, and Long Term		
As Is	Short Term	Long Term
waivers.	more standardization in specific areas. Resolution of confidentiality, consent, and inter-operability issues is accomplished.	integration of data across all health and support services. Focus and funding has shifted attention to health outcomes of individuals and providers.
	Other payers join with BH and Medicaid agencies in data exchange through HIEs. Payment and client level service processes and data elements are standardized across payers. Agencies can assess coordination of benefits (COB) automatically by using data standards and collaboration, and by applying business rules managed by HIEs. Care is being coordinated across selected payers, particularly BH agencies and Medicaid.	Payment activities for all payers are conducted using HIEs in a single payment model. All payers are coordinated (as part of COB) nationally at the point of service. A provider's update to an electronic health record triggers a message to the HIE, where business rules are applied to determine and remit appropriate payment. Care is coordinated across all payers.
<b>Other Government Agencies.</b> Other Federal, State, and local agencies exchange information, when it happens at all, with BH agencies using different media, connectivity, format, and data content. Data are siloed, and data content and data exchange is usually nonstandard. Systems and processes for interactions with other agencies and with agencies at different levels (federal, state, local) can vary widely, both in technology used and requirements for interactions. Interagency trust may be low and data collaborations are largely ad hoc.	BH and Medicaid agencies adopt common standards and coordinate common business processes, and are moving towards a common care management model. Confidentiality standardization across government health programs is in place. Other Federal, State, and local agencies begin collaboration with BH and Medicaid agencies to further coordinate and develop common standards, processes, and practices. Data, system, connectivity, and integration standards to facilitate exchange are mostly in place. A common method for participating routinely in an exchange exists, and interagency trust improves.	Other Federal, State, and local agencies, like payers, join with BH and Medicaid agencies through NHIN for the common purpose of coordinating care and operations nationally. All agencies use a single health model and see themselves as a team supporting consumer centered care. Interoperability on many levels is widespread. Requirements for participating in an exchange are greatly simplified. Interagency trust is high and reinforced by strong and proven system and administrative protections.
<b>General Public, Advocacy Groups.</b> There is no standard approach for regularly providing data to the public and to advocacy groups. These groups are quite diverse and have no single or defined points of connection, but their interests are generally met by the use of aggregate information or in research on effective care and treatment approaches. Attention to information needs vary over time. The public and advocacy groups can request and receive information from State BH agencies ad hoc, subject to confidentiality restrictions.	BH agencies build improved decision transparency, and make aggregate information available regularly subject to certain conditions. BH policies are demonstrated as data-driven rather than anecdotal decisions. The public and advocacy groups can access some aggregate information and research results directly through HIEs, subject to access restrictions and authentication. Security concerns become more important.	The public and advocacy groups can access aggregate information on a wide range of research results directly through HIEs that are nationally connected to the NHIN, subject to access restrictions and authentication. Information includes health outcomes associated with treatment and service packages, benchmarked comparisons, and provider performance and costs. Advocates shift from care to security concerns.
	BH agencies improve partnerships and client level treatment data exchange with courts, law enforcement, and corrections at all levels (local, state and federal). Collaborations improve as the correctional system model changes from punishment to rehabilitation and prevention, and care models begin to converge. Data standards help improve service coordination and integration to better serve overlapping clients. Uniform and common assessments that are shared among systems, care management, and progress reports help facilitate client transitions.	Regulatory changes allow improved communication between all agencies for common purpose of coordinating recovery and continuum of care. Diversion is included as part of the continuum of care. Prevention now includes preventing certain negative social outcomes associated with BH conditions, such as arrest and incarceration. Data is standardized and easily exchanged, and PHRs are available to help clients make treatment decisions both in and out of correctional facilities. The system seamlessly maximizes eligibility options for this population.

