Chapter 4:

Integrating Clinical Care through Greater Use of Electronic Health Records for Behavioral Health

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Key Points

- Compared to adults with private insurance, Medicaid beneficiaries suffer from higher rates of substance use disorder (SUD) and mental health conditions. They also experience other chronic conditions, such as hepatitis B or C, at higher rates than their privately insured peers.
- Specialty behavioral health providers and programs interact on a limited basis with other parts of the health care system. This represents a barrier to clinical integration and missed opportunities to provide high-quality care for beneficiaries with behavioral health conditions.
- Adopting certified electronic health record (EHR) technology (CEHRT) is one strategy that could improve communication between behavioral and physical health providers and strengthen clinical integration.
- Adoption of CEHRT among behavioral health providers supports clinical integration because it:
  - strengthens communication and data sharing among providers and allows them to make and monitor referrals to treatment across the care continuum;
  - provides easier access to state health information exchanges, which allow providers and patients to access and securely share medical information in real time; and
  - enables provider participation in value-based payment arrangements and supports federally mandated state quality reporting efforts.
- CEHRT adoption among behavioral health providers remains low because these providers were mostly left out of federal programs offering incentives to spur adoption of health information technology and EHR platforms.
- Due to low operating margins and limited working capital, behavioral health providers are often unable to invest in the expensive hardware, software, and training necessary for EHR adoption.
- When behavioral health providers can afford to adopt EHR platforms, they face additional challenges. For example, federal CEHRT requirements are not designed for federal standards regarding the confidentiality of SUD treatment information (known as 42 CFR Part 2).
- In the coming year, the Commission plans to examine potential solutions to address low rates of EHR adoption among behavioral health providers serving Medicaid beneficiaries.

CHAPTER 4: Integrating Clinical Care through Greater Use of Electronic Health Records for Behavioral Health

Compared to privately insured adults, Medicaid beneficiaries suffer from higher rates of substance use disorder (SUD) and mental health conditions. They also experience other chronic conditions at higher rates than their privately insured peers (SHADAC 2020a, MACPAC 2018). Many individuals with behavioral health conditions experience poor health outcomes (Roberts et al. 2017, Miller 2012, Druss et al. 2011). Evidence suggests that people with behavioral health conditions, especially those with serious mental illness, have a lower life expectancy than the general population. This is likely the result of a number of patient-related factors, including clinical risk and socioeconomic status, but can also be partially attributed to a lack of integration when care is required across different service settings (Druss et al. 2011, Rodgers et al. 2018). In part, poorly integrated health care stems from limited or inefficient coordination between specialists and minimal data sharing between the physical and behavioral health delivery systems. This can affect the provision of effective treatments and may even cause patient harm (Roberts et al. 2017, MACPAC 2016).

The Commission has previously commented on the siloed nature of physical and behavioral health care as well as the fragmented delivery systems for mental health and SUD (MACPAC 2020a, 2018, 2017, 2016). Generally, behavioral health providers encompass practitioners that treat SUD, mental health conditions, or both. Specialty behavioral health providers and programs interact on a limited basis with other parts of the health care system (MACPAC 2018, 2017, 2016). In addition, SUD treatment is generally not well coordinated or integrated with mental health services or the treatment of other physical health conditions (MACPAC 2018). We have also pointed to concerns that federal SUD confidentiality regulations under 42 CFR Part 2 (referred to as Part 2) are meant to ensure patient privacy but have the unintended consequence of creating barriers to sharing SUD treatment information among providers (MACPAC 2018).[1]

Adopting certified electronic health record technology (CEHRT) is one strategy to improve communication between behavioral and physical health providers and to provide better integrated care for beneficiaries.[2] Although electronic health records (EHRs) allow providers to retrieve and electronically transfer patient information easily, behavioral health providers were left out of large-scale federal efforts to promote clinical data sharing under the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH Act, Title XIII of P.L. 111-5) (ASPE 2013). As such, many behavioral health providers continue to rely on phone, paper, or fax, missing out on opportunities to share information with other providers (MACPAC 2018, Wolf et al. 2012).

This chapter represents the beginning of the Commission's work focused on the potential of EHRs to improve integration of physical and behavioral health and how federal policy can support EHR adoption among behavioral health providers. It first outlines the benefits of clinical integration and how fragmentation within the health care system can affect quality of care for Medicaid beneficiaries. In this discussion, the Commission largely focuses on the needs of those with mental illness, considering that we have extensively documented the needs of beneficiaries with SUD (MACPAC 2020a, 2019a, 2019b, 2018, 2017). For those unfamiliar to our prior work, we mention prior findings related to SUD as appropriate.

The chapter then discusses how use of health information technology (IT) can strengthen clinical integration through improved information sharing and communication among providers and patients. Next, the chapter analyzes low rates of EHR use among specialty behavioral health facilities and describes barriers preventing these providers from adopting EHRs.

As we look to next steps, the chapter concludes by describing several Medicaid funding authorities that could be used to strengthen clinical integration via health IT funding. Our work over the next year will focus on the merits and challenges of using these financing sources and on policy options to promote greater use of CEHRT among behavioral health providers.

Clinical Integration and Co-Occurring Conditions among Medicaid Beneficiaries

Poor health outcomes among individuals with mental illness have serious consequences. People with mental health conditions often die prematurely; those with serious mental illness die up to 32 years earlier than the general population (Roberts et al. 2017, Miller 2012). Premature death may be due to several factors, including limited insurance coverage, an insufficient mental health work force, and stigma that leads to delays in care, but comorbid conditions are a major factor (Roberts et al 2017, NASHMPD 2012). One study found that 95 percent of premature deaths among people with mental disorders are attributable to medical causes (e.g., cardiovascular diseases and adverse effects of psychotropic medications, including sudden death due to cardiac arrhythmias) as opposed to unnatural causes, such as suicide (Roberts et al. 2017). Co-occurring SUDs among individuals with mental illness also contribute to premature mortality (Roberts et al. 2017, Miller 2012). (Additional discussion of mortality among individuals with mental health conditions can be found in Chapter 2.)

The sharing of clinical information between behavioral and physical health providers, an important element of integrated models, can lead to improved health outcomes for adults with mental illness. For example, patients with serious mental illness served by highly integrated programs are more likely to self-report improvements in health status and have higher screening rates for blood pressure, cholesterol, and glucose (Gilmer et al. 2016).

When providers are unable to share information about their patients, gaps in knowledge may lead to conflicting treatments, such as prescribing medications with potentially dangerous or even deadly interactions with other medications (MACPAC 2018, SAMHSA 2018). Given the high rates of co-occurring physical ailments and SUD among beneficiaries with mental illness, limited data sharing represents a barrier to clinical integration and leads to lower quality of care (MACPAC 2016, Gilmer et al. 2016).

In this section, we provide an overview of the benefits of clinical integration for behavioral health patients. We then present data on rates of co-occurring physical conditions that disproportionately affect Medicaid beneficiaries, underscoring the importance of integration to this specific population. We then briefly discuss how poor integration is particularly harmful for those covered by Medicaid given the large amount of care provided through specialty behavioral treatment centers.

Behavioral health and clinical integration

Clinical integration of physical and behavioral health care can help close the gap between the number of people with behavioral health disorders and the much smaller number accessing care (SHADAC 2020a, MACPAC 2016, NASHPMD 2012). The term "clinical integration" is used to describe a wide range of activities designed to provide care to the whole person, rather than focusing on specific body systems, diagnoses, or conditions (Box 4-1).[3] Evidence suggests that integration efforts for certain populations and circumstances can lead to improved care and reduced costs, although evidence on efficacy for those with mental illness is mixed (MACPAC 2016). The mixed evidence may stem in part from delayed initiation of behavioral health treatment. For individuals with mental health conditions, the average delay between symptom

onset and treatment is 11 years (NAMI 2020). Similarly, the stigma associated with SUD can affect the willingness of individuals to seek help, providers to offer care, and payers to cover treatment (MACPAC 2017).

