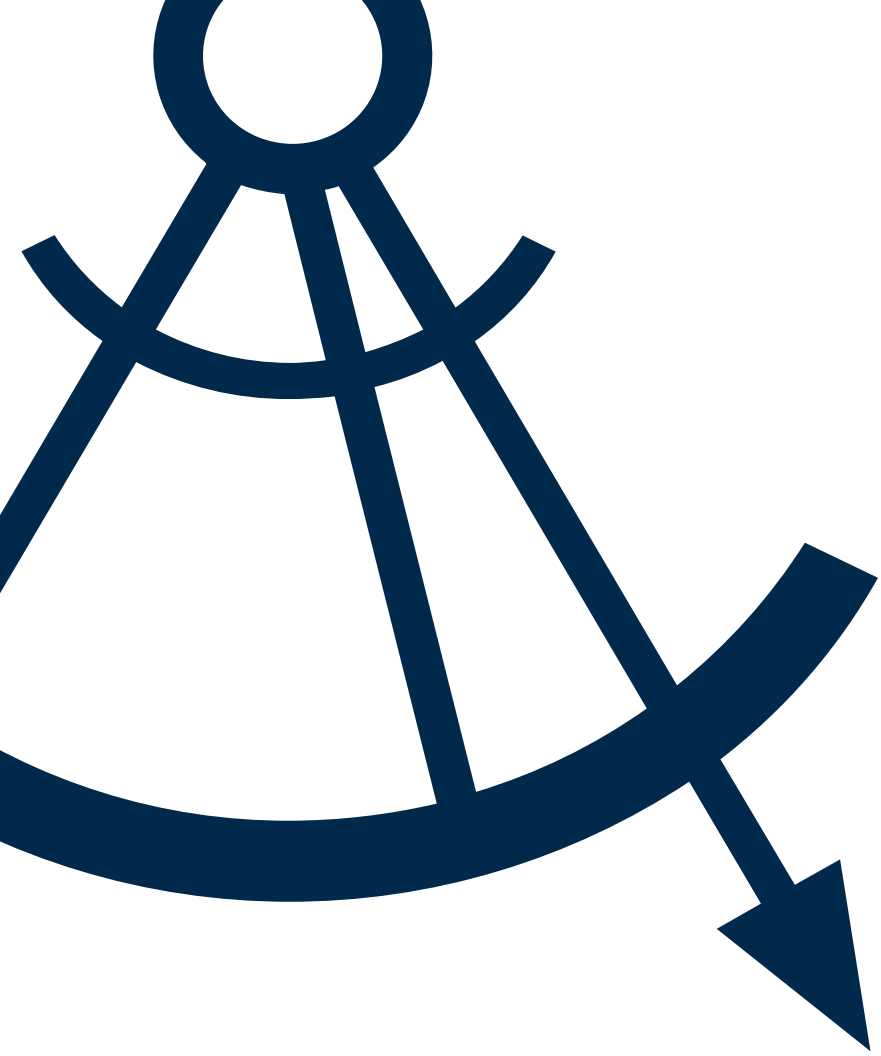


Digital Behavioral Health:

5 Essential Elements for a Successful Digital Behavioral Health Program

CHARTIS

While the behavioral health crisis in the U.S. has rapidly intensified in recent years, the pandemic has given us increased reason for hope—even as it has led to a dramatic increase in anxiety, depression, and overdose deaths.[1,2]

Prior to the pandemic, more than half of individuals with behavioral health conditions were unable to access necessary care.[3] Then practically overnight in 2020, behavioral health visits via telehealth increased from under 3% to over 60%. While other specialties also experienced a rapid rise in telehealth, ongoing use has fallen significantly from its peak in 2020. Behavioral health is a notable exception. It has sustained a telehealth delivery rate above 57% of all visits.[4] Several studies have affirmed that outcomes for virtual health, both generally and for behavioral health specifically, are comparable to outcomes for in-person care.[5,6] Studies also show that some patients actually prefer virtual care to in-person care for behavioral health.[7]

Thoughtful incorporation of digital behavioral health (DBH) solutions can further assist health systems in expanding access to care. In our first paper, "Digital Behavioral Health: The First Digitally Forward Service Line," we discussed the rationale for investing in DBH solutions. This paper describes the practical considerations for sustainable and scalable implementation of DBH solutions, incorporating key insights from leaders of several health systems and DBH vendors.