Roles of Stakeholders As-Is, Short Term, and Long Term		
As Is	Short Term	Long Term
	<p>Legislators, regulators, and other stakeholders can access some analytic data and aggregate information directly through internal state HIEs, subject to access restrictions and authentication. Data availability, access, and timeliness are improved, and easy-to-use analysis tools allow quick ad hoc generation of statistics and analytic results. Client outcomes and other performance data are increasingly available and accessible. As a result, legislators and regulators support increased partnerships across state agencies for data and IT initiatives. Collaboration occurs across state legislatures, state agencies, and federal agencies and Congress to support care coordination across political and program boundaries.</p>	<p>Legislators, regulators, and other stakeholders can access analytic data and aggregate information directly through HIEs nationally through NHIN, subject to access restrictions and authentication. Legislators can also request information directly through the HIE, which can facilitate quick analysis and response. Information includes health outcomes and provider performance. The legislative process improves with information sharing and access to a comprehensive picture of clients' healthcare services and delivery system processes. The focus is on an improved quality of life for all individuals.</p>
<p><b>Educational Institutions.</b> There is no standard approach for providing data to educational institutions. Educational institutions can request and receive information from State BH agencies on an ad hoc basis, subject to confidentiality restrictions and IT workload restraints.</p> <p>The education system is fragmented and siloed. State funding for health and BH services in schools is variable, and drug issues in schools are primarily focused on enforcement, not treatment. Competence for treatment and assessment of BH conditions within schools is variable. Confidentiality barriers are considerable.</p> <p>School access to health information beyond immunizations from the health care sector is extremely limited, and health information from the education system is not tied into the general health care sector. Medicaid pays for some school-based care but that information is not shared with BH treatment or other health systems. Prevention activities are not universal, and residential care interrupts education.</p>	<p>Educational institutions can access some analytic data and aggregate information directly through internal state HIEs, subject to access restrictions and authentication.</p> <p>Educational institutions universally provide services for students and families with BH and other health concerns. Focus shifts from security and enforcement to treatment and support. Schools provide families with information on available community resources. School-based treatment is knowledgeable, timely, and evidence-based. School treatment assessment and competence is improved with standard automated tools. Protocols are in place for consent to share information among family, school, and treatment entities.</p> <p>Exchange of health information between educational institutions, Medicaid, and the health care sector is improved. Data sharing to support outcomes measurement (days in school, suspensions, etc.) replaces student/parent self-reports. Schools better integrate prevention, and address the stigma of BH conditions. Survey data such as from the Youth Risk Behavioral Survey (YRBS) is linked to interventions for planning and evaluation.</p>	<p>Educational institutions can access analytic data and aggregate information directly through HIEs nationally through NHIN, subject to access restrictions and authentication. EHRs and social sites can all be mined for trends in the student population. There is seamless sharing of approved treatment information between health entities and education institutions at all levels.</p> <p>BH and other health services and information in educational institutions are seamlessly connected to and fully engaged with external health services and information systems. Treatment services and supports are increasingly available on site, and prevention is endemic. The schools emphasize better health education in the schools, including recognition of mind-body connections, personal actions, and available resources. Health issues of particular concern in schools, such as campus drinking, are specifically targeted.</p>
<p><b>Researchers.</b> There is no standard approach for providing data to researchers. Researchers can request and receive information from State BH agencies on an ad hoc basis, when approved by an Institutional Review Boards (IRB) for all research involving human subjects, subject to confidentiality restrictions and IT resource limitations.</p>	<p>Researchers can access some data directly through internal state and federal HIEs, subject to data sharing restrictions, authentication, and IRB approval.</p> <p>BH research has an overall research agenda and funding approach that has greater focus on client, treatment and system delivery needs. Data based</p>	<p>Researchers can access primary data directly through HIEs nationally through NHIN, subject to access restrictions, authentication, and IRB approval. The NHIN contains a variety of tools that support research and analysis, such as algorithms for automated data mining, and the capacity to create longitudinal or linked data upon request.</p>