BOX 4-1. Components of Clinical Integration

Clinical integration refers to the actions taken by clinicians and care coordinators to provide person-centered care. Models of integration can vary; some components of integration are listed below.

Care coordination or care management. Care coordinators or care managers act as single points of contact for patients and as hubs for the multiple providers treating a patient. Care coordinators can be located in behavioral health, physical health, or other settings, such as within the state or local Medicaid program office.

Co-location. Co-location refers to physically locating behavioral health and physical health providers in the same facility. It can encourage face-to-face contact between providers, it is convenient for beneficiaries, and it fosters communication about patients, improving efficiency and enhancing quality through a team-based approach to care.

Data sharing. Sharing clinical and other patient information can help care managers and providers from different disciplines communicate and coordinate care. Electronic health records can give patients and providers immediate access to clinical data and support knowledge transfer and informed decision making between providers. Data sharing allows providers and systems to exchange information on demographics, type of insurance coverage, hospital admissions, medications, lab results, diagnoses, allergies, treatment plans, clinical documentation, appointments, care team information, and activity logs. Furthermore, data sharing between the patient and provider enables patients to be active participants in their own treatment planning process, which is necessary given substance use disorder (SUD) privacy standards under 42 CFR Part 2.

Formal or informal agreements with external partners. Formal and informal arrangements between providers of behavioral health, physical health, and auxiliary community-based services (e.g., transportation, housing) can ensure beneficiary access to a full complement of services. Such arrangements allow providers to use community resources (e.g., contracting with a local non-profit organization for transportation services) without co-locating services. For example, SUD treatment facility may contract with a medical group to provide physical examinations and routine medical care for its patients.

Screening and referral to treatment. Screening and referral to treatment refers to a comprehensive and integrated approach to identifying appropriate treatments (including preventive care) and recommending the appropriate source of care for identified treatments. Screening and referrals can occur in both physical and behavioral health settings.

Provider education and training. Introducing concepts of behavioral health and interdisciplinary care teams during training can influence the future health care workforce's expertise and expectations about clinical practice. Residency training in family medicine and psychiatry is evolving to address person-centered care. For example, family medicine residents are now required to receive training in behavioral health, and psychiatric residents undergo some training in primary care settings (MACPAC 2016).

Co-occurring conditions among Medicaid beneficiaries

Services for physical and behavioral health are typically financed and delivered under separate systems. This means Medicaid enrollees with co-occurring conditions often find themselves interacting with multiple public and private agencies and receiving physical and behavioral health care from different sources (CMS 2020b, MACPAC 2020a). This fragmentation impedes access to care and may result in inappropriate or limited use of services, poor health status, and increased costs.

In 2018, non-institutionalized adults with any mental illness who were enrolled in Medicaid reported having a co-occurring physical health condition over the course of their lifetime at higher rates than those with private coverage (Table 4-1).[4] Medicaid beneficiaries also reported higher rates of co-occurring conditions than adults who were uninsured. Across all coverage categories, rates were higher for adults with serious mental illness than for adults with mild to moderate conditions. Furthermore, adults with serious mental illness who were enrolled in Medicaid reported higher rates of co-occurring conditions than Medicaid beneficiaries with mild to moderate mental illness for virtually all conditions. (For more detailed tables on specific co-occurring conditions, see Appendix 4A, Table 4A-1.)

TABLE 4-1. Reported Lifetime Rates of Co-Occurring Physical Health Conditions among Non-Institutionalized Adults Age 18–64 with Past Year Mental Illness, by Insurance Status, 2018

Condition	Percentage of adults ever having a co-occurring condition	Percentage of adults age 18–64 in each coverage category		
		Medicaid	Private coverage	Uninsured
Any mental illness	44.1%	48.2%	40.6%*	37.5%*
Mild to moderate mental illness	42.1	45.1	39.0*	35.8*
Serious mental illness	49.9	55.3	46.0*	41.8*

Notes: Co-occurring conditions include HIV or AIDS, heart conditions, diabetes, chronic bronchitis, cirrhosis of the liver, hepatitis B or C, kidney disease, asthma, cancer, high blood pressure, and sexually transmitted diseases. Estimates for any mental illness, mild to moderate mental illness, and serious mental illness are based on a statistical model of a clinical diagnosis and responses to questions in the main National Survey on Drug Use and Health (NSDUH) interview on distress, using the Kessler-6 scale; impairment, which is assessed through an abbreviated version of the World Health Organization Disability Assessment Schedule; past year major depressive episode; past year suicidal thoughts; and age. Mental illnesses in this category can vary in severity, ranging from no impairment, to mild or moderate, to severe impairment. Within the 2018 NSDUH survey, a diagnosable mental, behavioral, or emotional disorder is defined based on the *Diagnostic and Statistical Manual of Mental Disorders, 4th edition* and excludes developmental and substance use disorders (SAMHSA 2019a).

We used the following hierarchy to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid, other, or uninsured. Coverage source is defined as of the time of the most recent survey interview.

* Difference from Medicaid is statistically significant at the 0.05 level.

Source: SHADAC 2020a.

Substance use disorder. Prior MACPAC work documented comorbidities among beneficiaries with SUD; in this section we will discuss rates of co-occurring SUD among those with mental illnesses.[5] Among adults who report experiencing mental illness, co-occurring SUD is more prevalent among Medicaid beneficiaries than their privately insured peers. In 2018, one in four (26.2 percent) non-institutionalized adults with any mental illness who were enrolled in Medicaid had a co-occurring alcohol or drug dependence or abuse in the past year (Table 4-2). The reported rate of co-occurring alcohol or drug dependence or abuse was even higher (35.7 percent) among those with serious mental illness.[6]

TABLE 4-2. Reported Rates of Co-Occurring Substance Use Disorder in the Past Year among Non-Institutionalized Adults Age 18–64 with Past Year Mental Illness, by Insurance Status, 2018

Condition	Percentage of adults 18–64	Percentage of adults age 18–64 in each coverage category		
		Medicaid	Private coverage	Uninsured
Any mental illness	21.0%	26.2%	19.2%*	26.2%
Mild to moderate mental illness	18.3	22.2	16.8*	22.8
Serious mental illness	28.8	35.7	27.3*	34.9

Notes: Co-occurring substance use disorder includes alcohol or drug dependence or abuse. Estimates for any mental illness, mild to moderate mental illness, and serious mental illness are based on a statistical model of a clinical diagnosis and responses to questions in the main National Survey on Drug Use and Health (NSDUH) interview on: distress, using the Kessler-6 scale; impairment, which is assessed through an abbreviated version of the World Health Organization Disability Assessment Schedule; past year major depressive episode; past year suicidal thoughts; and age. Mental illnesses in this category can vary in severity, ranging from no impairment, to mild or moderate, to severe impairment. Within the 2018 NSDUH survey, a diagnosable mental, behavioral, or emotional disorder is defined based on the *Diagnostic and Statistical Manual of Mental Disorders, 4th edition* and excludes developmental and substance use disorders (SAMHSA 2019a).

We used the following hierarchy to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid, other, or uninsured. Coverage source is defined as of the time of the most recent survey interview.

* Difference from Medicaid is statistically significant at the 0.05 level.

Source: SHADAC 2020a.

