TELEBEHAVIORAL HEALTH CARE

A Solution to Improve Cost, Access, and Quality of Care
INTRODUCTION

Untreated behavioral health conditions, including both mental health and substance use disorders (SUDs), are a major public health concern. Over 44 million United States (U.S.) adults have a mental illness, and fewer than 50 percent receive treatment (1–5); treatment rates are as low as 1 in 10 among the almost 20 million adults diagnosed with SUDs each year (3). Furthermore, national prevalence statistics are known to grossly underestimate the true number of individuals with behavioral health conditions; for every individual diagnosed, one more may go undiagnosed and subsequently untreated (6).
Untreated behavioral health conditions are costly. Beyond the recognized cost of human suffering, behavioral health conditions also result in avoidable overall medical expenditures, lost productivity, and criminal justice costs. While a significant part of this burden is carried by those with severe mental illness, an additional burden is carried by those with chronic medical conditions who experience two-to-three-fold higher risk for depression versus their peers, and face health-related limitations that further challenge access to behavioral health care (7–10). Among working adults age 18–64 years, this translates into measurably higher medical utilization and expenditures, as well as disability and impaired work productivity estimated to total more than $210 billion annually for major depressive disorder alone (11). Among older adults, such as Medicare beneficiaries aged 65 and older, those with depression have almost double the health care costs compared to those without depression (12). These higher medical costs are primarily driven by the cost of treating associated medical comorbidities and not by mental health care costs (11, 12), suggesting there is an opportunity to drive down total health care costs by treating behavioral health conditions.

Over the past decade, telebehavioral health care has gained recognition as a solution to enhance access to quality behavioral health care in the U.S. The aim of this report is to describe the multidimensional value of telebehavioral health care. In this report, telebehavioral health care is defined as evidence-based behavioral health care administered over the telephone or via secure video by a licensed or otherwise qualified practitioner. There are many other technology-enabled behavioral health interventions including computer or internet-based programs, mobile phone applications (apps), and automated telephone services that are not included in this review. Indeed, telebehavioral health care is a broad concept encompassing a heterogeneous collection of treatment modalities, providers, and clinical conditions. The scope of this report has been limited to telebehavioral health care as defined above in order to specifically describe the value of providing evidence-based telebehavioral health care in direct comparison to traditional face-to-face delivery.

**BEHAVIORAL HEALTH CONDITIONS INCLUDED IN THIS REPORT**

A wide spectrum of behavioral health conditions merit treatment, ranging from mild presentations of depression and anxiety to severe mental illnesses such as schizophrenia or bipolar disorder. Collectively, this is a group too broad to ensure adequate coverage of each and every condition in a single concise report. As such, this review focuses on those behavioral health conditions that are clinically amenable to telehealth care delivery.
with the evidence summarized herein limited to common conditions formally studied in the context of evidence-based telebehavioral health care.

**ADDITIONAL SPECIFICATIONS**

The purpose of this report is to describe the value of telehealth delivery of behavioral health care. We recognize that value can be defined differently by different stakeholders, including consumers, providers, payers, policy makers, and others. Therefore, we aim to review varying dimensions of value including, but not limited to, cost-effectiveness, quality of care, and improved access to care.

In order to most directly translate this value for multiple stakeholders, we drew on academic, government, and industry data specifically collected in the U.S. health care system (with recognition that the value of telebehavioral health care has been demonstrated internationally as well). Additionally, this report will focus solely on telebehavioral health care for adults aged 18 and above. While there is value in telebehavioral health care for individuals under the age of 18 years, the treatment of children and adolescents with telebehavioral health care is more complex and has additional factors that are different from adult treatments and therefore merit a stand-alone report. Finally, quality behavioral health care delivered via telehealth as described in this report should meet the same standards as face-to-face delivery of the same care including that it is evidence-based, safe, effective, person-centered, efficient, and equitable (13–15).
For example, a 2012 randomized controlled clinical trial conducted by Mohr et al. documented clinically significant and similar improvements in depressive symptoms among participants receiving telephone administered cognitive behavioral therapy, versus their counterparts receiving the same intervention face-to-face (27 percent remission at 18-weeks; 16). Most of the research in this area has utilized cognitive behavioral therapy, or other evidence-based psychotherapy approaches, as the intervention (16–25).