Roles of Stakeholders		
As Is	As-Is, Short Term, and Long Term	
	Short Term	Long Term
<p>BH research has limited funding and lacks an overall research agenda. Data based research primarily uses administrative (claims) or survey data. Research follows funding, not consumer, treatment, or system needs. Data are poorly integrated and quality is often suboptimal. Determining and applying consent requirements, particularly if many people are involved, can be burdensome and prevent investigation. GPRA requirements may also complicate or deter government funded research activity.</p> <p>IRBs vary in size, and methodological stringency as applied to research projects. IRB processes in particular are complex, time consuming and require a tremendous amount of documentation. Some research projects must be reviewed by multiple IRBs, and overlapping controls may lengthen the process and create conflicts across requirements. Confidentiality protections are paramount and may override the benefits of or derail the research.</p>		<p>The BH research agenda focuses on building a comprehensive picture of health across individuals, time, and services that includes outcomes, costs, long term health, and whole life functionality, and in support of personalized care. The research agenda and system data and tools also supports real-time decision making. Data quality and availability are ensured. All surveys are conducted electronically and the need for surveys is substantially reduced. Consent requirements are simplified and embedded in the system, and audit and quality measures are automatically calculated by the systems and pushed to the appropriate parties.</p> <p>The IRB processes are completely standardized and automated, and documentation requirements are streamlined with use of data from the NHIN. With universal inclusion of study populations, better data access eliminates the need for randomized trials, and more research can be accomplished using the available data. Consumers can be directly alerted of research projects that they would qualify for and recruited via their PHRs.</p>
<p><b>IT Vendors.</b> Vendor offerings often drive system and technology choices, and may limit purchaser choices and functions. Few vendor offerings are specifically tailored to BH functions; most must be customized to meet the specific needs of a specific BH agency.</p>	<p>Vendors facilitate integration by being more flexible and modular in their application functionality, aided by greater industry standardization that reduces the need for major customization. BH agencies have also standardized and integrated more processes and functions with Medicaid processes and functions, making some standard functionalities more broadly applicable.</p>	<p>Vendors provide a set of modular capacities based on national standards, which purchasers can pick and choose from to create a system that meets their particular business needs. All modules are flexible and easily updated, and vendors provide support services that include automatic upgrades to incorporate new and revised standards. Vendors also provide connectivity support to assist HIE interactions.</p>
<p><b>Employers.</b> There is no standard approach for providing data to employers for things like workers comp, employee advisory services. Employers can request and receive information from State BH agencies on an ad hoc basis, subject to confidentiality restrictions and IT resource limitations.</p>	<p>Employer access is facilitated by the existence of HIEs and EHRs/PHRs, with appropriate confidentiality restrictions and consumer permissions. Employer access criteria and restrictions are well defined and standardized nationally.</p>	<p>Employer access universally occurs through HIEs, which contain appropriate business rules and consumer permissions to approve, deny, or limit access.</p>
<p><b>Unions.</b> There is no standard approach for providing data to unions for things like workers comp, employee advisory services. Unions can request and receive information from State BH agencies on an ad hoc basis, subject to confidentiality restrictions and IT resource limitations.</p>	<p>Union access is facilitated by the existence of HIEs and EHRs/PHRs, with appropriate confidentiality restrictions and consumer permissions. Union access criteria and restrictions are well defined and standardized nationally.</p>	<p>Union access universally occurs through HIEs, which contain appropriate business rules and consumer permissions to approve, deny, or limit access.</p>
<p><b>Pharmaceutical Companies.</b> There is no standard approach for providing data to pharmaceutical companies, which act</p>	<p>Pharmaceutical company and PBM access and linking to clinical data is facilitated by the existence of HIEs and</p>	<p>Pharmaceutical company and PBMs can access a universal set of clinical data through HIEs, which contain</p>