DBH solution implementation requires attention to 5 core areas:

01 PATIENT EXPERIENCE
Cultivate proactive, personalized, and meaningful connections with patients to optimize outcomes.

02 CARE TEAM ENGAGEMENT
Establish resources and support to facilitate the change management process.

03 CLINICAL WORKFLOW ADAPTATION
Update workflows to enable the seamless integration of DBH solutions.

04 PERFORMANCE MANAGEMENT AND REPORTING
Create meaningful, timely, transparent, and actionable reporting of key performance indicators (KPIs).

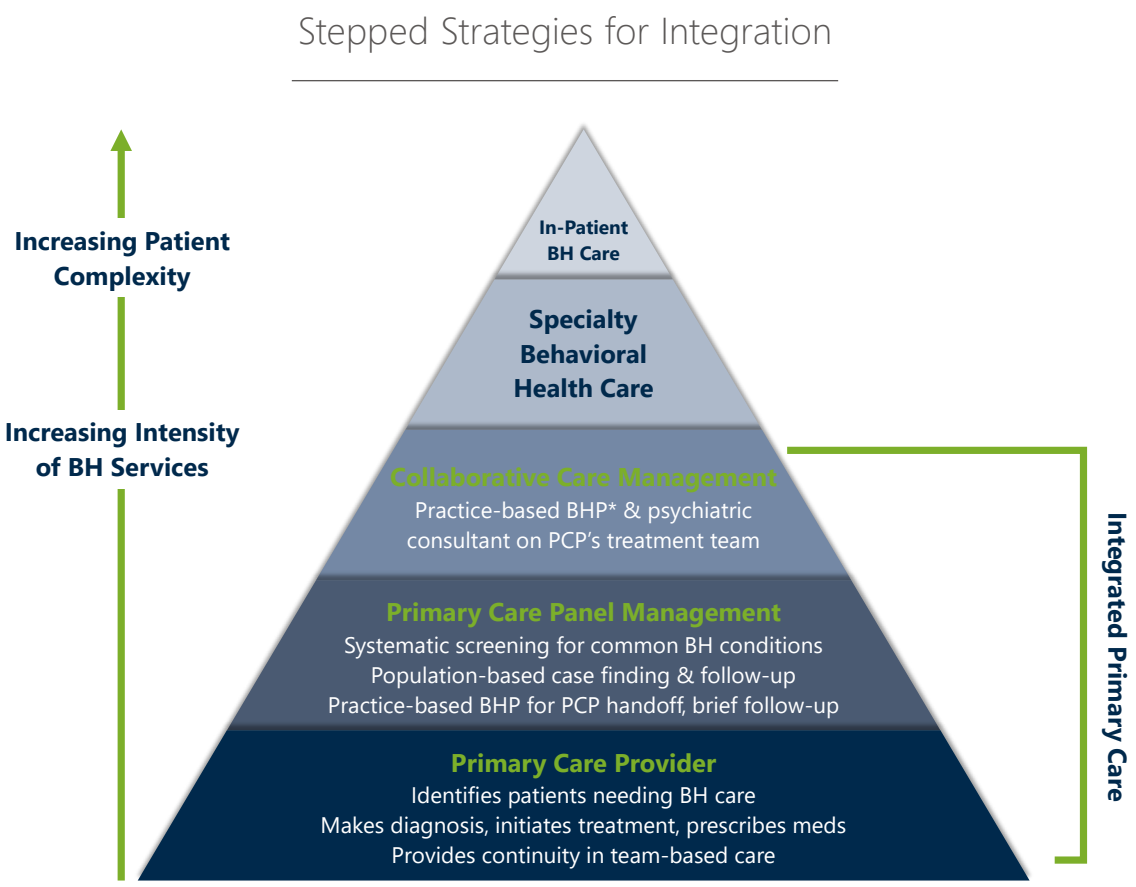
05 DATA MANAGEMENT
Implement processes that safeguard patient privacy and prevent unauthorized access to data and inadvertent disclosures.

