



Issue Brief:

Multiple Provider Network Interoperability and Compliance Challenges

A guiding principle of the Addiction Recovery Medical Home – Alternative Payment Model (ARMH-APM) is that clinical and non-clinical recovery support assets should be integrated to enable the sharing of patient information, ensure commensurate clinical and safety standards, and support high-functioning care transitions across the continuum of care. In order to achieve such integration, providers need to operate on a single, common electronic health record (EHR) or health information exchange (HIE) that can facilitate ready access to protected health information (PHI) and treatment and recovery plans across a continuum of care. While some integrated delivery networks will be able to offer all ARMH-APM services in-house and some have a common EHR system in place, networked providers will need to function as a clinically integrated network (CIN) to share clinical information and coordinate care.

The two-fold purpose of this issue brief is to 1) explore the specific implications of data sharing among local integrated substance use disorder (SUD) treatment and recovery networks, given the general existing fragmentation of the infrastructure, and 2) highlight key considerations to overcoming these challenges.

Common Terms and Definitions

To avoid confusion, this brief refers to the following terms as defined by the Office of the National Coordinator for Health Information Technology (ONC):¹

Electronic Medical Records: An electronic record of health-related information on an individual that can be created, gathered, managed, and consulted by authorized clinicians and staff within one health care organization.

Electronic Health Records: An electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards and that can be created, managed, and consulted by authorized clinicians and staff across more than one health care organization.

Personal Health Record: An electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards and that can be drawn from multiple sources while being managed, shared, and controlled by the individual.

Health Information Exchange: The electronic movement of health-related information among organizations according to nationally recognized standards.

¹ <http://tigerstandards.pbworks.com/f/HITTermsFinalReport.pdf>

Health Information Organization: An organization that oversees and governs the exchange of health-related information among organizations according to nationally recognized standards.

Regional Health Information Organization: A health information organization that brings together health care stakeholders within a defined geographic area and governs health information exchange among them for the purpose of improving health and care in that community.

Meaningful Use: A set of specific objectives that eligible professionals and hospitals must achieve to participate in the EHR Incentive Programs through the Centers for Medicare & Medicaid Services (CMS). In 2011, CMS released the “Fiscal Year (FY) 2021 Medicare Hospital Inpatient Prospective Payment System for Acute Care Hospitals and Long-term Care Hospital Prospective Payment System Proposed Rule” to encourage eligible professionals and hospitals, to adopt, implement, upgrade and demonstrate meaningful use of certified electronic health record technology (CEHRT).²

Assessing the Capability of Clinical Information Sharing Systems

There are two important factors to consider when designing an integrated treatment and recovery network: the variety of providers that may participate in a patient’s care (see Figure 1) and the utilization of multiple different care settings and remote engagement technologies.

Figure 1: ARHM-APM Care Recovery Team



Integrated Providers

In a setting where the core contracted entity either owns or is in close proximity to a technology platform with sufficient infrastructure to exchange information, a technology intermediary can enable common patient records to be coordinated across care settings and establish Health Insurance Portability and

² <https://www.cms.gov/newsroom/fact-sheets/fiscal-year-fy-2021-medicare-hospital-inpatient-prospective-payment-system-ipsps-and-long-term-acute>

Accountability Act (HIPAA) and 42 CFR Part 2 patient information-sharing consent. The care recovery team, depending on individual care team roles and responsibilities, should be able to access all other PHI through the EHR.

Networked providers

If the lead organization and/or its network affiliates are unable to exchange clinical information through a common EHR, then a functionally equivalent technology solution that can support or otherwise facilitate the exchange of important clinical information should be identified. There are two primary options for this:

- Sufficient API connections between system EHRs. The success of this is highly correlated with fewer EHRs requiring connectivity and the system EHRs possessing the capacity to share clinical information in the required formats.
- An EHR overlay capable of integrating electronic data transmission (EDT) feeds of clinical information that comprises key patient-specific information. These systems could consist of population health management platforms and/or clinical information management tools.

A third option may include a patient-led or -enabled application where the individual participant is given access to their EHR and is able to grant each provider in the continuum of care access to real-time health information on a patient.

Once an integrated treatment and recovery network establishes its size, scope, and network configuration, it is important to analyze the technology infrastructure used to share real-time information regarding a patient's treatment and recovery journey. The assessment should examine the current EHR systems employed by the lead organization in the network to ascertain the continuity of the system through the entire network. Specific considerations include the EHR's ability to:

- ingest the treatment and recovery plan
- be accessed by each member of the care recovery team (as needed)
- annotate and flag consents/waivers (such as the global waiver required for 42 CFR Part 2)
- collect the required clinical and process information required to validate and track selected/anticipated quality measures

The **Healthcare Information and Management Systems Society (HIMSS)** classifies the extent to which systems and devices can exchange and interpret shared data in three tiers:

Foundational (basic) interoperability: the ability of one IT system to send data to another IT system. The receiving IT system does not necessarily need to be able to interpret the exchanged data — it must simply be able to acknowledge receipt of the data payload.