Use of the specialty behavioral health treatment system

Medicaid beneficiaries often receive treatment in specialty mental health facilities, which typically treat individuals with serious mental illness and are separate from other health care facilities (MACPAC 2018). These facilities provide a range of services from outpatient behavioral health services, to partial hospitalization, to residential treatment. Despite high rates of co-occurring conditions among beneficiaries with behavioral health conditions, these specialty facilities rarely offer fully integrated care (SAMHSA 2019b). Many of these facilities participate in Medicaid and are more likely to be located in low-income communities than in higher income neighborhoods (SAMHSA 2019b, Cummings et al. 2017).

Medicaid beneficiaries with mental illness are more likely to receive care in these specialty facilities than their privately insured peers (SHADAC 2020a, Cummings et al. 2017). Moreover, beneficiaries are less likely to receive specialty behavioral health services in office-based settings than their privately insured peers (SHADAC 2020a, Cummings et al. 2017). (For additional information on access to mental health treatment, see Chapter 2.)

In 2018, specialty mental health facilities that accept Medicaid were more likely to offer SUD treatment (roughly half of facilities) than integrated primary care services (about one-quarter of facilities). The proportion of specialty mental health treatment facilities offering integrated care also varied by state, ranging from 10 percent of facilities in Nevada to 43 percent in the District of Columbia (SAMHSA 2019b). Furthermore, the frequency of operational integration and routine co-occurring treatment may fall short of these reported offerings of integrated care (LeVota 2021).

Health IT: A Tool for Clinical Integration

EHRs can foster clinical integration through data sharing, care coordination, and referral to treatment across the care continuum. EHRs alone will not fully integrate patient care, but the ability to share information among providers and between providers and patients is an important step toward this goal. In general, EHRs can promote coordinated care by allowing clinicians to update patient health information quickly and distribute it to other authorized providers in disparate care settings (Falconer et al. 2018).

To confer confidence that electronic health information can be easily shared between providers using different EHR platforms, the Office of the National Coordinator for Health Information Technology (ONC) certifies EHRs to confirm that they meet a minimum quality standard (ONC 2015). The structure of EHRs that have not received ONC certification may not conform to standards, making data transfers between providers a challenge (CMS 2020c). Because CEHRT meets basic minimum standards on core functions and data structures, it is more likely to enable and ensure interoperability and data exchange than non-certified EHR platforms (CMS 2020c).

Below we describe in more detail how CEHRT could enable greater clinical integration between behavioral and physical health services.

CEHRT provides easier access to state health information exchanges

Health information exchanges (HIEs) are entities that facilitate the transfer of health care information electronically across organizations within a geographic region, hospital system, or insurer. Virtually all states have some HIE infrastructure that allows providers and patients to access and securely share medical information, often in real time (ONC 2021). Immediate access to medical information has numerous benefits, including making available vital patient information to inform decision making at the point of care. For example, experts agree that the integration that comes with participation in an HIE may lower the probability of readmission, lower the risk of medication discrepancies, reduce redundant imaging and laboratory tests, and decrease emergency department (ED) use (Menachemi et al. 2018, Boockvar et al. 2017, Murphy et al. 2017, Vest et al. 2015, Yaraghi 2015).

Providers who have adopted CEHRT have easier access to patient data stored in the HIE. Under the 21st Century Cures Act (Cures Act, P.L. 114-255), CEHRT must store data in the same standardized structure as used by HIEs. This makes it easier for providers with CEHRT to send and receive patient records from an HIE.

As we will discuss later in this chapter, behavioral health providers have adopted CEHRT at lower rates than other providers and consequently access clinical and patient data from HIEs at lower rates than other types of providers (Barker 2020). As a result, many behavioral health providers cannot easily obtain patient information to proactively strengthen quality of care and coordination, for instance, accessing state prescription drug monitoring programs to determine whether the patient has multiple prescribers or receiving real-time notifications if a patient has been admitted to a hospital for a behavioral health treatment. Similarly, physical health providers are often unaware of a beneficiary's participation in behavioral health services (Box 4-2).

BOX 4-2. Maryland's Health Information Exchange Supports Care Coordination

The Chesapeake Regional Information System for Our Patients (CRISP) is a regional health information exchange (HIE). It receives information on emergency and inpatient admissions in real time from acute care hospitals in Maryland and the surrounding jurisdictions, including Delaware, the District of Columbia, and West Virginia.

All providers partnering with CRISP may upload patient information to the HIE. When an individual is admitted to a hospital, the hospital will ask the patient for basic information and the reason for the visit. This information is then entered in the patient's hospital medical record, which is immediately sent to CRISP. If the patient's record is matched with information on the HIE, then CRISP sends an immediate notification to any provider who has opted to receive this information and whose certified electronic health record technology or electronic health record platform has the functionality to accept real-time alerts. These encounter notification systems can help a behavioral health provider proactively engage with an individual who might be at risk of frequent emergency department visits (Martin and Chute 2017).

CEHRT enables participation in value-based payment arrangements and supports quality reporting

CEHRT is a necessary precursor to increased behavioral health provider participation in value-based payment (VBP) arrangements (LeVota 2021). State Medicaid agencies and managed care organizations (MCO)s are increasingly developing VBP arrangements that require the use of CEHRT or other EHR platforms with some of the advanced functionalities of CEHRT. The latter include EHRs that can identify high-risk and high-need patients within a provider's patient panel but may lack other CEHRT functions. Use of CEHRT enables different specialists involved in a patient's care to transmit patient information critical to the value-based models. For example, CEHRT can be used to analyze different levels of risk within a patient population and to determine provider quality scores for purposes of VBP (AmeriHealth Caritas 2021, AmeriHealth Caritas DC 2019).[7] Providers responsible for health outcomes such as non-emergent ED visits need CEHRT capable of generating risk profiles that predict such use (MACPAC 2020b). CEHRT can also ease the burden of reporting to state agencies or Medicaid MCOs on behalf of the provider (Box 4-3).

BOX 4-3. Certified Electronic Health Record Technology and Value-Based Payments in Medicare

One of the better-known value-based payment (VBP) programs—the Quality Payment Program (QPP)—operates under Medicare Part B and illustrates the importance of certified electronic health record technology (CEHRT). Clinician participation in QPP requires the meaningful use of CEHRT to determine provider quality scores. Examples of QPP measures include expanded use of e-visits and telehealth and sharing consultations with referring clinicians. These measures can influence the provider's total payment. Additionally, CEHRT can enable clinicians to capture, track, and report clinical quality measures. A clinician can rely on CEHRT to automatically collect the data, incorporate any exclusion criteria, and calculate a quality score. Without CEHRT, the labor and capital costs required to calculate these scores could make participation in QPP cost prohibitive for the clinician (Gillen et al. 2018).

Increased adoption of CEHRT would support the data collection needed to calculate provider quality scores and the Medicaid core set of health care quality measures (MACPAC 2020b). Currently, few behavioral health providers use CEHRT, so even when electronic data are available, the data are in non-standardized data formats. This creates challenges for states and MCOs as they work with providers to collect data according to federal core set measure technical specifications. In addition, without CEHRT, behavioral health providers may not have the technical capacity to transmit behavioral health data electronically to the Medicaid agency (MACPAC 2020b).

The inability of many behavioral health providers to analyze and transmit the data required for Medicaid's core set of health care quality measures is a pressing concern given that beginning in fiscal year (FY) 2024, states are required to report on behavioral health quality measures in the Adult Core Set. As of 2020, eight of the adult behavioral health measures rely exclusively on administrative data, which include data that could be collected from CEHRT (MACPAC 2020b).[8] However, states have indicated that it is unlikely they will be able to address the challenges of CEHRT interoperability and data extraction from EHRs by the deadline (MACPAC 2020b).