Phone or video delivery has been demonstrated efficacious for multiple behavioral health and related conditions, including but not limited to:
- Major depressive disorder (16, 17)
- Generalized anxiety disorder (18)
- Posttraumatic stress disorder (22, 23)

Randomized controlled trials of telebehavioral health care interventions have documented clinically meaningful improvements in depressive symptoms (e.g. depressive symptom response) and anxiety symptoms (e.g. clinically reduced anxiety symptoms and worry) (16–18). When telebehavioral health interventions are utilized in populations with medical comorbidities (e.g., cardiovascular disease, HIV/AIDS, or multiple sclerosis), clinical benefit has also been demonstrated for additional outcomes including medication adherence and quality of life (26–30).

Telebehavioral health care also offers great potential to enhance treatment and recovery for individuals with SUDs (31–37). Several studies of telebehavioral health care for addiction, as well of the treatment of mental health conditions among individuals with SUDs, have found no statistically significant difference in the treatment results or patient satisfaction with care provided in person versus by telephone or video (32–35). Examples of treatment settings where utility of teledelivery of care for SUDs has been apparent include outpatient follow-up and medication assisted therapy (34, 36, 37).
Telehealth is increasingly viewed as a cost-effective modality for the delivery of care across multiple clinical condition areas. For behavioral health care, remote delivery of easily accessible treatment options may avoid higher cost urgent or emergent mental health care services and also avoid unnecessary medical utilization by addressing behavioral health in individuals with comorbid medical conditions. Moreover, multiple studies have demonstrated the impact of depression on impaired work productivity, and treatment of depression may reduce cost attributable to lost productivity. As with other chronic conditions, early identification and treatment of behavioral health issues can prevent higher cost, severe, and debilitating manifestations of mental illness in the future.
TELEBEHAVIORAL HEALTH CARE AND HEALTH CARE COSTS

Assessment of the impact of telehealth on health care costs should include both the cost of telehealth services themselves and the impact on reducing avoidable and incremental expenditures arising from unaddressed behavioral and medical health issues. Telebehavioral health care need not cost more than on-site services (38, 39). As one example, a recent study among U.S. Veterans with depression treated via telehealth demonstrated that the trajectory of health care costs was not significantly different versus in-person delivery (39). In fact, an original goal of telehealth was to offer easy-to-access and lower cost alternatives to higher cost care environments (such as in an emergency department).

When the focus is on future cost avoidance, greater access and greater utilization of high value clinical behavioral health services—whether in person or via telehealth—has the potential to significantly reduce medical expenditures. The opportunity for telebehavioral health programs to save money for the health care system has been most evident for individuals with medical and psychiatric comorbidities (24). For example, telebehavioral health for individuals with comorbid behavioral health and/or chronic health conditions has been shown to reduce medical and psychiatric hospitalizations by as much as 25–30 percent and promote overall medical cost savings (22, 29, 40). In the collaborative care setting, inclusion of telebehavioral health providers has been shown to be cost-effective for primary care and post-operative care as well (41, 42).

TELEBEHAVIORAL HEALTH CARE AND WORKPLACE COSTS

Working adults comprise another consumer group where telebehavioral health care yields a cost benefit (43, 44). In an intervention described by Wang et al that included telephone-delivered coaching, care coordination, and cognitive behavioral therapy for employed individuals with depression resulted in reduced depression symptoms, higher job retention, and more hours worked at six months to one year (43). And a telebehavioral health care intervention for adults with depression and decreased work productivity developed by Lerner et al improved
Collaborative care-based telebehavioral therapy for coronary artery bypass surgery recipients with depression has been shown to improve quality of care and to be cost effective compared to physician care as usual.

depressive symptoms, at-work productivity loss, and absences compared to usual care, estimated to translate into thousands of dollars saved annually per employee (44, 45).

**TELEBEHAVIORAL HEALTH CARE AND FUTURE BEHAVIORAL HEALTH RISK**

Earlier intervention via telebehavioral health care has potential to impact prevention of severe and debilitating mental illness. Prevention of major depressive disorder in older adults is projected to reduce the risk of excess mortality after acute medical events, support maintenance of health-related quality of life, and lower risk of disability (46). It is expected that by treating mild behavioral health conditions early, the risk of developing full clinical psychiatric disorders that are less reversible is lowered; ultimately all of these benefits may be cost-effective and impactful if they can be achieved at scale (46). Telehealth delivery provides a viable mechanism to reach more individuals in need of treatment earlier in the disease life course.
IMPROVING ACCESS TO BEHAVIORAL HEALTH CARE THROUGH TELEHEALTH

Millions of U.S. adults suffer from mental illness, yet nearly one half remain undiagnosed and untreated. Though multiple challenges contribute to these statistics, insufficient access to quality behavioral health care is a major factor. Telehealth is poised to increase access to behavioral health care for those in need of treatment by overcoming limitations due to geography, stigma, system level challenges, and other factors.