Roles of Stakeholders			As-Is, Short Term, and Long Term		
As Is		Short Term		Long Term	
<p>as de facto payers in providing drug discounts and drug supports for eligible consumers. Information on pharmaceuticals supported by drug companies and controlled by Pharmacy Benefits Managers (PBMs) is not well coordinated with those paid for by other payers and programs. There are different payment mechanisms and different information requirements for pharmaceutical company programs, which are not always subject to the same confidentiality requirements as providers and health plans. .</p>		<p>EHRs/PHRs, with appropriate confidentiality restrictions and consumer permissions. Other stakeholders can link to core pharmaceutical treatment data for analysis. Pharmaceutical company access criteria and restrictions are well defined and standardized nationally. Drug information and drug payment mechanisms are standardized across payers, and alerts for allergies and drug interactions immediately appear upon input.</p> <p>Drug therapy regimens are shared across providers and payers, and teams consult to reach the optimum drug therapy for each consumer. Consumer confidence in confidentiality is improved.</p>		<p>appropriate business rules and consumer permissions to approve, deny, or limit access. Other stakeholders can link to comprehensive pharmaceutical treatment data for analysis. Pharmaceutical company access criteria and restrictions are embedded as HIE business rules. Drug therapy is coordinated across payers, and teams consult to reach the optimum drug therapy for each consumer for all conditions. Consumer confidence in confidentiality is assured, and consumers have complete control over the information accessed by drug companies.</p>	
<p><b>Family and Friends.</b> There is no standard approach for providing data to family and friends. Access to consumer information is often tightly restricted, even when family and friends are involved in the person's care. Family and friends can request and receive information from State BH agencies on an ad hoc basis, subject to confidentiality restrictions.</p>				<p>Family and friends can access information directly through HIEs nationally through NHIN, subject to access restrictions and consumer permissions. Information available may include individual treatment plans, progress and health outcomes, and provider performance. Families and friends are willing to more routinely provide relatively broad access to client records as trust and documented benefits accrue.</p>	

**Table A-3 Data and Communication Are Transformed over Time**

<b>Data Content and Interchanges As-Is, Short Term, and Long Term Scenarios</b>		
<b>As Is</b>	<b>Short Term</b>	<b>Long Term</b>
<p>General characteristics of As-Is data content and exchanges:</p> <ul style="list-style-type: none"> <li>• Based on Federal reporting requirements</li> <li>• Provider or funding stream focused</li> <li>• Mostly electronic, but still often siloed and lacking clinical detail</li> <li>• Barriers to reporting additional information on client from other health or social services providers exist.</li> <li>• Data not real time</li> <li>• Widespread use of less secure mail, fax, and telephone by intermediaries and providers</li> <li>• Additional clinical data supplied on paper on request or through audits and surveys</li> <li>• Slow and inefficient data analysis process (data is often incomplete and not comparable to data from other systems)</li> <li>• Provider data is often still manually input into the system</li> </ul>	<p>General improvements of data content and exchange in the short-term:</p> <ul style="list-style-type: none"> <li>• Reporting requirement-based data replaced by EHR-like data which acts as central depository</li> <li>• Provider receives routine treatment feedback</li> <li>• Consumer can control personal health information at a granular level.</li> <li>• Fully electronic at the state and intermediary level</li> <li>• Interoperable barriers to reporting additional information are removed</li> <li>• Moving towards real time data</li> <li>• Manual exchange of information obsolete and exceptional</li> <li>• Subsets of standardized clinical data become more available (e.g., claims attachment)</li> <li>• Improved analytic tools and flexible report formats for decision maker to access meaningful and reliable data</li> <li>• Virtual information access independent of mega data warehouses</li> </ul>	<p>Possibilities for data content and exchange in the long-term:</p> <ul style="list-style-type: none"> <li>• EHR-like data replaced by full EHR access brokered through local HIEs</li> <li>• Primarily consumer focused and controlled.</li> <li>• Interoperable data systems include additional client information from other health and social services systems that can easily be linked and collected</li> <li>• A significant portion of the data is real time</li> <li>• Electronic capture of clinical data becomes the norm as manual exchange of information is obsolete and exceptional</li> <li>• Clinical data readily available to authorized users and used for regular feedback to providers and payers at all government and other stakeholder levels.</li> </ul>
<b>Client and Population Data</b>		
	<p>Standardized client level linked data is collected from a web-based “one-stop shop” for both billing and reporting functions, along with information submitted by consumers. Clients need not duplicate their information at each provider since it is captured and shared. New information includes consumer satisfaction, outcome measures, and provider performance ratings. Nationally standardized codes are used for all services. Consumer input is captured using user-friendly screening tools, and cultural and linguistic indicators are uniformly captured. Consumer consent is standardized, with detailed access controls over who, what and when access is allowed, and choices are captured electronically.</p>	<p>Broader focus on capturing and using client level clinical data that supplements administrative reporting data. This yields rich information on trends and changes in demographics, improvements in outcomes, use of evidenced based practices, and client satisfaction. Focus of central repository (even if virtual) is on meeting needs and determining future needs. Population health and safety information is a national focus. Consumers have access to secure, self-directed care tools, and consumer feedback on services and outcomes is captured. Consumer consent choices are fully electronic, and are automatically transmitted with any data exchange.</p>
<b>Provider and Contractor Data</b>		
<p>Data collected primarily from enrollment/admissions, claims, and encounters/discharges. Data collection is greatly siloed, often redundant or with duplicate client counts of clients, and not in real time. There is idiosyncratic data from non-standard/non-comparable collection methods. Data sharing across payer/program systems is infrequent in most states as confidentiality provisions between systems are variable and not</p>	<p>NPIs and taxonomy codes are in use nationally. Taxonomy codes are available and used for atypical BH providers, such as transportation, housing, and other support services. There is one central location for provider credentials and performance data. Clinical and cost data are collected and can be compared at a provider level across multiple agencies. All providers are able to update their own</p>	<p>Access to clinical data greatly improves provider performance, and is routinely shared electronically with the provider. Information on providers is available nationally to authenticated and authorized requesters. Provider credentials are verified once and stored electronically for common use. Reliance on paper records is reduced/eliminated with increased efficiency of web based EHR systems,</p>