Start with a Well-Defined Use Case

Effectively designing and deploying DBH solutions requires focus and intention. Trying to do too much too soon often results in undisciplined efforts, disconnected solutions, and frustrated consumers and care teams. Selecting an appropriate initial use case (e.g., a specific patient population and clinical program) is critical. Criteria for a strong use case include:

1. Strategic alignment with enterprise goals (e.g., expands access, generates revenue)
2. Targeted patient segments (defined by condition, acuity, treatment, care setting, and provider)
3. Feasible implementation process (due to relatively lower levels of complexity)

The Collaborative Care Model (CoCM) meets these criteria for a strong use case. CoCM is an evidence-based clinical model that integrates behavioral health into the primary care practice. By engaging a consultant psychiatrist and behavioral health specialist, primary care providers can more holistically treat patients and manage behavioral health disorders. It has been proven effective for treating patients with common behavioral health disorders (e.g., anxiety, depression, and substance use disorder), with improved clinical outcomes, greater patient and provider satisfaction, and reduced cost of care. In 2017, the Centers for Medicare and Medicaid Services (CMS) announced 3 new "incident-to" billing codes for CoCM to provide practices with greater financial support to implement this model.[8]



The Collaborative Care Model was developed at the University of Washington and relies on a stepped care model of routing patients to treatments aligned to symptom severity, also called "measurement-based treatment to target.[9]
**BHP = behavioral health provider*

Through the lens of this use case, we explore the 5 core implementation areas.

01 Patient Experience

Optimizing the patient experience requires attention to important touchpoints throughout the care journey, including screening and recruitment, ongoing education, and active engagement in treatment. These experiences must be personalized based on patient condition, acuity, and preferences.

STRATIFY BY RISK AND CONNECT PATIENTS TO PERSONALIZED CARE USING DIGITAL SCREENING

Personalizing solutions to individual patient needs promotes trust, successful adoption, and, consequently, improved outcomes. DBH solutions facilitate this personalized approach at scale, enabling practices to match thousands of patients to the right care for their needs. Digital screening surveys are integrated into practice workflows via each patient's channel of choice (e.g., email, text, patient portal).

DRIVE PATIENT ADOPTION USING DIGITAL EDUCATION RESOURCES

Educational content empowers patients to knowledgeably engage in their care and engenders trust with their providers. Throughout a patient's care journey, health systems can use digital channels (e.g., website, patient portal, email, text) and channel-friendly presentation options (e.g., short-form content, video, infographics) to provide patients with timely, understandable, and actionable information about their conditions and treatments.

PROMOTE SUSTAINED PATIENT ENGAGEMENT THROUGH DIGITAL INTERACTIONS

Providers can extend their connection with patients outside of a face-to-face visit utilizing DBH solutions. Options include:

- Digital surveys to monitor progress and inform treatment adjustments over time.
- Automated, targeted reminders via a patient's preferred channel to encourage and "nudge" behavior.
- Dynamic digital education resources, as referenced above, to help consumers easily find answers to questions as they arise.
- Smartphone apps designed to help patients manage symptoms in real time (e.g., cognitive behavioral therapy-based anxiety interventions).
- Digital gamification techniques (e.g., tracking of survey completions) to incent patients with rewards for adhering to their care plans.

Engaging and Educating Patients Through Their Medium of Choice at a Large Health System in the Northeast

A psychiatrist at a large health system reflected on their CoCM implementation and emphasized the importance of tailoring screens and educational content to a patient's needs and preferences. For example, based on the visit type, some patients receive a more minimal screen or survey assessment, while others receive a full monitoring screen. Additionally, patients can consume content via the patient portal in Epic or via an in-office kiosk or personal tablet.

In the next section, we'll focus on implementation requirements for care team engagement.