Structural (intermediate) interoperability: the uniform movement of healthcare data from one system to another such that the clinical or operational purpose and meaning of the data is preserved and unaltered. To achieve structural interoperability, the recipient system should be able to interpret information at the data field level.

Semantic (advanced) Interoperability: the ability of health IT systems to exchange and interpret information — then actively use the information that has been exchanged.

Key Federal Policies

There are three specific federal policies that have, or are poised to have, a transformative impact on how patients, providers, and technology companies create efficiencies for records. While not specific to SUDs, it will be important to ensure that any solution an ARMH-APM network deploys is compatible with these federal guidelines.

Connecting Health and Care for the Nation: A Shared Nationwide Interoperability Roadmap

In 2015, ONC released “Connecting Health and Care for the Nation: A Shared Nationwide Interoperability Roadmap”³ which outlined ten guiding principles to accomplish nationwide interoperability, some of which included:

- Build upon the existing health IT infrastructure
- Allow for interoperability to empower individual users to take ownership and management of their personal health data allowing them to become active partners in their health care decisions
- Leverage the market and innovative efforts in the interoperability space to advance the organizations’ vision
- Implement and utilize the simplest solutions first and increase complexity over time
- Maintain modularity to increase flexibility and allow innovation and adoption as technologies advances to avoid a complete system overhaul
- Protect the privacy of individual users and secure all information while remaining transparent of the business uses of the data

On March 9, 2020 the Trump administration finalized two rules that collectively govern interoperability, information-blocking, and the exchange and flow of medical data between patients, providers, and payers. The companion rules from the CMS and ONC are described in further detail below.

CMS Final Rule on Interoperability and Patient Access

Under the final rule, Medicare Advantage (MA) plans, state Medicaid and Children’s Health Insurance Program (CHIP) agencies, Medicaid and CHIP managed care plans, and qualified health plan (QHP) issuers in the federally-facilitated exchanges (FfEs) must meet certain requirements regarding patient access to their health care information, including requirements related to application programming interfaces (APIs).⁴

This final rule attempts to advance the electronic exchange of PHI and improve patient access to their health information. The core elements of the rule are:

- Enabling patients to access health information electronically without special effort through APIs
- Ensuring that providers have access to information on patients regardless of where they previously received care
- Preventing providers from inappropriately restricting the flow of information to other providers and payers
- Reducing burden on providers
- Ensuring that payers make enrollee electronic health information available through an API
- Making it easy for patients and providers to identify providers within a plan’s network

³ <https://www.healthit.gov/sites/default/files/nationwide-interoperability-roadmap-draft-version-1.0.pdf>

⁴ <https://www.cms.gov/Regulations-and-Guidance/Guidance/Interoperability/index>

21st Century Cures Act: Interoperability, Information Blocking, and the ONC Health IT Certification Program

The ONC rule implements key provisions of the 21st Century Cures Act, including provisions designed to advance interoperability; to support the access, exchange, and use of electronic health information; and to address occurrences of information blocking. The ONC rule “establishes programming interface (API) requirements to support a patient’s access and control of their electronic health information. APIs are the foundation of smartphone applications (apps). As a result of this rule, patients will be able to securely and easily obtain and use their electronic health information from their provider’s medical record for free, using the smartphone app of their choice.” The Alliance for Addiction Payment Reform Convener, The Healthcare Financial Management Association, has published a detailed summary of the rule.⁵

In April 2020, CMS and ONC announced they would extend certain flexibilities to the implementation timeline of the interoperability rules, including a six-month extension for providers and payers to meet new requirements under the CMS Interoperability and Patient Access final rule.^{6,7}

Implementation Considerations and Best Practices

In order for a system to be considered interoperable, it must be able to perform three main functions:⁸

- collect and store patient data electronically, such as demographics, patient problem lists (e.g., diagnoses, medications, allergies, notes, and summaries), including a longitudinal collection of information (such as a history of the patient’s medical conditions);
- make these data available to multi-disciplinary providers upon request, after applying privacy and security controls consistent with stipulations of the HIPPA and CFR 42 Part 2; and
- provide clinicians with computerized decision support tools – standard, evidence-based options for medical decision making regarding individual patients.