<b>Data Content and Interchanges</b>		
<b>As-Is, Short Term, and Long Term Scenarios</b>		
<b>As Is</b>	<b>Short Term</b>	<b>Long Term</b>
	data, and share clinical as well as claims data. Providers increasingly use web based EHR systems that can abstract needed data for billing, reporting, and other routine purposes automatically.	automatic billing and other functions, Client and other information is easily exchanged electronically.  State BH Agencies have greater access to provider demographics, distribution and performance information, and can easily research changes in levels of participation and services offered. Provider payment is almost immediate, and based on performance adjusted for client acuity, geographical factors, quality of care, and sites of treatment.
<b>Health Program and Payment Data</b>		
Information on eligible services, vouchers, service limits, and fees stored for use in payment processing and reporting. The data is often insufficient for the information desired.	Health program and payment information is shared with all agencies. Consumers and providers have "one-stop shop" to view available services and service limits. Service data is dynamically updated from standard-making organizations.	Nationally linked health information exchanges share information on available services and service limits with all interested parties, who can compare services available across the country.
<b>Healthcare Service Data</b>		
	Clinical information and other reported information is available on an encounter basis. Comparison of course of treatment, provider performance, and client outcomes improves. Data are used to effectively match appropriate services to consumer needs.  Standardized, monitorable, testable client level service histories with diagnostics and treatment plans are available in real time and in use. Longitudinal, cross-system data is used to monitor and evaluate the paradigm shift in care from an episodic acute model to a recovery support model. Advanced directives are widely available via exchange networks. Service and client satisfaction information shared with providers has visible benefit to all parties. Fraud detection improves.	Client level encounter based service data is communicated dynamically from the provider electronic health record (EHR). Real time reporting of claims and other administrative data is automatically identified and extracted from the EHR and submitted. Data quality and validity is checked and improved automatically. Consumers have full access to personal records and needs are matched to appropriate services in real time as requested. BH agencies understand how programs, providers and services are performing and being utilized, what the outcomes associated with services are, and where improvements are needed. Agencies can forecast utilization and measure changes.

## ***Attachment B Acronyms and Glossary***

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Listed below is an all-inclusive list of acronyms and definitions used for the BH MITA project for this document. This list will be added to with each project deliverable and finalized in one version at the end of the project.

<b><u>Acronym</u></b>	<b><u>Definition</u></b>
42 CFR pt. 2	Federal Substance Abuse Facility Confidentiality Law
AA	Application Architecture; Attribute Authority
ACL	Access Control List
ADA	American Dental Association
AHA	American Hospital Association
AHIC	American Health Information Community
AMA	American Medical Association
ANSI	American National Standards Institute
APC	Ambulatory Patient Classification
APD	Advance Planning Document
ASC	Accredited Standards Committee
ASN	Abstract Syntax Notation
ASP	Application Service Provider
ASTM	American Society for Testing and Materials
ATR	Access to Recovery services
AVR	Automated Voice Response
B2B	Business-to-Business
BA	Business Architecture; Business Areas; Business Associate Agreement
BAFO	Best and Final Offer
BC	Business Capability
BCM	Business Capability Matrix
BENDEX	Beneficiary Data Exchange
BH	Behavioral Health
BH-MITA	Behavioral Health-Medicaid Information Technology Architecture
BHR	Behavioral Health Record
BHS	Behavioral Health Standards
BP	Business Process
BPDM	Business Process Definition Metamodel
BPEL	Business Process Execution Language
BPM	Business Process Model
BPMN	Business Process Management Notation
BPPC	Basic Patient Privacy Consents
BPSS	Business Process Specification Schema