02 Care Team Engagement

Implementation requires support and engagement of care team members, particularly physician champions and early adopters who see the value of DBH solutions for patients and providers. Their support is critical for making the case for practice transformation.

ENGAGE PHYSICIAN CHAMPIONS AND EARLY ADOPTERS

Forward-thinking physicians and other care team evangelists who are willing to experiment with new approaches offered by DBH solutions are critical. Notably, these care team members do not need to be particularly tech-savvy. They should, however, be excited about approaching care in new ways and respected by their colleagues so they may be capable of persuading "late adopters." Most importantly, they should be comfortable guiding the broader care team and navigating the anticipated challenges and ambiguity inherent in the adoption of new technologies and workflows.

MAKE THE CASE FOR ADOPTION

As these leaders refine DBH solutions, it's necessary to communicate—early and often—both the benefits of adoption and how concerns will be addressed. Imposing new solutions upon an unprepared and skeptical provider team is counterproductive. Common concerns for primary care physicians include extending the length of an appointment and being ill-equipped to discuss a patient's behavioral health concerns. Digital solutions can help. For example, digital screenings offer providers critical information prior to the visit, allowing them more time to effectively prepare. Information addressing the following expected questions should also be provided: "Who developed this tool?"; "How do my patients and I access the tool (e.g., download and interact with it)?"; "How is patient data protected?"; and "Whom should I contact if I run into any issues?"

CHANGE CULTURE AROUND MEASUREMENT-BASED CARE

Over the past few decades, there has been a concerted effort to create valid and reliable clinical performance metrics. More recently, this effort has extended to behavioral health, a field that historically has lagged in the development of rigorous quantitative measures of performance. DBH capabilities can facilitate the collection and reporting of patient-reported measures for common clinical conditions, including depression (e.g., PHQ-9), anxiety (e.g., GAD-7), and alcohol use disorder (e.g., AUDIT). These measures can be used to both initially screen and track treatment effectiveness over time.

Using Technology to Engage Providers at Penn Medicine

Cecilia Livesey, MD, was the Chief of Integrated Psychiatric Services at Penn Medicine through the fall of 2020. Penn Medicine understood that providers needed assurance that they would have the support necessary to implement CoCM. Dr. Livesey shared, "It's helpful if you are able to say, 'You're going to have support, a behavioral health clinician embedded in your practice, and direct access to e-consults with psychiatrists. And you will be able to collaborate on cases that are challenging, take time, or need care escalation.'"

She cites 4 ways that technology can make it easier for providers to care for patients: (1) automate processes; (2) centralize and integrate processes; (3) make processes more targeted and precise; and (4) push critical information to more accessible devices and communication portals. One such example is that providers can view surveys completed prior to the appointment and digitally "prescribe" self-serve treatments (e.g., online education resources, behavioral health mobile apps), eliminating time that would have been spent making referrals or delivering education through other channels. To be effective, these new tools must be part of the provider's workflow. In most cases, this means integration with the health system's electronic health record (EHR).

In the next section, we'll review how digital solutions embed themselves in clinical workflows, enabling both speedy ramp-up and sustainability.

03 Clinical Workforce Adaptation

Adapting the clinical workflow to make it just as if not easier for providers to perform the desired task is necessary for successful adoption. Without effective integration of DBH solutions into primary care workflows, these new technologies will, at best, not be used optimally. Worst case scenario is that they are experienced as barriers to good care and not used at all. As Hal Wolf, Chief Executive Officer of HIMSS (Healthcare Information and Management Systems Society), puts it:

"New Technology + Old Organization/Workflows = Costly Old Organization."

INTEGRATE PROVIDER AND CARE TEAM WORKFLOWS TO ENSURE ADOPTION

Efforts to incorporate a program such as collaborative care into a patient visit can face significant resistance. PCPs who already feel overburdened with the clinical and administrative requirements that must be squeezed into a typical visit may view the program as a set of additional tasks. DBH solutions can significantly mitigate this challenge for all steps in the clinical care process, from intake to evaluation and care management, decision support, and coding/billing.