Behavioral Health Providers Adopt EHRs at Low Rates

As noted above, behavioral health providers generally, and specialty behavioral health providers in particular, lag behind hospitals and physicians in adoption of EHRs. Below we discuss rates of EHR adoption among a subset of these providers: specialty mental health and SUD treatment facilities. These treatment facilities provide services ranging from outpatient behavioral health services, to partial hospitalization, to inpatient behavioral health care. We also discuss barriers to EHR adoption for the broader specialty behavioral health community, such as psychiatric hospitals and individual providers.

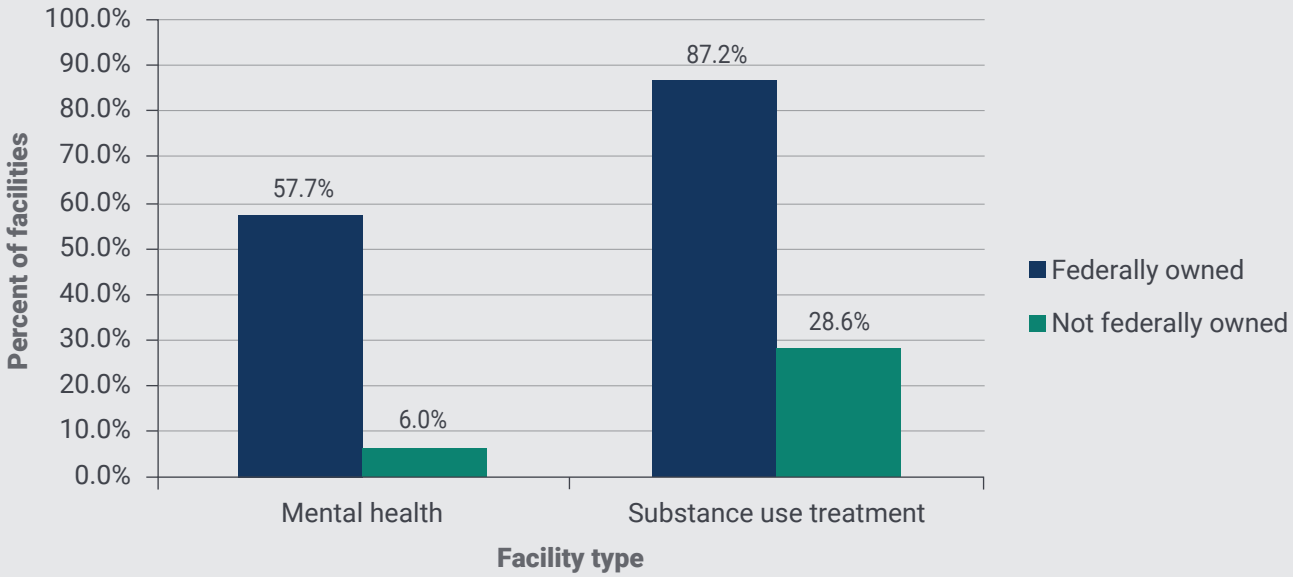
To quantify EHR uptake among behavioral health providers, we used the National Mental Health Services Survey (N-MHSS) and the National Survey of Substance Abuse Treatment Services (N-SSATS).[9] The N-MHSS collects data from facilities providing specialized mental health services, while the N-SSATS collects data from facilities providing SUD treatment. Both are administered annually by the Substance Abuse and Mental Health Services Administration (SAMHSA) and are used to conduct a census of facilities that provide specialty mental health or SUD treatment services, respectively. It

should be noted that the results presented here are an approximation of CEHRT functionality because neither survey asks specific questions about CEHRT adoption.[10] More details on our methodology can be found in Appendix 4B.

EHR adoption rates vary based on facility ownership

MACPAC's analysis of N-MHSS and N-SSATS shows that whether providers use electronic means for recordkeeping and basic clinical functions varies extensively by ownership status. Federally owned mental health and substance use treatment facilities are predominantly operated by the U.S. Department of Veterans Affairs and the U.S. Department of Defense. Generally, federally owned behavioral health facilities have benefited from government efforts to digitize health care records, and they have adopted EHRs at higher rates than non-federally owned facilities. For mental health facilities, in 2017–2018, 58 percent of federally owned facilities used an electronic system for basic clinical functions compared to 6 percent of non-federally owned facilities. For substance use treatment facilities, 87 percent of federally owned substance use treatment facilities used an electronic system for basic clinical functions compared to 29 percent of non-federally owned facilities (Figure 4-1).[11]

FIGURE 4-1. Percentage of Behavioral Health Facilities That Use an Electronic System for Basic Functions and Accept Medicaid, 2017–2018

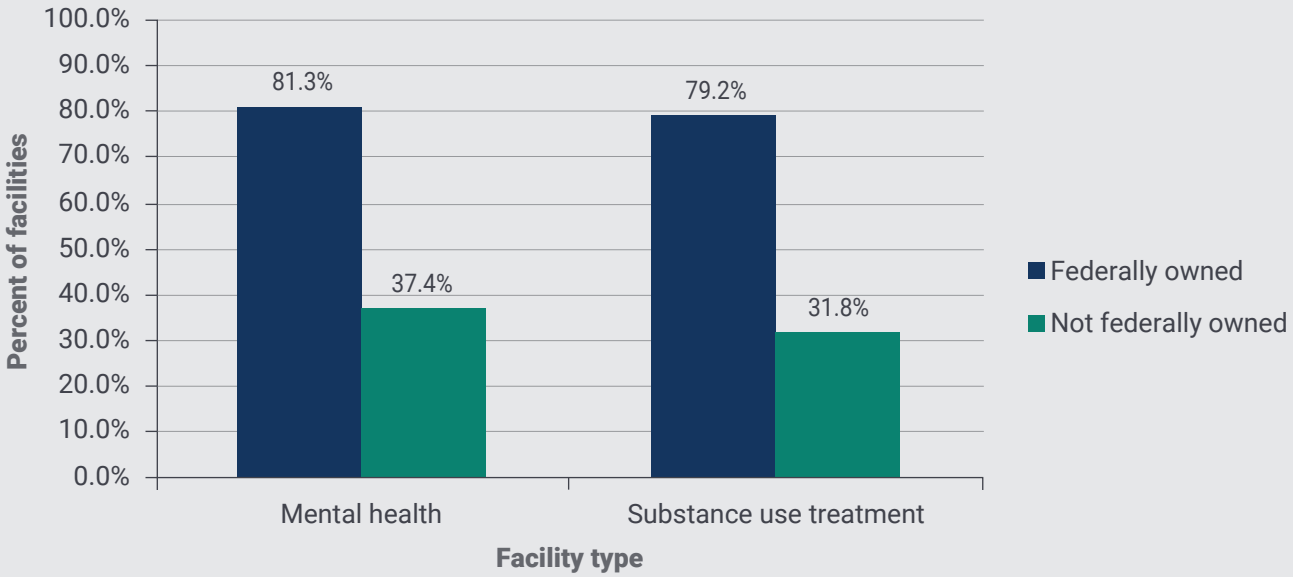


Notes: Includes only facilities that accept Medicaid-enrolled patients. The measure is a composite based on how providers answered a series of survey questions; it measures whether a facility uses only electronic means–as opposed to a combination of electronic and paper or only paper means–for basic clinical functions, such as storing and maintaining health records, assessing a client, creating a treatment plan, or checking for medication interactions. If a facility does not execute a specific clinical function, then it was dropped from the composite measure. For more on how this measure was calculated, please refer to Appendix 4B.

Source: SHADAC 2020b.

