

Chapter 15

A Health System's Perspectives on Integration, Planning, and Implementation Behavioral Telehealth Solutions



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Introduction

Access to behavioral health services is limited to many of the estimated over 41 million U.S. adults that report having mental illness, with providers not evenly distributed in areas that have the highest concentration of patients (American Psychological Association, 2014). Additionally, adults are suffering from mild to moderate depression and anxiety, but do not recognize or report that as mental illness. Primary care providers (PCP) increasingly are asked by their patients to address mental health concerns; however, time spent in a typical office visit is short and does not provide adequate time to address, diagnose, and determine an appropriate treatment plan. Patient assessments such as the Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001) and generalized anxiety disorder (GAD-7; Spitzer et al., 2006) can assist the PCP with determining mental health needs and severity of illness. Some patients require long-term therapy and are best cared for via more traditional behavioral health programs. Patients with mild to moderate symptoms are best served through a shorter series of appointments that can be conducted in the PCP office or from the comfort of their home or other chosen location.

The Collaborative Care Model (Katon et al., 1997) provides an evidence-based approach to caring for patients in a partnership between primary care and behavioral health. To address the challenge of a small number of behavioral health providers serving patients from a large geographic area, telemedicine provides an effective approach. Mental health providers are in a centralized location, or even practicing

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from a home office, and patients present to their local community health center, their PCP's office, or are able to connect from a chosen location using a device that allows for real-time audio and video. Setting up a telemedicine program requires minimal additional infrastructure as most offices already have access to high-speed internet. Providers must ensure they have a device that allows for high quality audio and video, a location that is private and conducive for treating patients over video, and must employ some basic "websites manner" skills to empathically connect person-to-person even when not physically in the same room. Patients must be educated and oriented to the process and meet basic equipment and internet connectivity standards if connecting from their own location. In a Collaborative Care Model, patients are treated in a series of appointments. The licensed clinical therapist monitors medications, teaches coping skills, and provides brief therapy while coordinating care between the patient's primary care provider, a staff psychiatrist, and psychiatric pharmacist. The staff psychiatrist consults on all cases and provides medication recommendations to the primary care provider who prescribes and manages the medications for the patient. Key Performance Indications ("KPIs"), including a reduction in patient PHQ-9 and GAD-7 scores, are assessed at every visit and are closely monitored. Patients who reach remission of symptoms are surveyed and provide compelling anecdotal assessment of the success of the program. These patients receive periodic assessment to determine if the interventions have been successful over time or if additional intervention is required.

When you've completed this chapter, you'll be able to:

1. Identify the requirements for setting up a real-time audio/video therapy session where a provider is in a clinical setting and the patient is in a primary care clinic or in their home environment.
2. Define opportunities to provide evidence-based behavior therapy to individuals in situations where significant barriers to effective treatment exist (e.g., few providers, patients comfort level with accessing care).
3. Design a 100% virtual program that allows patients to participate regardless of their access to and comfort with technology.

Infrastructure Requirements

There are several key requirements for a successful telehealth session: reliable internet access, computing device of some type, and readily available technical support. We also touch on technical specifications and data integration.

Reliable internet access for successful audio/video connections requires at a minimum an 8Mbps data rate. This is recommended to support a wide variety of video platforms. A platform agnostic technology assessment tool (Tech Check) developed by Henry Ford Health System (2022) is one of several ways that patient (and provider) device readiness can be determined, whether on a computer or a mobile device.

While the goal was to have a tool that could be used immediately prior to a video visit, one of the “lessons learned” was that depending on how the website is used and on what device, the ability to connect to a video visit may be compromised. This is because the “technical check” uses the device’s camera, microphone, and speaker to perform the test and if not properly closed out, those key items would not be available for use when connecting with the provider. The development team was able to take this feedback as users were reporting issues and redesigned the testing site with the following features:

- The camera and microphone are only engaged on the page where the device is actively being tested
- After 1 minute of inactivity or the user navigates away from the page without closing out, the web page automatically redirects them to the patient portal.

Providers and patients require a computing device that allows audio/video connectivity. For behavioral health, the best practice would be for the provider to have a static setup, likely a computer or laptop, with a camera positioned about eye level. To ensure a good experience for the patient, the provider should look directly at the camera lens as much as possible. The provider should also be in a private, well-lit location and have an unobstructed microphone to best be understood by the patient.