INTEGRATE CLINICAL DATA TO INFORM DECISION-SUPPORT TOOLS

Effective and efficient clinical decision-making is dependent upon a robust and reliable data analytics capability. Data must be integrated from multiple sources into a single "source of truth," as well as organized and presented in a way that minimizes unnecessary effort interpreting results. A reliable view of consolidated key information, such as real-time visualizations coupled with decision support tools, builds provider confidence and gives them more time to focus on their patients.

OPTIMIZE THE REVENUE CYCLE

Technology-enabled coding and billing processes ensure that the practice optimizes revenue from clinical activities. In the case of collaborative care, primary care providers can use either the new "incident-to" codes or the therapy billing codes, both of which require guidance regarding appropriate ways to document and bill for these services to ensure compliance.

Creating a Data-Driven Practice Culture at Concert Health

Virna Little, PsyD, LCSW-R, is the co-founder and Chief Operating Officer of Concert Health, which provides collaborative care services to primary care providers and organizations. Concert trains PCPs and their staff not only to adopt but optimize CoCM, including offering guidance on leveraging technology and data to make decisions. For example, Chief Product Officer Alec Fishburne describes the prioritization dashboard designed to help provider organizations manage their patient population more efficiently. Used in weekly case reviews between care managers and psychiatrists, the dashboard identifies cases for review based on a configurable set of inputs, including payer rules, assessment (e.g., PHQ-9, GAD-7) scores, and primary care partner preference. Rules can also be defined to trigger alerts that require timely attention (e.g., high-risk Medicare patients not showing expected improvement). Compared with manual processes, these clinical dashboards help behavioral healthcare managers more effectively prioritize patients and, thus, concentrate on patients who are in most need of their services. These offerings enable tracking health data in real time, fostering a culture of measurement-based care.

In the next section, we'll review how organizations define, capture, and use the data that matters to them.

04 Performance Management & Reporting

A thoughtful, deliberate, and broad-based assessment of performance is critical to any endeavor, particularly when implementing new approaches to care, such as DBH solutions. The development of key performance indicators (KPIs) supports this structure.

CRAFT KEY PERFORMANCE INDICATORS TO MONITOR AND MANAGE OPERATIONS

Performance indicators ensure new processes are designed appropriately and adjusted as needed. They also ensure targets are achieved to reach clinical, operational, and financial goals. DBH solutions uniquely enable KPI monitoring because data use is inherent to the design of the solution itself.

EMPOWER PATIENTS WITH INFORMATION

Consumer expectations regarding understanding and managing their healthcare needs are increasing. Just as consumers demand information on their financial spending (e.g., Mint), shopping habits (e.g., Amazon), and fitness goals (e.g., Fitbit), they also want to access and understand their medical records. Moreover, specific legislation (e.g., the Cures Act) requires that providers, and their vendors, give patients access to their medical records.

ASSESS THE IMPACT OF INTERVENTIONS ON OUTCOMES TO IMPROVE CLINICAL DECISION-MAKING

Tracking clinical interventions and their associated health outcomes enables providers to refine care decisions over time. For example, screening algorithms can be evaluated to determine whether they have the appropriate sensitivity (e.g., capturing all patients deemed high-risk for a particular clinical disorder, minimizing "false negatives") and specificity (e.g., reducing interventions for patients deemed not at risk, minimizing "false positives"). This enables health systems to refine algorithms and deliver more targeted, evidence-based treatment. Digital analytics are an essential tool to provide automated and seamless capture, aggregation, and analysis of these large datasets. By standardizing outcome measurement and reporting across the collaborative care population, the provider community can evaluate the sustainability of outcomes, determine the effectiveness of care pathways (what works, for whom, and when), and improve these pathways over time.