We found that facilities also use an electronic system for specific clinical functions, such as maintaining health records and sharing client information with other providers. Among substance use treatment facilities, the percentage of federally owned facilities that maintain health records on a computer or electronically was more than double the rate among non-federally owned facilities (79 percent versus 32 percent). Between federally owned and non-federally owned mental health facilities, the difference was similar, 81 percent and 37 percent, respectively (Figure 4-2).

FIGURE 4-2. Percentage of Behavioral Health Treatment Facilities That Store and Maintain Health Records Electronically and Accept Medicaid, 2017–2018

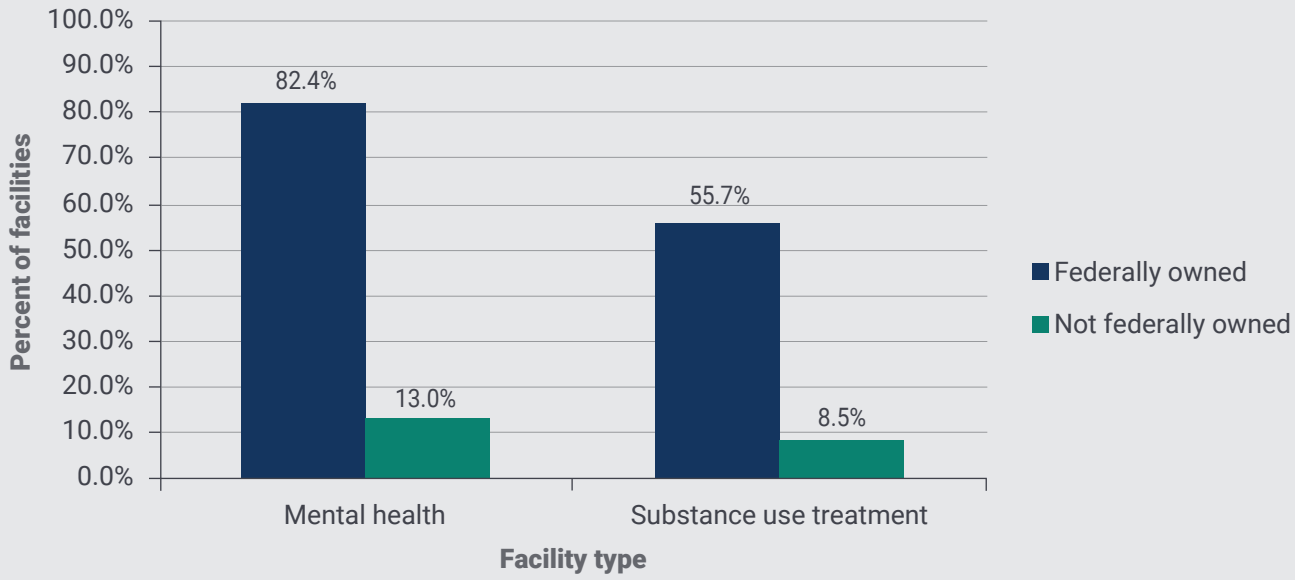


Notes: This analysis includes only facilities that report acceptance of Medicaid. The measure is based on whether the facility uses only computer and electronic means—as opposed to a combination of electronic and paper or only paper means—to store and maintain health records.

Source: SHADAC 2020b.

Differences in electronic sharing of client information were even greater.[12] A higher share of federally owned mental health facilities (82 percent) than non-federally owned mental health facilities (13 percent) reported sharing client information electronically. Similarly, a higher share of federally owned substance use treatment facilities than non-federally owned facilities shared patient information electronically (56 percent versus 9 percent) (Figure 4-3).

FIGURE 4-3. Percentage of Behavioral Health Facilities That Electronically Share Client Data with Other Providers and Accept Medicaid, 2015–2016



Notes: This analysis includes only facilities that report acceptance of Medicaid. Question on interoperability changed in 2017 and therefore is not comparable in future years. The measure is based on whether the facility uses only computer and electronic means—as opposed to a combination of electronic and paper or only paper means—to electronically share client data with other providers.

Source: SHADAC 2020b.

Peer effects may explain low rates of electronic client information sharing. That is, when few facilities can share information electronically, the incentive for them to invest in EHR systems or other patient information-sharing mechanisms declines. EHR peer effects have been noted as a reason for lower rates of electronic data sharing throughout the health care system (Patel et al. 2019, Henry et al. 2018). For example, half of hospitals indicate that their patient data exchange partners are unable to receive data, either because their EHR systems are incompatible or because partners cannot electronically receive the data (Pylypchuk et al. 2020). Facilities that were ineligible for incentive payments under the HITECH Act are less likely to have an operable EHR system (Adler-Milstein et al. 2017).

Barriers to CEHRT adoption among behavioral health providers

The barriers to CEHRT adoption are multifaceted. Behavioral health providers often have limited capital to invest in technology. Moreover, as noted

above and discussed more fully below, most were ineligible to receive federal incentive payments to adopt CEHRT (MACPAC 2018, MACPAC 2016).

To understand how limited CEHRT adoption and use affects behavioral and physical health care, we reviewed comments submitted in response to federal rulemaking on behavioral health EHR interoperability, including a request for information on how to assist behavioral health providers in leveraging technology to exchange health data and coordinate care in a more agile fashion. The comments, submitted by insurance carriers and Medicaid MCOs, EHR vendors, HIEs, behavioral health provider associations, state Medicaid agencies, and various health IT coalitions, provide insight on use of CEHRT among behavioral health providers as well as potential federal solutions.[13]

Costs. Behavioral health providers report that cost is the principal barrier to CEHRT uptake (NASMHPD 2018).[14] Despite a strong demand for CEHRT adoption, the costs of purchasing and installing the system and training staff remain substantial for behavioral health providers—especially solo practitioners and those in small practices—as well as state behavioral health agencies with limited budgets (NASMHPD 2018).[15] Although many hospitals and physicians received federal incentive payments for EHR adoption under the HITECH Act, with the exception of psychiatrists, behavioral health providers were not included in this effort. For context, previous federal incentives for CEHRT adoption could equal almost $64,000 over a six-year period per individual eligible provider and almost $15 million over a four-year period.[16]

Due to low operating margins, behavioral health providers often have little capital available to invest in the expensive hardware, software, and training needed to use EHRs (MACPAC 2016). The COVID-19 pandemic has further strained provider finances. An April 2020 survey conducted by the National Council of Behavioral Health found that nearly all (93 percent) of behavioral health providers had reduced operations and nearly half (46.7 percent) of behavioral health organizations had laid off or furloughed employees or planned to do so (NCBH 2020).

Privacy rules. Federal CEHRT standards were designed to comply with the Health Insurance Portability and Accountability Act of 1996 (HIPAA, P.L. 104-191), which governs use and disclosure of individually identifiable health information (i.e., information related to all health conditions, health care services, and payment). HIPAA generally allows information to be shared without patient consent among providers and payers for payment, treatment, and health care operations purposes. As such, it can easily be shared among providers that are using CEHRT.