The patient should also be in a well-lit, private location. They may be using a smartphone, tablet, or computer. If using a mobile device, best practice is for the patient to set the device on a stable surface, about eye level. Patients should treat the video visit as they would an “in person” office visit and be dressed appropriately and not engaged in other activities (i.e., driving).

For our medical providers, a white coat is encouraged while on video. In all cases, the provider identification badge with name and organization should be worn at collar level and be able to be viewed in the video frame by the patient.

Technical support for providers via an internal help desk support must have the appropriate resources to assist with any technical issues related to video visits. They should also be able to escalate any issues to the appropriate team for resolution.

Patient technical support is conducted in various ways, both proactively and reactively. Written instructions are provided to patients in appointment reminders. Additionally, YouTube educational videos provide visual, step-by-step instructions for patients to get connected to the video visit with the provider.

Best practice is for clinic staff to reach out to patients identified as having the potential for difficulty connecting to video visits. Based on several criteria, this should take place several minutes to a full day prior to the scheduled visit to ensure the patient’s ability to interact with the technology and get connected with the provider at the scheduled appointment time.

Consider implementing a customer support center with a group of advocates that assist patients with the patient portal or however they access video visits. Patients can call to obtain assistance getting connected. These advocates can also contact the clinic directly if needed, provide another connection option for the patient, or assist with getting the encounter converted to an audio-only visit.

All this, of course, demands some rigorous technical specifications. Video platform vendors typically define minimum specifications required for optimal connectivity such as operating system and software versions. In addition, health system network security must work with the vendors to ensure that the data traffic carrying the audio/video streams is approved and allowed on the network. Audio and video connections need a relatively large amount of bandwidth that is prioritized to reduce any lag in transmission that would cause audio and/or video delays or degradation.

Measuring Outcomes

Background

As of 2017, one in five Americans will struggle with some form of mental illness. Sadly, the National Institute of Mental Health estimates that nearly half of the individuals with mental illness in the United States will not receive treatment.

The content in this chapter is sourced primarily from the experiences of the Henry Ford Health (“HFH”) in implementing a collaborative care behavioral health model in rural settings and is adapted to be helpful to any large health system implementing the same.

The Behavioral Health Integration (BHI) program at HFH is based on the AIMS Center Collaborative Care Model (2022) and was created to improve access and increase patient comfort while seeking treatment via a 100% virtual program. Therapists are located at a central clinical location and can deliver care using real-time audio and video. The aims of the BHI program following a successful pilot were to:

- Improve access to mental health care for patients with mild-moderate mental health needs
- Track patients on a registry, treat to target, and implement relapse and prevention techniques
- Spread behavioral health integration across primary care sites in a large geographic region through the use of virtual care/telemedicine.

This telemedicine approach allows a small number of therapists that are licensed throughout the country to care for patients across the health system providing evidence-based treatment with proven clinical outcomes compared against care provided by a primary care physician alone. Important process considerations include:

- Developing a standardized plan to engage primary care physicians and staff to encourage referrals, patient engagement, and program completion
- Adapting program processes to local clinic environments, including staff training and improved patient messaging regarding interaction via telemedicine (real-time audio/video) with psychotherapist/psychiatrist
- Refining a population registry to track patients, touchpoints, and outcomes

- Implementing standardized depression and anxiety treatment algorithms
- Utilizing a dashboard/database to track program access and effectiveness

Patients are treated in a series of appointments at their PCP's office or from the comfort of home. The licensed clinical therapist monitors medications, teaches coping skills, and provides brief therapy while coordinating care between the patient's primary care provider, a staff psychiatrist, and psychiatric pharmacist. Therapists are trained in the provision of Cognitive Behavioral Therapy, Dialectical Behavioral Therapy and Trauma Informed therapy employing the short-term solution focused approach to support the established standard of care to ensure tele-behavioral health is at or above expectations. The staff psychiatrist consults on all cases and provides medication recommendations to the primary care provider allowing the psychiatrist to treat over 200 patients per week versus their usual weekly caseload of 60 patients.