**Acronym**

**Definition**

BRM	Business Relationship Management
BS	Business Services
BTOM	Brief Treatment Outcomes Measure
BSDP	Business Service Definition Package
CA	Certificate Authority
CCHIT	Certification Commission for Healthcare Information Technology
CCOW	Clinical Context Object Workgroup
CCR	Continuity of Care Record
CDA	Clinical Document Architecture
CDC	Centers for Disease Control and Prevention
CDM	Conceptual Data Model
CDT	Code on Dental Procedures and Nomenclature
CE	Client Executive
CEFACT	Centre for the Facilitation of the Administration, Commerce, and Transport
CFR	Code of Federal Regulations
CHI	Consumer Health Informatics
CIM	Common Information Model
CIO	Chief Information Officer
CM	Configuration Management
CMHS	Center for Mental Health Service
CMIA	Cash Management Improvement Act
CMM	Capability Maturity Model
CMS	Centers for Medicare & Medicaid Services
CMSO	Center for Medicaid and State Operations
COB	Coordination of Benefits
COO	Concept of Operations
COTS	Commercial off-the-shelf
CPA	Collaboration Protocol Agreement
CPP	Collaboration Protocol Profile
CPT	Current Procedural Terminology
CRM	Customer Relationship Management
CSAP	Center for Substance Abuse Prevention
CSAT	Center for Substance Abuse Treatment
DAIS	Data Access and Integration Service
DAML	DARPA Agent Markup Language
DARPA	Directory Access Resolution Protocol Allocation
DASIS	Drug and Alcohol Services Information System
DBMS	Database Management System
DBOR	Database of Record
DDI	Design, Development, and Implementation

**Acronym**

**Definition**

DeCC	Dental Content Committee (of the ADA)
DHHS	Department of Health and Human Services
DHS	Department of Homeland Security
DICOM	Digital Imaging and Communications in Medicine
DISA	Data Interchange Standards Association
DLM	Decentralized Label Model
DM	Disease Management
DME	Durable Medical Equipment
DMS	Data Management Strategy
DMTF	Distributed Management Task Force
DMZ	Demilitarized Zone
DoD	Department of Defense
DOJ	Department of Justice
DRG	Diagnosis Related Group
DRM	Digital Rights Management
DS	Data Standards
DSMO	Designated Standard Maintenance Organization
DSS	Decision Support System; Division of State System
DST	Data Standards Table
DSTU	Draft Standard for Trial Use
E/R	Entity-relationship
E2E	End to End
EA	Enterprise Architecture
EBHR	Electronic Behavioral Health Record
ebMS	ebXML Message Service
ebXML	Electronic Business Extensible Markup Language
eCTD	Electronic Common Technical Document
EDI	Electronic Data Interchange
EDOC	Enterprise Distributed Object Computing
EEC	End Entity Certificate
EFT	Electronic Funds Transfer
EHR	Electronic Health Record
EHRS	Electronic Health Record System
EMC	Electronic Media Claim
EMR	Electronic Medical Record
EOB	Explanation of Benefits
EOMB	Explanation of Medicare Benefits
EPA	Environmental Protection Agency
E-PAL	Enterprise Privacy Authorization Language
EPSDT	Early and Periodic Screening, Diagnosis, and Treatment