Below, we have outlined seven industry best practices that should be taken into consideration when developing an interoperable system.

- Identify clinical use cases at the start, including which data will need to be pulled by providers and which will need to be pushed to providers to inform the data needs and the types of communication required between providers (i.e., direct messaging capabilities, provider portal, etc.)
- Establish electronic prescribing (e-prescribing) capabilities and expectations to create a bi-directional information flow between the provider and the pharmacist, thus facilitating the ability to exchange clarification requests with prescribers in real time, saving pharmacists’ time, and potentially decreasing the risk of medication errors⁹

⁵ <https://www.hfma.org/content/dam/hfma/Documents/industry-initiatives/fact-sheets/onc-cures-act-3-9-final-rule-announcement-summary.pdf>

⁶ <https://www.hhs.gov/about/news/2020/04/21/statements-from-onc-cms-on-interoperability-flexibilities-amid-covid19-public-health-emergency.html>

⁷ <https://www.hhs.gov/about/news/2020/04/21/statements-from-onc-cms-on-interoperability-flexibilities-amid-covid19-public-health-emergency.html>

⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3149797/>

⁹ <https://www.pharmacytimes.com/publications/Directions-in-Pharmacy/2015/August2015/Interoperability-Plugging-Community-Pharmacy-into-the-Clinical-Data-Superhighway>

- Develop mechanisms to enable greater exchange between labs and providers with more accurate patient matching capabilities, enhanced patient-centered care, and greater efficiencies through standardized, automated formats¹⁰
- Use established standards when exchanging health care data (i.e., SNOMED, ICD-10, etc.)
- Consider a patient-centered model or capabilities to eventually transition to a model which allows patients to maintain and control aggregation of their data and make it available to providers as needed
- Ensure all stakeholders are aligned around a singular implementation playbook which outlines anticipated value, process, requirements and time expectations of the implementation
- Consider communication needs and differences across different reimbursement models and multi-payer systems¹¹

Implications and Challenges for SUD Treatment and Recovery Networks

Technology and Infrastructure¹²

- Small providers and agencies may not have access to well-developed health information systems causing technological and infrastructural challenges.
- Specialty SUD treatment settings vary in approaches and settings (i.e., withdrawal management, residential, and IOP) are not always set up with HIT infrastructure to talk to communicate electronically.

Regulatory

SUD-specific treatment providers have not had as much flexibility to share patient data across providers as other disciplines because 42 CFR Part 2 requires specific and supplemental authorization in the form of written consent to share substance use records. Also, some states have more restrictive regulations and guidelines than others on protecting sensitive health information complicating the ability to share PHI data.

On July 13, 2020 the U.S. Department of Health and Human Services [published](#) the final rule of a revised version 42 CFR Part 2. The final rule seeks to remove barriers to coordinated care and enable providers to share more patient information. The final rule will retain a basic framework to protect the records of patients with SUD. While the changes should boost information-sharing among providers, insurers, government agencies and law enforcement, patients will still have to agree to share information under most circumstances. The rule changes take effect August 14, 2020.¹³

A further revised ruling of the 42 CFR Part 2 regulations are not expected until 2021, however, Section 1332 of the 2020 CARES Act authorized a number of notable changes to the law:¹⁴

- Information may be redisclosed consistent with existing HIPAA regulations and shared with a public health authority as long as requirements for de-identification are met in accordance with HIPAA regulations
- Introduces an education component to ensure the patient understands consent before deciding

¹⁰ https://www.cdc.gov/cliac/docs/addenda/cliac0415/6_DYER_ONC-Laboratory-Interoperability-Plan.pdf

¹¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3149797/#b12-sar-2-125>

¹² <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3149797/#b12-sar-2-125>

¹³ <https://www.hhs.gov/about/news/2020/07/13/fact-sheet-samhsa-42-cfr-part-2-revised-rule.html>

¹⁴ The Association for Behavioral Health and Wellness (ABHW)

- Includes opt-out clause for patients to rescind opt-in decisions
- Requirements for breach notification
- Stipulates that records may not be disclosed or used in legal proceeding except for explicitly stated activity, except when authorized by a court order or patient consent
- Expands existing patient protections to prevent discriminatory behavior towards patients suffering from a SUD concerning:
 - access to treatment
 - termination of employment
 - receipt of worker's compensations
 - rental housing
 - social services and benefits provided by federal, state, or local governments
- Mandates a common set of data elements to be recorded and shared may dissuade patients from responding to medical questions and screenings truthfully

Financial

- Small treatment community-based organizations may not have the funding available to support an EHR infrastructure and required training, maintenance and user support.
- High rates of staff turnover will require significant investment in continued training and monitoring other provider types may not be subject to.