In contrast, SUD treatment information is subject to additional requirements that affect information sharing among providers. Specifically, Part 2 does not allow the disclosure or redisclosure of protected SUD treatment information for treatment purposes. As such, Part 2-covered providers must obtain patient consent to disclose, and redisclose, such information, including for care coordination and case management.[17] These requirements mean that CEHRT must be able to segment Part 2-protected SUD treatment information from the rest of a patient's health record.[18] In practice, CEHRT often does not have such segmentation capabilities. There are no federal requirements for CEHRT to include the functionality to comply with Part 2. There is also disagreement within the behavioral health community as to whether, and to what degree, widespread Part 2-compliant interoperability is even technically feasible.[19]

Recent changes in federal privacy laws may make it easier for providers to share this information. The Coronavirus Aid, Relief, and Economic Security Act (CARES Act, P.L. 116-136) aligned the statutory basis for Part 2 more closely with HIPAA. Among other things, it requires providers to obtain general consent for disclosure of SUD treatment records and allows disclosure of SUD information for treatment, payment, and health care operations. However, providers subject to Part 2 must still obtain consent to disclose information, and

information may be shared only with other Part 2-regulated providers and HIPAA-covered entities and business associates. Moreover, the CARES Act allows recipients of Part 2-protected information to make redisclosures in accordance with HIPAA. Individuals have the right to request a restriction on the use of SUD records for treatment, payment, and health care operations, and covered entities are required to make every reasonable effort to comply with a patient's request.[20]

Regardless of the provisions of the CARES Act, CEHRT will likely still need to have segmentation capabilities, because an individual can still request restrictions on the use of their SUD treatment records. Moreover, in addition to being subject to HIPAA, certain other sensitive health data (e.g., related to HIV/AIDS, mental health, reproductive health, and domestic violence) may also be subject to state laws mandating heightened protections for disclosure or redisclosure.

Guidance on EHR suitability. Federal EHR adoption incentives spurred a large and active vendor market, especially for office-based practices (Gold 2016). This allowed providers to choose an EHR that was affordable and met their specific clinical needs. However, the large market also has drawbacks. Due to the extensive choice of products available, a provider had to be highly informed to purchase the right EHR for a specific practice. In some cases, the product met requirements at the time of purchase but later turned out to be inadequate for subsequent reporting stages (Gold 2016).[21]

For many behavioral health providers, sharing information electronically will be a major shift in how they operate, and they will need technical assistance (AmeriHealth Caritas 2021, Covered California 2021, NYeC 2021). For example, provider education and technical assistance will be needed both for buy-in and for adopting new practice workflows that integrate technology (AmeriHealth Caritas 2021). Technical assistance is also necessary for addressing the long-standing reluctance of behavioral health providers to share information due to Part 2-related privacy concerns. Addressing privacy concerns may also have further cost implications. For example, legal counsel could be required to update privacy practice notifications and disclosure and redisclosure consent documentation (OHA 2021).

Additional voluntary standards may also be necessary to instill confidence that the EHR provides a minimum set of functionalities to meet the needs of behavioral health patients and providers. It is unclear if all behavioral health providers need access to the same type of EHR as physical health providers and if they will require additional functionality than currently available from CEHRT. Additional voluntary behavioral health EHR standards above current CEHRT standards may be needed to address Part 2-related segmentation requirements, and these may affect the collection of standardized information about plans of care, encounter notes, and patient-directed goals. Even specialized behavioral health EHRs that are currently in use primarily capture these data elements in ways that are not easily analyzed.

There is precedent for creating a federal voluntary CEHRT standard for different types of providers. For example, ONC facilitated a working group that created voluntary standards for EHR modules for pediatrics. These standards identify the need for CEHRT to compute weight-based drug dosages, synchronize immunization histories with registries, and segment access to information (ONC 2020b). ONC has also advised that the CEHRT used in pediatric settings must be able to tag certain sensitive information (e.g., pertaining to sexual health, mental health, and social history) and limit electronic access to such information (ONC 2020b).

Next Steps

There are a number of ways federal Medicaid policy could be used to support EHR adoption among behavioral health providers. In future work, the Commission will examine potential solutions to address low rates of CEHRT adoption among behavioral health providers, including the following:

Strengthening behavioral health EHR adoption through new health IT incentives. Given low rates of data sharing and CEHRT adoption among behavioral health providers, the Commission is interested in exploring whether new legislation targeting providers that were ineligible for incentive payments under the HITECH Act is necessary and how such support could be structured. The HITECH Act was instrumental in increasing the adoption of EHRs among acute care hospitals and other providers and could serve as a model for new legislation (Adler-Milstein et al. 2017, Henry et al. 2016).[22] However, making CEHRT incentive payments to behavioral health providers would be costly. The Congressional Budget Office estimates that an EHR incentive program that targets behavioral health providers would cost $5 billion to $10 billion over a 10-year period. With this in mind, the Commission will also explore targeted and less expensive interventions to assist behavioral health providers' participation in an HIE or to offer guidance on EHR suitability.

Enhanced health IT federal financial participation (FFP). The Commission is interested in understanding whether the enhanced federal administrative match of up to 90 percent under Medicaid Information Technology Architecture 3.0 could be used to support state efforts to integrate clinical care and enable and encourage data sharing. Under current law, state agencies can access enhanced FFP to make state health IT infrastructure improvements under Sections 1903(3)(A) and (B) of the Social Security Act (the Act).[23] We plan to examine closely whether states are accessing enhanced match to promote data sharing among behavioral health providers, physical health providers, and patients. The Commission will also examine how health IT administrative funding can be used to strengthen HIEs and to target data-sharing payments to behavioral health providers, similar to what was allowed under the HITECH Act.

Testing different approaches to making behavioral health EHR incentive payments. The Commission is interested in learning more about the role that the Centers for Medicare and Medicaid Innovation (CMMI) could play in strengthening clinical integration of behavioral health services. The Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment and Communities Act (SUPPORT Act, P.L. 115-271) authorized CMMI to test EHR incentive payments for behavioral health providers that contract with state Medicaid plans under Section 1115A of the Act. However, as of May 2021, CMMI has yet to implement such a demonstration.

Behavioral health IT and Section 1115 demonstrations. Finally, the Commission will explore how Section 1115 demonstrations are addressing clinical integration among behavioral health providers. Section 1115 demonstrations for adults with serious mental illness and children with severe emotional disturbance, as well as for individuals with SUD, require states to submit a health IT plan that describes the state's ability to leverage health IT systems, advance the exchange of health information electronically across organizations, and ensure health IT interoperability.[24, 25] State Medicaid agencies are investing substantial resources in establishing behavioral health treatment systems that are separated from physical health care providers, and the Commission plans on examining whether these demonstrations enable greater integration.[26] Although evaluation results are not yet available, in the future they may provide important insight into how state Medicaid agencies are addressing behavioral health IT, including interoperability.

Endnotes

[1] The confidentiality of SUD patient records regulations contained in Part 2 establish patient protections and set the conditions for disclosure of SUD treatment and prevention records for people receiving treatment from federally assisted programs. These regulations were first promulgated in 1975 and implement statutory requirements intended to encourage individuals to seek treatment for SUDs by addressing stigma and concerns that individuals receiving treatment could be subject to negative consequences. Among other things, the statute (42 USC 290dd-2) requires the patient to consent in writing to the disclosure or redisclosure of any identifiable information in connection to their SUD treatment.

[2] CMS and the Office of the National Coordinator for Health Information Technology (ONC) have established standards and other criteria for structured data that electronic health records (EHRs) must meet in order to qualify for use in the Promoting Interoperability program, formerly known as Meaningful Use or the Medicare and Medicaid EHR Incentive Program. Structured data allow health care providers to retrieve and transfer patient information easily and use the EHR in ways that can aid patient care. EHR technology that meets these requirements is known as certified EHR technology (CEHRT). CEHRT is a specific classification of EHR that has been certified to support certain security and clinical functions such as prescribing, ordering, and receiving laboratory and diagnostic imaging results, and making transition plans for care (ONC 2020a, 2015, 2013). CEHRT gives assurances to purchasers and others that an EHR system or module offers the necessary technological capability, functionality, and security to help meet the meaningful-use criteria outlined within the Promoting Interoperability program. Certification can also give providers and patients confidence that the electronic health information technology (IT) is secure, can maintain data confidentially, and can work with other systems to share information (CMS 2020a, ONC 2020a).