Monitoring Key Performance Indicators in Real Time at NeuroFlow

Matt Miclette, MPH, MS, RN, is the VP of Clinical Operations at NeuroFlow, a technology-enabled behavioral health vendor. Matt detailed how measurement-based care is the foundation of their solution, monitoring a wide array of KPIs in real time. This measurement begins at risk triaging, wherein individuals who score higher on behavioral health assessments are routed to higher-touch services (e.g., referral to a psychiatrist) through their partner network. Those with mild and moderate scores are routed to the primary care-based collaborative care process or the organization's integrated care program. Finally, individuals with a lower risk profile can be assigned preventative self-management or cognitive behavioral therapy (CBT) modules through NeuroFlow. Stratifying by clinical risk up front optimizes registry volume (the number of individuals who meet criteria for needing behavioral health interventions), which informs proper, cost-efficient staffing models. NeuroFlow also tracks clinical indicators, including validated assessments like the PHQ-9 for depression, which ensures patients are adequately treated and that interventions can be adjusted in real time based on a patient's progress toward their health goals.

In the next section, we'll discuss how the millions of data points captured must be effectively managed and safeguarded.

To effectively integrate DBH solutions, KPIs must be defined, captured, and monitored in real time. The technology elements of DBH solutions (e.g., virtual screens, real-time tracking of patient engagement) make both data capture and KPI tracking easier. In the case of CoCM, the following KPIs are common:

CATEGORY	ILLUSTRATIVE KEY PERFORMANCE INDICATORS
Patient Engagement	• % of patients who accept invitation and consent to screening • % of patients screened who accept the recommended intervention (vs. deem irrelevant, reject, and request something else) • % of patients who try the intervention • % of patients who continue beyond the first encounter • % of patients who remain engaged in the program
Patient Outcomes	• Reduction on GAD-7 or PHQ-9 scores over time • Rate of GAD-7 or PHQ-9 response and remission rate • Self-reported well-being
Care Team Engagement	• % of primary care physicians (PCPs) offering CoCM • % of PCPs referring patients to DBH solutions • % of PCPs actively engaging with clinical/reporting dashboards
Value Drivers	• Revenue generated through collaborative care codes per patient identified • Cost savings from addressing comorbid mental health issues • Performance on quality measures
Cost Drivers	• Cost per screen • Cost per DBH solution subscription • One-time implementation, including EHR integration • Additional staffing required (e.g., a behavioral health specialist) • Ongoing technical maintenance costs

05 Data Management

The intentional collection and organization of data underpins and unlocks the value of DBH solutions. Data privacy and security are necessary foundational components for all DBH solutions.

REINFORCE DATA PRIVACY AND HIPAA COMPLIANCE TO ENABLE THE RIGHT ACTIONS

Data privacy is guided by standards established through the Health Insurance Portability and Accountability Act of 1996's (HIPAA) Privacy and Security Rules, as well as by additional federal and state legislation and regulation. Compliance with healthcare data privacy standards is a critical requirement for technologies, such as DBH solutions, that utilize patient health information (PHI). Given the historical stigma around mental health, and the volume of technology startups entering the DBH space, enforcing data privacy policies is even more important. Beyond ensuring that the necessary structural elements of data warehousing are in place, training for all data users regarding how to safely access and communicate this information is required.

ENSURE DATA SECURITY AND GOVERNANCE TO MAINTAIN CREDIBILITY

Implementation of DBH solutions must also ensure that measures are taken to prevent unauthorized access to data and inadvertent disclosure to internal or external parties. The Federal Trade Commission (FTC) recently announced that applications collecting consumers' health information must comply with the Health Breach Notification Rule or face significant fines.[10] As such, DBH vendors undergo numerous efforts to prioritize the privacy and security of patient data, including conducting risk assessments, maintaining HIPAA compliance, and encrypting patient data.

CONSIDER POTENTIAL LIABILITY AND OPPORTUNITIES FOR RISK REDUCTION FROM THE START

Clearly defining liability and ensuring mitigation tactics are in place for possible risks is essential to securing trust to deploy new DBH solutions. Trust is required from the legal team to launch, from providers to change workflows, and from patients to meaningfully engage.