Initial visits with the therapists were intended to be in a primary care clinic location connecting over a video platform to the therapist with subsequent visits being either in a clinic location or at another location of the patient's choosing. These visits taking place in a clinical location accomplished many goals. From a patient perspective, holding the visit in the clinic ensured that the patient would not have to navigate unfamiliar technology and would be using a high speed, wired network that would help ensure a clear and consistent video connection. Clinicians believed that an in-clinic visit helped to ensure patient safety, especially if a patient being seen had more severe behavioral issues than initially thought and could be assisted if additional intervention was required. Clinicians also wanted to ensure that patients had a secure, private location to discuss their behavioral health needs. Finally, more payors covered telemedicine if the patient location was a medical center and fewer would cover the visit if the patient was at home. The pandemic altered the program and most visits occurred in the patient's home (or other location of the patient's choosing) and not in a clinic. As the pandemic subsided, patients began to opt for an in-clinic video visit. Moving forward, the patient home is a covered location for many insurances and will likely continue as a preferred location for patients seeking behavioral health care.

KPIs include a reduction in the patient PHQ-9 and GAD-7 which are assessed at every visit. Overall, the program looks to "graduate" all patients who begin the program. To date, patients are on average achieving remission after completing eight sessions. BHI is also intended to be a quick intervention where all patients can be seen within 2 weeks, with most patients completing their first visit same day or within 1 week. Patients are also asked to complete surveys at the conclusion of their program where a very compelling anecdotal assessment of the success of the program is gathered.

Methods

BHI with primary care was developed following the collaborative care model. The collaborative care model is a population-based approach to treating depression and anxiety in primary care by demonstrating meaningful improvement in symptoms for patients with depression.

After a successful pilot of BHI in 2017, the aims of this project were to:

- Improve access to mental health care for patients with mild-moderate mental health needs.
- Track patients on a registry, treat to target, and implement relapse and prevention techniques.
- Spread behavioral health integration across 27 primary care sites through virtual care/telemedicine.
- Reach patients close to their home by providing the services at the primary care offices, typically located close to patient populations.
- Serve patients in their home using video visits eliminating the need for travel and making care possible for those who otherwise would be unable to drive to an office for therapy.

The following process changes were implemented following the pilot program:

- Developed a standardized plan to engage primary care physicians and staff to encourage referrals, patient engagement, and program completion.
- Adapted program processes to local clinic environments, including staff training and improved patient messaging regarding interaction via telemedicine (real-time audio/video) with psychotherapist.
- Refined a population registry to track patients, touchpoints, and outcomes.
- Implemented standardized depression and anxiety treatment algorithms.
- Utilized a custom dashboard to track program access and effectiveness.

Challenges

The primary challenge solved using telehealth was few psychotherapists trying to serve multiple patient locations. Having a hub and spoke model enabled the small number of resources to effectively service many patient sites. Some clinicians can cover multiple sites based on a structured schedule. For example, one clinic in Minnesota may need a child psychiatrist 3 days a week and another clinic in Kansas could contract for the other 2 days. With proper licensing and credentialing, coverage can significantly improve access to care with one clinician. The additional benefit includes providing the psychiatrist a differentiation in practice which has been found to be beneficial for retention of staff. Telehealth also allows for the availability of appointments for new patients to be seen within 2 weeks of referral but can

often be seen same day if requested/required as there are schedule holds in place to accommodate urgent need.

The second challenge was primary care staff communication and education. Providers needed to understand what the program was designed to provide for patients, what patients were appropriate for the service, why this was beneficial for both the PCP and patient, and how the patient would be referred and seen by the psychotherapist. This challenge was met through presentations at staff meetings that included both a primary care physician and a psychotherapist reviewing the program and reinforcing the benefit of the team approach to patient mental health.

Frequently PCPs have little or no access to consultation with a behavioral health clinician. Studies have demonstrated that collaboration between a psychiatrist and primary care team leads to improved behavioral health outcomes and overall health measures including a reduction in A-1C, blood pressure, and weight loss.

The third challenge was implementing staff and patient education regarding participating in the therapy session via telemedicine. It is important for the patients to understand that they would not see a therapist who was physically at the same location. However, they would see that therapist via video.

The initial visits were conducted in a clinical setting. That meant that rooming workflows needed to be developed to include setting up the telehealth video call as well as determining how to effectively conclude visits and get patients the after-visit paperwork as required. Each clinic, depending on staff and physical setup, needed to create a workflow that would best utilize staff and be efficient for patients. Because of the pandemic, the model had to shift to where the initial and follow-up visits occur in the patient's home and not in a medical clinic.