[3] This description of the components of clinical integration is not meant to be an all-encompassing clinical integration framework. For example, frameworks codeveloped by the Health Resources and Services Administration (HRSA) and the Substance Abuse and Mental Health Services Administration (SAMHSA) provide a more in-depth and comprehensive model for how to advance integration within a medical setting (SAMHSA and CIHS 2017).

[4] Co-occurring physical conditions can include HIV or AIDS, heart conditions, diabetes, chronic bronchitis, cirrhosis of the liver, hepatitis B or C, kidney disease, asthma, cancer, high blood pressure, and sexually transmitted diseases. We should note that "sexually transmitted diseases" is the term used by the National Survey on Drug Use and Health (NSDUH). The clinically appropriate term is "sexually transmitted infections".

[5] Prior MACPAC work on individuals with SUD includes the degree to which individuals with SUD experience other behavioral health disorders as well as physical health conditions (MACPAC 2018, 2017). For example, heroin use in particular is associated with other serious health conditions such as HIV, hepatitis C, and hepatitis B. Intravenous drug use can cause bacterial infections of the skin, bloodstream, and heart (MACPAC 2017). Some physical health conditions, including liver disease, pancreatitis, and hypertension, may also be attributable to an individual's SUD (MACPAC 2018).

[6] The term "alcohol or drug dependence or abuse" no longer aligns with current practice. However, we use this terminology because it is the language used by the NSDUH.

[7] Behavioral health providers may be evaluated on a number of Health Care Effectiveness Data and Information Set measures, such as follow-ups after a mental illness hospitalization or emergency department (ED) visit and antidepressant medication management. However, they may also be evaluated on other quality measures, such as non-emergent ED visits or avoidable hospital admissions, reflecting a need for these providers to be involved in care provided by multiple providers.

[8] The often fragmented delivery of behavioral health services can make it difficult to obtain data needed for core set reporting. For example, to report on the measure of screening for depression and follow-up plan for children age 12–17, data for a single individual may be needed from multiple care settings.

[9] These surveys do not capture behavioral health services delivered by office-based solo practices.

[10] For example, facilities could report that they use an electronic record system if they track information in a spreadsheet rather than certified EHR technology. However, these results can be interpreted as the upper bound estimate of the rate of basic EHR adoption and interoperability among behavioral health facilities, and may overstate the use of EHRs among surveyed facilities.

[11] "Using an electronic system for basic functions" is a composite measure based on how providers answered a series of questions; it looks at whether a facility uses only electronic means–as opposed to a combination or only paper means–for basic clinical functions, such as storing and maintaining health records, assessing a client, creating a treatment plan, or checking for medication interactions. If a facility does not execute a specific clinical function, then it was dropped from the composite measure. For more on how this measure was calculated, please refer to Appendix 4B.

[12] Client information is the term used by SAMHSA in both surveys. The information can include basic patient information, such as type of insurance and demographic information.

[13] In December 2020, CMS and ONC issued a proposed rule on prior authorization, which included a request for information on how to assist behavioral health providers in leveraging technology to exchange health data and care coordination in a more agile fashion. Most comment letters gathered were in response to this proposed rule, though other comment letters have been used as well.

[14] Additionally, designing and maintaining systems that comply with Part 2 requirements (including incorporating updates such as those made by the 2017 and 2018 Part 2 regulatory changes) can be costly (MACPAC 2018).

[15] Even if a provider adopts CEHRT, there are additional costs associated with sharing data with other providers. These may include getting set up or into an information exchange, fees charged by a state HIE, and legal counsel for interpreting HIE legal agreements.

[16] For context, each HITECH-eligible provider could receive an initial payment of $21,250 in the first year of adoption, and $8,500 for each subsequent year for a total of $63,750 over six years (CMS 2013). Hospitals could be eligible for up to $6.4 million in their first year, $4.8 million in their second, $3.2 million in their third, and $1.6 million in their fourth year.

[17] When patients are unable or unwilling to authorize Part 2 providers to disclose SUD treatment information, inadequate or even dangerous care, such as prescribing medications with dangerous or deadly interactions, may be the result (SAMHSA 2018, Wakeman and Friedman 2017, APA 2016, MHA 2016).

[18] CEHRT segmentation capabilities enable appropriate controls to share information in accordance with state and federal law (ONC 2015). Data segmentation includes capabilities to tag health care data and allow certain documents, messages, or individual data elements to be marked as sensitive, without restricting access to the entire EHR. This is typically not automated, but it serves as an important technological step to protect patient privacy.

[19] For example, ONC and SAMHSA have developed the Data Segmentation for Privacy (DS4P) standard and the Consent2Share software application to manage patient consent preferences and share Part 2-protected information electronically through EHRs and HIEs. The Health Information Technology Standards Committee advising ONC called into question the maturity of the DS4P standard, suggesting that additional testing and refinements are needed (MACPAC 2018).

[20] The CARES Act also requires the Secretary of the U.S. Department of Health and Human Services (HHS) to update federal regulations to align with statutory changes to SUD confidentiality standards. However, there is no timeline associated with this provision. As of April 2021, HHS is still in the rulemaking process, and this provision has yet to be implemented.

[21] This program is called Promoting Interoperability, though it has gone through many name changes since its inception. Promoting Interoperability is now the umbrella term for most of the EHR incentive payment programs. The Medicaid component of Promoting Interoperability is administered by the states. This name change went into effect in April 2018.

[22] Between 2008 and 2015, the share of non-federally owned hospitals that used an EHR system with basic functionalities (e.g., constructing medication lists, keeping physician notes, and viewing lab results) grew from less than 10 percent to over 80 percent (Henry et al. 2016). Almost all eligible hospitals (96 percent) adopted CEHRT by 2015. Certain HITECH-eligible providers lag behind these numbers. These

include office-based physicians, small and rural hospitals, and children's hospitals. However, even among these groups, EHR adoption has significantly increased since the passage of the HITECH Act (ONC 2019). As noted previously, HITECH funding was meant to target funding only to physicians that drive most decisions on care and to hospitals where the largest share of health care dollars is spent, which led to behavioral health providers being ineligible for incentive payments (Stark 2010).

[23] The rules governing this enhanced FFP are outlined under the Medicaid Information Technology Architecture (MITA) framework. States are interested in understanding how the MITA framework can be used to bolster HIE data-sharing capabilities, especially as the enhanced administrative HITECH Act funding comes to a close in October 2021 (WAHCA 2021, CMS 2016).

[24] The plan must address electronic care plan sharing, care coordination, and behavioral health and physical health integration. Terms and conditions for Section 1115 SUD demonstrations also require states to describe how the state will centralize information exchange with its prescription drug monitoring program.

[25] Interoperable health IT is electronic health information that can be securely exchanged between providers, patients, and insurance companies without any special effort on the part of the user. Any effort to intentionally or unintentionally block the sharing of health data to those authorized for access constitutes information blocking and is subject to financial penalties starting in FY 2021 (CMS 2020c).

[26] As of April 2020, 30 states and the District of Columbia have an approved Section 1115 SUD demonstration waiver to provide inpatient and residential SUD treatment in institutions for mental diseases; these also require states to offer a full continuum of facility-based SUD treatment (MACPAC 2020c). A similar demonstration opportunity is available to states to offer a full continuum of mental health care for adults with serious mental illness and children with serious emotional disturbance. However, fewer states have sought this demonstration opportunity. See Chapter 2 for additional information on Section 1115 demonstrations for serious mental illness.