Deployment

- Ensure appropriate security measures for inbound and outbound firewalls between communicating institutions
- Build-in mechanisms for continuous maintenance to meet HIT organizations' requirements to develop and support the data standards required for interoperability
- Address any duplication between EHR tools for screening and managing SUD and incumbent tools being used

Emerging Models and Frameworks

The National Interoperability Collaborative (NIC) is a “community of networks” that was founded to help promote technology strategies and best practices for collaborative and integrative multi-sector work among health and human services organizations to address social determinants of health (SDoH) and well-being known as The Collective Impact Model.¹⁵ This model is being deployed widely as a solution to cross-sector framework to enable sharing between community-based groups and multi-sector organizations. The model has five elements: common agenda, shared measurement, mutually reinforcing activities, continuous communications, and backbone support driven by an independent, dedicated staff or organization that provides the infrastructure and operations of the initiative where the data sharing and curation is housed. Examples of backbone support organizations include 2-1-1 San Diego Community Information Exchange Platform (CIE), APHL AIMS (Association of Public Health Laboratories Informatics Messaging Services Platform).

To address interoperability challenges with models that provide backbone support to existing EHRs, screenings have been developed that feed directly into the EHR. Some of the widely used screenings include:

¹⁵ https://www.academyhealth.org/sites/default/files/partnerships_programs_platforms_april2019.pdf

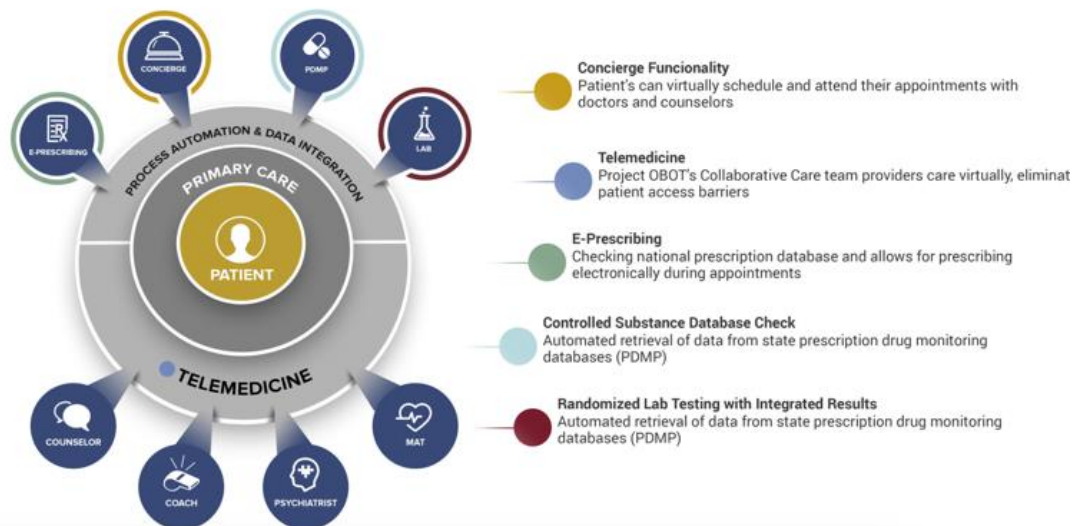
- The Accountable Health Communities Health-Related Social Needs Screening Tool
- American Academy of Family Physicians (AAFP) EveryONE Project Toolkit
- HealthBegins
- PRAPARE

Examples of Interoperability Platforms for Connecting Medical and Community-Based Organizations

Project OBOT (Office-Based Opioid Treatment)¹⁶

In 2018, North Carolina deployed Project OBOT – an office-based, collaborative opioid treatment model aimed at building connections to support the identification, treatment, testing, and monitoring of identify those suffering from an opioid use disorder across the state. Project OBOT utilizes The Recovery Platform software to coordinate care, medical assisted treatment, and referrals across a multitude of providers and community organizations including pharmacists, labs, counselors, psychiatrist, and more (see Figure 2).