**Acronym**

**Definition**

ESB	Enterprise Service Bus
eSCM-CL	eSourcing Capability Model for Client Organization
eSCM-SP	eSourcing Capabilities Model for Service Provider
FA	Fiscal Agent
FDA	Food and Drug Administration
FEA	Federal Enterprise Architecture
FEAF	Federal Enterprise Architecture Framework
FFP	Federal Financial Participation
FHA	Federal Health Architecture
FI	Fiscal Intermediary
FIPA	Foundations of Intelligent Physical Agents
FIPS	Federal Information Processing Standards
FISMA	Federal Information Security Management Act
GGF	Global Grid Forum
GOTS	Government off-the-shelf
GPRA	Government Performance and Results Act
GSA	General Services Administration
HCBS	Home and Community-based Services
HCPCS	Healthcare Common Procedure Coding System
HEDIS	Health Plan Employer Data and Information Set
HIE	Health Information Exchange
HIPAA	Health Insurance Portability and Accountability Act of 1996
HIS	Healthcare Information System
HISB	Healthcare Informatics Standards Board
HISPC	Health Information Security and Privacy Collaborative
HITSP	Healthcare Information Technology Standards Panel
HL7	Health Level 7
HMD	Hierarchical Message Description
IA	Information Architecture
IAPD	Implementation Advance Planning Document
ICD	International Classification of Diseases
ID-FF	Identify Federation Framework
IDMS	Integrated Data Management System
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers
IETF	Internet Engineering Task Force
IHE	Integrating the Healthcare Enterprise
IM	Interaction Model
IMPI	Intelligent Platform Management Interfaces
INPC	Indiana Network for Patient Care

<b><u>Acronym</u></b>	<b><u>Definition</u></b>
IPSEC	Internet Protocol Security
ISO	International Organization for Standardization
IT	Information Technology
ITIL IT	Infrastructure Library
ITU	International Telecommunications Union
IVR	Interactive Voice Response
LDM	Logical Data Model
LOB	Line of Business
LOINC	Logical Observation Identifiers, Names and Codes
MARS	Marketing Accounting Reporting System
MCO	Managed Care Organization
MET	Message Type
MH	Mental Health
MH/SA	Mental Health/Substance Abuse
MHCCM	Medicaid HIPAA-compliant Concept Model
MITA	Medicaid IT Architecture
ML	Markup Language
MMIS	Medicaid Management Information System
MMM	MITA Maturity Model
MOF	MetaObject Facility
MOU	Memoranda of Understanding
MSIS	Medicaid Statistical Information System
MSMQ	Microsoft Message Queuing Server
MSX	Message Exchange
MTG	MITA Technical Group
NASADAD	National Association of State Alcohol and Drug Abuse Directors, Inc.
NASCIO	National Association of State Chief Information Officers
NASMD	National Association of State Medicaid Directors
NASMHPD	National Association of State Mental Health Program Directors
NCPDP	National Council for Prescription Drug Programs
NCVHS	National Committee on Vital and Health Statistics
NDC	National Drug Code
NEMA	National Electrical Manufacturers Association
NET	Non-emergency Transportation
NHII	National Health Information Infrastructure
NHIN	National Health Information Network
NIH	National Institutes of Health
NIST	National Institute of Standards and Technology
NMEH	National Medicaid EDI HIPAA (workgroup)
NOMS	National Outcome Measures

<b><u>Acronym</u></b>	<b><u>Definition</u></b>
NPI	National Provider Identifier
NPPES	National Plan and Provider Enumeration System
NUBC	National Uniform Billing Committee
NUCC	National Uniform Claim Committee
OAS	Office of Applied Studies, SAMHSA
OASIS	Organization for the Advancement of Structured Information Standards
OCL	Object Constraint Language
OLAP	Online Analytical Processing
OLTP	Online Transaction Processing
OM-AM	Objective, Model, Architecture, and Mechanism
OMG	Object Management Group
ONC	Office of the National Coordinator for Health IT
ONDCP	Office of National Drug Control Policy
OWL	Ontology Web Language
P3P	Platform for Privacy Preference Project
PBM	Pharmacy Benefit Manager
PC	personal Computer; Proxy Certificate
PCCM	Primary Care Case Manager
PCP	Primary Care Physician
PDA	Personal Digital Assistant
PHDSC	Public Health Data Standards Consortium
PHIN	Public Health Information Network
PHR	Personal Health Record
PI	Proxy Issuer
PITAC	President's Information Technology Advisory Committee
PKC	Public Key Certificate
PKI	Public Key Infrastructure
Point-to-Point	A direct connection from one location to another (point A to point B).
POS	Point-of-sale; Point-of-service
PPTP	Point-to-point Tunneling Protocol
PS-TG	Private Sector Technology Group
QoS	Quality of Service
QRO	Quality Review Organization
QSO	Qualified Service Organization
RBAC	Role-based Access Control
RDBMS	Relational Database Management System
RDF	Reference Description Framework
RFP	Request for Proposals
RHIN	Regional Health Information Network
RHIO	Regional Health Information Organization