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APPENDIX 4A: Methodology for Quantifying Co-Occurring Conditions

To quantify the rates of co-occurring disorders within the Medicaid population, MACPAC analyzed the 2018 National Survey on Drug Use and Health (NSDUH) to estimate the prevalence of mental illness among non-institutionalized adults age 18–64 and the rates at which they receive treatment, comparing the experience of adults enrolled in Medicaid to those with other sources of coverage. For this analysis, prevalence estimates for mental health conditions are reported in three categories that range in severity: any mental illness, mild to moderate mental illness, and serious mental illness. (See Chapter 2 for more information on the prevalence of mental illness among adult Medicaid beneficiaries.)

TABLE 4A-1. Reported Lifetime Rates of Co-Occurring Conditions among Non-Institutionalized Adults Age 18–64 with Past Year Mental Illness, by Insurance Status, 2018

Condition	Percentage of adults ever having co-occurring condition	Percentage of adults age 18–64 by coverage category		
		Medicaid	Private coverage	Uninsured
Ever had a heart condition				
Any mental illness	8.9%	10.6%	6.7%*	7.2%*
Mild to moderate mental illness	8.3	9.8	6.6*	6.8
Serious mental illness	10.7	12.5	7.3*	8.0
Ever had diabetes				
Any mental illness	8.8	11.5	6.2*	7.8*
Mild to moderate mental illness	9.1	11.9	6.1*	8.0
Serious mental illness	8.2	10.7	6.4	7.3
Ever had chronic bronchitis				
Any mental illness	6.2	9.1	3.8*	5.0*
Mild to moderate mental illness	5.2	7.5	3.5*	4.8
Serious mental illness	9.0	13.0	5.2*	5.6*
Ever had hepatitis B or C				
Any mental illness	1.6	2.2	0.7*	–
Mild to moderate mental illness	1.3	2.4	–	–
Serious mental illness	–	–	–	–
Ever had kidney disease				
Any mental illness	2.0	3.5	1.1*	–
Mild to moderate mental illness	1.8	–	1.0	–
Serious mental illness	2.5	2.8	–	–

TABLE 4A-1. (continued)

Condition	Percentage of adults ever having co-occurring condition	Percentage of adults age 18–64 by coverage category		
		Medicaid	Private coverage	Uninsured
Ever had asthma				
Any mental illness	15.5%	18.6%	15.8%	12.1%*
Mild to moderate mental illness	14.0	15.5	14.6	10.3*
Serious mental illness	19.9	25.9	19.8*	16.7*
Ever had cancer				
Any mental illness	4.4	4.9	3.8	3.3
Mild to moderate mental illness	4.2	4.5	3.9	–
Serious mental illness	5.0	5.9	3.6	–
Ever had high blood pressure				
Any mental illness	17.3	17.5	15.7	11.2*
Mild to moderate mental illness	16.3	15.4	15.0	10.6*
Serious mental illness	20.5	22.4	18.0	12.8*

Notes: Estimates for any mental illness, mild to moderate mental illness, and serious mental illness are based on a statistical model of a clinical diagnosis and responses to questions in the main National Survey on Drug Use and Health (NSDUH) interview on distress, using the Kessler-6 scale; impairment, which is assessed through an abbreviated version of the World Health Organization Disability Assessment Schedule; past year major depressive episode; past year suicidal thoughts; and age. Mental illnesses in this category can vary in severity, ranging from no impairment, to mild or moderate, to severe impairment. Within the 2018 NSDUH survey, a diagnosable mental, behavioral, or emotional disorder is defined based on the *Diagnostic and Statistical Manual of Mental Disorders, 4th edition* and excludes developmental and substance use disorders. Respondents were asked whether they had any of the chronic conditions listed in this table over their lifetime (SAMHSA 2019a).

We used the following hierarchy to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid, other, or uninsured. Coverage source is defined as of the time of the most recent survey interview.

* Difference from Medicaid is statistically significant at the 0.05 level.

– Dash indicates that estimate is based on too small of a sample or is too unstable to present.

Source: SHADAC 2020a.

APPENDIX 4B: Methodology for Quantifying EHR Use among Specialty Behavioral Health Facilities

This appendix provides supplementary information to help readers interpret figures in this chapter.

Data Sources

Using the National Mental Health Services Survey (N-MHSS) and the National Survey of Substance Abuse Treatment Services (N-SSATS), we estimated the extent to which certain behavioral health facilities have adopted electronic health records (EHRs). The N-MHSS collects data from facilities providing specialized mental health services, and the N-SSATS collects data from facilities providing substance use disorder (SUD) treatment. Both surveys are administered annually by the Substance Abuse and Mental Health Services Administration (SAMHSA). Neither captures behavioral health services delivered by office-based solo practices. Because different sets of questions are asked in different years, we used the 2016 and 2018 N-MHSS data years and the 2015 and 2017 N-SSATS data years.

Electronic Record Use

Neither survey asks facilities to answer questions regarding EHRs or certified EHR technology (CEHRT), both of which store patient records in a structured format that allows providers to easily retrieve and transfer patient data. Both surveys include similar questions on whether different clinical functions are accomplished using only electronic or computer means, both electronic and paper means, or only paper means. We defined electronic record use as use of only electronic or computer means to accomplish clinical functions. Both surveys categorize tools such as EHRs, web portals, and spreadsheet software as electronic records, while e-fax, pdf, or scanned documents are considered paper records. Because using computer or electronic means can also include non-EHR software, we consider the answer to these questions to represent an upper bound on EHR use. Therefore, our analysis of the surveys may overstate use of EHRs among surveyed facilities.

Defining basic use of electronic records

We sought to quantify whether substance use treatment facilities and mental health facilities meaningfully use electronic records for clinical protocols by creating a composite measure to capture routine use of electronic or computer mechanisms for various functions. This composite measure is based on questions about creating treatment plans, monitoring client progress, and receiving lab results. Table 4B-1 displays all the questions related to staff use of electronic resources included in the 2017 N-SSATS and the 2018 N-MHSS, and the questions that were included in our composite measure evaluating electronic resources for basic clinical functions. This is similar to the approach used in other studies assessing meaningful use of EHRs (Jha et al. 2009).

TABLE 4B-1. Questions Used to Define Basic Use of Clinical Records

Do staff members routinely use computer or electronic resources for:	2017 N-SSATS	2018 N-MHSS
Intake	Not used for basic composite	Not used for basic composite
Scheduling appointments	Not used for basic composite	Not used for basic composite
Assessment/evaluation	Basic composite	Basic composite
Treatment plan	Basic composite	Basic composite
Client progress monitoring	Basic composite	Basic composite
Discharge	Basic composite	Basic composite
Referrals	Basic composite	Basic composite
Issue/receive lab results	Basic composite	Basic composite
Outcomes management	Basic composite	NA
Medication prescribing/dispensing	Basic composite	Basic composite
Checking medication interactions	NA	Basic composite
Store and maintain client health and/or treatment records	Basic composite	Basic composite
Send client health and/or treatment records to providers or sources outside your organization[1]	Not used for basic composite	Not used for basic composite
Receive client health and/or treatment records from providers or sources outside your organization[1]	Not used for basic composite	Not used for basic composite
Billing	Not used for basic composite	Not used for basic composite
Client or family satisfaction surveys	NA	Not used for basic composite

Notes: NA means questions were not asked in this survey. Basic composite means we used these questions in our composite measure for evaluating whether a facility only used electronic or computer resources for basic clinical functions, as opposed to both paper and electronic, or paper only. Because questions are slightly different on the N-SSATS and N-MHSS, the basic composite measure is not identical for each survey.

[1] "Sending and receiving client health and/or treatment records" was a new question in the 2017 N-SSATS and 2018 N-MHSS. Previous years used a single question that asked about sharing patient information. Because 2017 and 2018 were the first years where these questions were split, we used the 2015 and 2016 version of the question for possible trending purposes.

Source: SHADAC 2020b.