Figure 2: Project OBOT Technology



The Project OBOT pilot cited the following outcomes:

- Patient engagement was 84 percent and 93 percent for counseling and coaching services, respectively
- Automated prescription drug monitoring program searches before each MAT visits indicated no drug seeking behavior
- Seventy-eight percent of patients were found to be abstinent of opiates or illicit drugs in randomized lab screening
- Eighty-four percent of participants showed improvement on the COWS score for Opioid Withdrawal and 71 percent showed improvement on their Brief Addiction Monitor (BAM) score

¹⁶ <https://therecoveryplatform.com/payers/#1584734198374-348d2af9-f95d>

The Chicago Medical Home Network^{17,18}

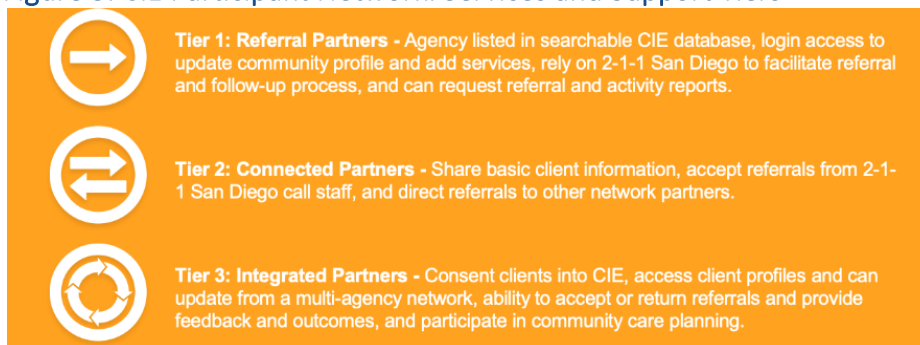
In 2008, The Medical Home Network Accountable Care Organization (ACO) was founded to serve approximately 180,000 Medicaid members across three hospitals and nine federally qualified health centers across the Chicago area. To manage patient care, the ACO soon realized the value of a platform that can seamlessly share data across the non-integrated entities. In early 2010, the Medical Home Network, the entity that provides care management and operational services for the ACO, developed the MHNConnect platform. This secure, web-based platform enables connectivity between ACO and non-ACO participating providers (22 discrete hospitals and 200 medical homes). The platform has many functions including: “improving care coordination, tracking patient activity throughout the delivery system, providing participating providers with pertinent patient clinical history, and facilitating near real-time information exchange between emergency departments, hospitals, and medical home primary care practice sites.”

The Medical Home Network in collaboration with the Illinois Department of Healthcare and Family Services completed a two-year Care Coordination Pilot using MHN connect, which resulted in a 3.5-percent reduction in the total cost of care trend attributed Care Coordination Pilot lives, relative to a non-MHN population, in year one and a five-percent reduction in year two.

2-1-1 San Diego¹⁹

2-1-1 San Diego, a confidential information hotline launched by United Way, formed the Community Information Exchange (CIE) in 2011. The CIE enables data sharing and communication through a secure platform between 34 social service and health care providers, including federally qualified health care centers, and government agencies with the goal to improve care coordination for the city’s most vulnerable populations. The CIE complements the city’s HIE by tracking interactions not traditionally captured by an HIE such as social services visits. In turn, community benefit organizations can access information about when their client has had multiple health care or emergency department visits. The partners in the CIE network participate at three different tiers (see Figure 3).

Figure 3: CIE Participant Network: Services and Support Tiers



Sharp Grossmont Hospital (SGH) operates a Care Transitions Intervention plan (CTI) that connects high-risk patients to 2-1-1 San Diego Health navigators to address short-term and long-term social determinants of health needs. Patients referred to 2-1-1 through the CTI program experienced a 9.6-percent readmission rate compared to a 30 percent rate in a comparison group. The hospital calculated a

¹⁷ https://deltacenter.jsi.com/wp-content/uploads/2019/04/JSI-Case-Study-MHN_042419.pdf

¹⁸ <https://www.medicalhomenetwork.org/proven-model>

¹⁹ https://www.chcs.org/media/2-1-1-San-Diego-Case-Study_080918.pdf

return on investment of approximately \$17,562 per inpatient admission and \$1,387 per emergency department admission, with higher ROIs for uninsured populations.

The Path Forward for SUD Treatment and Recovery Networks

Historically, the addiction field has essentially treated individuals using short-term acute interventions for what is definitively a chronic disease impacting people throughout their life. As the system slowly moves towards models of long-term engagement and management of individuals and their families, connectivity between emergency departments, primary care, psychiatry, in-patient services, out-patient services, recovery support services, pharmacy, laboratory, and mobile engagement tools become indispensable to every phase of the recovery journey. The care coordinator and every provider involved must be able to have a holistic view of each case not only to be empowered to support the person in the most effective way, but to provide an essential feedback loop back to the health system in order to better understand various care models and the constellation of activities and services that result in the best outcomes. As the acclaimed recovery researcher, William White, often remarks, “we are on a quest to find the psychosocial equivalent to the AIDS cocktail.” Until we can effectively map the specific process components that correlate to reductions in recovery disruptions, and improved quality of life measures we will not be able to effectively scale chronic disease management care models reliably for SUDs.

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