<b><u>Acronym</u></b>	<b><u>Definition</u></b>
RIM	Reference Information Model
RMP	Remote Management Portlet
RO	Regional Office
ROI	Return on Investment
ROSC	Recovery Oriented Systems of Care
RSS	Recovery Support Services
S&P	Security and Privacy
SA	Subject Area; Substance Abuse
SAMHDA	Substance Abuse and Mental Health Data Archive
SAMHSA	Substance Abuse and Mental Health Services Administration
SAML	Security Assertion Markup Language
SBVR	Semantics of Business Vocabulary and Rules
SCA	Service Component Architecture
SCHIP	State Children’s Health Insurance Program
SDO	Standards Development Organization
SDX	State Data Exchange
Seamless	Operates smoothly across various systems and processes so that users see no differences when utilizing functions across those systems and processes
SEI	Software Engineering Institute
SI	Service Infrastructure
SLA	Service Level Agreement
SLAlang	Service Level Agreement Language
SLM	Service Level Management
SME	Service Management Engine
SNMP	Simple Network Management Protocol
SNOMED	Systematized Nomenclature of Medicine
SOA	Service-oriented Architecture
SOAP	Simple Object Access Protocol
SPP	Security and Privacy Profile
SQL	Structured Query Language
SRM	Standards Reference Model
SSA	Social Security Administration
SS-A	State Self-Assessment
SSC	Services Support Center
SSD	Service Structure Diagram
SSH	SecureShell
SSI	Supplemental Security Income
SSN	Social Security number
SSO	Single Sign-on
S-TAG	Systems Technical Advisory Group

<b><u>Acronym</u></b>	<b><u>Definition</u></b>
SUR	Surveillance and Utilization Review
SURS	Surveillance Utilization Review System
TA	Technical Architecture
TAL	Trust Anchor List
TANF	Temporary Assistance for Needy Families
TC	Technical Capability
TCM	Technical Capability Matrix
TEDS	Treatment Episode Data Set
TPL	Third-party Liability
TPR	Third-party Recovery
TRM	Technical Reference Model
TS	Technical Services
TSDP	Technical Service Definition Package
TSRG	Technology Standards Reference Guide
UBL	Universal Business Language
UCM	Use Case Model
UDDI	Universal Description, Discovery and Integration
UML	Unified Modeling Language
UMLS	Unified Medical Language System
UN	United Nations
URA	Unit Rebate Amount
URI	Uniform Resource Identifier
USHIK	United States Health Information Knowledgebase
VHA	Veterans Health Administration
VPN	Virtual Private Network
VRS	Voice Response System
W3C	World Wide Web Consortium
WEDI	Workgroup for Electronic Data Interchange
WFMC	Workflow Management Coalition
WFML	Workflow Management Language
WITS	Web Infrastructure for Treatment Services
WMX	Web Services for Management Extensions
WS	Web Services
WS-BPEL	Web Services for Business Process Execution Language
WS-CAF	Web Services Composite Application Framework
WSDL	Web Services Description Language
WSDM	Web Services Distribution Management
WSN	Web Services Notification
WSRF	Web Services Resource Framework
WSRM	Web Services Reliable Messaging



**Acronym**

**Definition**

WSRP	Web Services Remote Portlets
XACML	Extensible Access Control Markup Language
XAML	Extensible Application Markup Language
XDS	Cross-Enterprise Clinical Documents Sharing
XKMS	XML Key Management
XML	Extensible Markup Language
XrML	Extensible Rights Markup Language
XSL	Extensible Stylesheet Language
XSLT	XSL Transformations