Outcomes

Metrics are tracked in a variety of ways. From a growth perspective, the total number of referrals from primary care is tracked along with the number of completed referrals by the BHI program. The numbers increased steadily.

Some patients who had previously completed the program did return, in large part, due to increased depression and anxiety that was triggered by the pandemic.

Therapists' utilization to determine the overall value and cost-efficiency of the program has been tracked. This metric indicates the percentage of available clinic openings that have been scheduled. On average, the utilization is 80%, due mainly to holds in the schedule for same-day appointments as well as patient no-shows. The program has been able to maintain a lead time of 7 days or less for 90% of patients that requested an appointment following a referral to the program.

Clinical outcomes are measured by the percentage of patients who achieve remission of symptoms. The program has shown an 80% remission rate for patients within five therapy sessions, where the patient PHQ-9 score or the GAD-7 score is below 5. Comparatively, only about 20% of patients that are treated with medication

and managed by their primary care physician alone show substantial clinical improvements (Pence et al., 2012).

Lessons Learned

Integrating behavioral health services with primary care has been very successful especially as there is often a perceived stigma associated with patients seeking and receiving care for behavioral issues around depression and anxiety. Virtual care options were critical to program implementation allowing a limited number of therapists to serve a large number of primary care clinics spread over a large geographical area.

Here are the critical success factors:

- Successful implementation requires the engagement of all stakeholders in the process and close communication to keep everyone involved in achieving desired outcomes.
- Communication with providers, patients, staff, and the entire team is vital for implementation and improvement.
- Employee engagement increases the quality of care. A team that enjoys its roles and ability to impact patients has created an increased level of engagement in meetings with other team members and primary care teams. Patients report a high level of satisfaction with care as they feel connected to and supported by the BHI team.
- To properly track and monitor the progress of the patients in BHI the patient registry was pivotal.
- Standardized processes drive the implementation process and a thorough Plan-Do-Check-Act cycle drives improvement.

Patient and family involvement was also critical to the ongoing development and improvement of the program.

Consider establishing a Patient Advisory Council to solicit feedback on the program, messaging, and marketing materials. Patient stories, example quotes below, are continually collected and are shared regularly with physicians and staff. For Henry Ford, patients responded:

I don't know, I didn't want to do this process of skyping, but we hit it off so well right away and it was so amazing that I couldn't wait to get here. At first, I thought this was so lame but now I'm very grateful. I probably wouldn't have done it at all. And I trust Dr. S so that helped too, he told me to just try it once and I'm so glad I did.

I don't even want to think about it. I'm sure I'd still be depressed and think everybody hates me and I'm worthless. I really appreciate how consistently you spoke to me and the tools you gave me.

Best practices would include having the therapists return to the primary care site to review workflows and perform analysis based on access, utilization, patient feedback, appointment timeliness, therapist, and primary care staff feedback. Any team can make process corrections from identified opportunities where alterations by

clinic are needed or error prevention tools can be used. These improvements can increase utilization, same day access, higher percentage of appointments scheduled within 7 days, and PHQ-9 and GAD-7 score reductions.

Replicability/Next Steps

The BHI program was successfully rolled out to all primary care clinics. At the program inception in 2017, funding was partly supported by a 2-year \$192,000 grant from the Flinn Foundation but is now self-sustaining.

Revenue for primary care is generated by Collaborative Care Codes, special billing codes for this type of behavioral integration. Revenue is also generated by the therapists for visits. In addition, analytics and epidemiology studies should be used to understand the impact that a collaborative care program has on downstream cost and utilization as it has been proven repeatedly that caring for patients who have both medical and psychiatric conditions is very costly.

In addition to integration with primary care, HFH uses this model with pediatric patients as well as post-partum obstetrics patients and is exploring other specialties to determine need and interest for this type of integrated behavioral health service.

Patient success can be monitored through tracking the number of sessions that patients require to achieve remission. The goal is to have all patients complete the program. In cases where patients drop out of the program, follow-up should be performed to try to get patients to the correct level of care and support the primary care provider as they manage the health of the patient.

Success of the program can also be assessed via patient and provider surveys as well as the overall value of care provided, as patients are matched to an appropriate level of mental health treatment often mitigating a host of other health problems.