Establishing an Approach to Protect Patients and Providers at Jefferson Health

Michael J. Vergare, MD, Chair Emeritus of the Psychiatry and Human Behavior Department at Jefferson Health, noted that liability concerns were a critical first discussion when engaging their DBH vendor. A common conversation is, "If a patient indicates they are suicidal via a digital screener, what's our obligation to take action?" They convened Jefferson's legal team, the vendor's legal and technical teams, and a third-party risk management group to create an approach that protected patients and their respective organizations.

Implementing DBH Solutions Has Never Been Easier—or More Essential

Readily available digital technologies have made the potential benefits of DBH solutions increasingly accessible to and attractive for patients, providers, and healthcare organizations. Integrated DBH options are rapidly moving from a "nice to have" to an essential component of the healthcare system. Although the first foray can feel daunting, health systems that address the 5 areas outlined above will be well-positioned to successfully implement DBH solutions and achieve better patient outcomes.

AUTHORS

Nitya Kanuri
Engagement Manager
nkanuri@chartis.com

Jon Freedman
Principal
jfreedman@chartis.com

Mark Wenneker, MD, MPH
Principal
mwenneker@chartis.com

CHARTIS

SOURCES

1. Haomiao Jia, Rebecca J. Guerin, John P. Barile, et al, "National and State Trends in Anxiety and Depression Severity Scores Among Adults During the COVID-19 Pandemic—United States, 2020–2021," Morbidity and Mortality Weekly Report, Centers for Disease Control and Prevention, https://www.cdc.gov/mmwr/volumes/70/wr/mm7040e3.htm
2. "Overdose Deaths Accelerating During COVID-19," Centers for Disease Control and Prevention, https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19.html
3. Audrey Kearney, Liz Hamel, and Mollyann Brodie, "Mental Health Impact of the COVID-19 Pandemic: An Update." Kaiser Family Foundation, https://www.kff.org/coronavirus-covid-19/poll-finding/mental-health-impact-of-the-covid-19-pandemic/
4. "Telehealth Adoption Tracker," Chartis, https://www.chartis.com/insights/telehealth-adoption-tracker
5. Jordan Albritton, Alexa Ortiz, Roberta Wines, et al, "Video Teleconferencing for Disease Prevention, Diagnosis, and Treatment," Annals of Internal Medicine, https://www.acpjournals.org/doi/10.7326/M21-3511
6. Nyssa Z. Bulkes, Kaley Davis, Brian Kay, and Bradley C. Riemann, "Comparing Efficacy of Telehealth to In-Person Mental Health Care in Intensive-Treatment-Seeking Adults," Journal of Psychiatric Research, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8595951/
7. Heather Landi, "Demand for Virtual Mental Health Care is Soaring. Here Are Key Trends On Who Is Using It and Why," Fierce Healthcare, https://www.fiercehealthcare.com/tech/demand-for-virtual-mental-health-soaring-here-are-notable-trends-who-using-it-and-why
8. Andrew D. Carlo, Lauren Drake, Anna D. H. Ratliff, Denise Chang, Jürgen Unützer, "Sustaining the Collaborative Care Model (CoCM): Billing Newly Available CoCM CPT Codes in an Academic Primary Care System," Psychiatry Online, https://ps.psychiatryonline.org/doi/full/10.1176/appi.ps.201900581
9. Measurement-based Treatment to Target," Advancing Integrated Mental Health Solutions (AIMS), https://aims.uw.edu/resource-library/measurement-based-treatment-target.
10. "FTC Warns Health Apps and Connected Device Companies to Comply With Health Breach Notification Rule," Federal Trade Commission, Sept. 15, 2021, https://www.ftc.gov/news-events/news/press-releases/2021/09/ftc-warns-health-apps-connected-device-companies-comply-health-breach-notification-rule

About Chartis

Chartis is a leading healthcare advisory services firm serving healthcare providers, payers, health service and technology companies, and investors. Chartis brings an unparalleled breadth and depth of expertise in strategy, performance improvement, digital and technology, clinical quality and patient safety, health equity and belonging, and strategic communications. Learn how Chartis is helping to build a healthier world at www.chartis.com.

CHARTIS