Conclusions

For health systems, implementation of integrated behavioral health into existing care pathways is now more critical than ever. About 4 in 10 adults will experience mental health illness or a substance abuse diagnosis at some point in their lifetime. Nearly 7 in 10 of these adults with a behavioral health disorder do not get treatment, due to lack of access to care, an unwillingness to seek care, or an inability to understand how behavioral health interventions could be helpful in treating their condition. Approximately 20% of primary care visits are related to mental health concerns with primary care providers writing over 1/3 of all behavioral health-related prescriptions. About 2/3 of primary care providers report difficulty connecting patients with outpatient behavioral health providers due to a shortage of mental health providers and health insurance barriers. This gap in care has worsened exponentially over the past few years during the COVID-19 pandemic.

To meet this challenge, a collaborative care model that meets the needs of patients in an existing primary care and community mental health infrastructure providing evidence-based care via a 100% virtual telemedicine service can be implemented to reach a maximum number of patients over a large geographic area. Keys to program start up include the identification of physician champions in both behavioral health and primary care or community mental health clinics to ensure support, collaboration, and partnership to address the critical community mental health needs. Infrastructure requirements for providers often involves using existing high speed internet access as well as audio- and video-enabled devices. If required, high-definition cameras can be purchased for less than \$100 and readily available headphones and/or speakers often provide quality sound. Patients may have access to devices and high-speed internet access allowing them to connect to care from a location of their choosing; however, patients without access to the appropriate technology can be cared for in a clinical location in their community (PCP office or community mental health center) instead of traditional care that may require them to travel long distances to seek care.

The PCP engages the therapist directly, and the consulting psychiatrist indirectly to create a team approach to the mental health care of the patient using this Collaborative Care Model. Patient progress is tracked and monitored through the course of care and to follow-up after patient completion of the program via a patient registry. The use of telemedicine enables a smaller number of providers to care for a large group of patients spread over a large geographic area. Outcomes of this program meet the triple aim of care quality, patient satisfaction and cost-effectiveness. Patients are much more likely to achieve remission from their symptoms when working with a care team consisting of primary care and behavioral health versus a primary care physician trying to manage patient symptoms and medications without support. The COVID-19 pandemic has amplified the need for mental health services and stretched resources to care for patients. A team approach to mental wellness, using telemedicine, has potential benefit for all patients in need regardless of their location and access to technology.

CE/CME Questions

1. Patient support for telehealth visits when being conducted outside of a clinical setting (i.e. patient's home) should include all of the following EXCEPT:
 - (a) Pre-recorded instructional videos
 - (b) Verbal instructions at the time the visit is scheduled
 - (c) Written materials/files that can be sent in advance of visit
 - (d) Clear instructions in an appointment reminder
 - (e) Medical staff outreach to patient within 24 hours of scheduled visit

2. When implementing a behavioral telehealth program, the following process considerations should include the following EXCEPT:
 - (a) Create a new plan for each primary care location as local offices have unique needs
 - (b) Create a population registry to track patients and outcomes
 - (c) Implement standardized treatment algorithms
 - (d) Use a dashboard to track program access and effectiveness
 - (e) Adapt patient messaging and staff training to local clinical environments
3. Critical factors for a successful rural telehealth program include all of the following EXCEPT:
 - (a) Communicate in a clear and open manner with providers, staff, and patients at every step of care pathway
 - (b) Ensure employee engagement to increase overall quality of care
 - (c) Engage key stakeholders early in process to focus on desired outcomes
 - (d) Successful programs should not be reviewed or updated
 - (e) Monitor and track patient progress on patient registry
4. An objective measure of patient success in the behavioral telehealth program is reflected via:
 - (a) Patient uses telehealth for other medical services
 - (b) Patient stops prescribed medication for behavioral health issue
 - (c) PCP determines patient participation is no longer required
 - (d) Patient decides not to return for future visits
 - (e) Reduction of PHQ-9 and/or GAD-7 scores
5. Challenges to delivering quality behavioral health services in a rural setting include all of the following, EXCEPT:
 - (a) Ensuring the patient has access to high speed internet
 - (b) Obtaining provider licensure in states where patients are located
 - (c) Documenting visits properly and collaborating with PCPs to ensure maximum reimbursement for services
 - (d) Determining when to schedule readily available appointments for new patients
 - (e) Ensuring access and ability to use a device that can transmit audio and video

Answers

1. (b)
2. (a)
3. (d)
4. (e)
5. (d)

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