TELEBEHAVIORAL HEALTH CARE OVERCOMES GEOGRAPHICAL CHALLENGES

Individuals with behavioral health disorders in rural areas are about half as likely as those in urban or suburban areas to receive behavioral health treatment; and when they do receive treatment, it is less likely to be delivered by a licensed mental health professional (47). Rural counties of the U.S. are more than twice as likely to have no behavioral health providers than metropolitan counties, resulting in the need to travel long distances to access health care services (48, 49). And in the U.S., lowest income communities are less likely to have any office-based practices for mental health specialists (physicians and non-physicians) versus higher income communities (50). Telebehavioral health care can increase access to treatment by making providers that reside in distant geographic locations available to individuals in need. For example, designated facilities where individuals can securely videoconference with a provider have been demonstrated effective to improve access to behavioral health care in sustainable fashion over a two-year period (38, 51). Moreover, the provision of telebehavioral health care in an individual’s own home or convenient location of one’s choosing (e.g., at work) may improve access further by avoiding the costs and time associated with travel to a facility. These opportunities are also relevant in more suburban settings where transportation or traffic to reach providers may sometimes prove challenging, or the ability to take time off from work to seek care may prove a limitation.
TELEBEHAVIORAL HEALTH CARE SOLVES FOR INDIVIDUAL-LEVEL CHALLENGES

Telebehavioral health care also holds promise to overcome many of the myriad reasons that keep individuals from seeking behavioral health care including personal challenges (e.g., related to one’s own thoughts, perceptions, or emotions) and external challenges (e.g., related to day-to-day activities). Stigma remains a powerful barrier to seeking mental health treatment due to stereotypes and prejudice, concerns about discrimination in the workplace, and fear regarding privacy concerns, collectively leading to treatment avoidance (52–54). Telebehavioral health care can solve for concerns related to stigma and privacy by bringing behavioral health care to a private environment (55).

Adults with self-perceived need for treatment frequently cite financial concerns as obstacles to seeking treatment (4). Telebehavioral health care has potential to alleviate a portion of consumer costs associated with treatment, in particular transportation costs (if treatment is provided at home) and the costs associated with missed work hours or child care. Additionally, increasing awareness about the coverage for evidence-based telebehavioral health care services provided by health insurance companies may increase utilization among individuals in need of care.

Perceived and real lack of available treatment is another common barrier to seeking behavioral health care that could be ameliorated through increased penetration of evidence-based telebehavioral health care options (4). Increased awareness about availability of evidence-based telebehavioral health care services may boost utilization among individuals who recognize the need for care, but have not sought it out due to perceived lack of availability. Mental health literacy also plays a role. Provision of information or education about behavioral health conditions, symptoms, and telebehavioral health care treatment options could open the eyes of many individuals in need and increase treatment seeking (2).

Convenience/transportation concerns can impact the busy working professional as well as the homebound individual. Homebound adults may experience limited access to evidence-based therapy due to inability to travel or lack of transportation, that may be effectively overcome through telebehavioral health care (55, 56). In addition, individuals juggling multiple responsibilities such as jobs and caregiving may be confronted with the challenges with finding appointments during a time that they are free, or giving the time to commute to and from a behavioral health visit. Telebehavioral health care solutions can address these challenges, especially treatment options that are provided in the individual’s own home (57).
TELEBEHAVIORAL HEALTH CARE SOLVES FOR SYSTEM-LEVEL CHALLENGES

There are several health care system-level access challenges including qualified provider shortages and non-participation in health plan networks among available providers (49). A psychiatrist shortage has been identified by the Association of American Medical Colleges and projected to worsen by 2025 (58, 59). Additionally, the number of psychologists has remained stable and not growing with the need (60). As many as two out of three primary care physicians cannot access psychiatry referrals for their clients in need (61). Telebehavioral health care can address these challenges by further increasing the reach of available qualified providers to more individuals.

Telebehavioral Health Care Overcomes Challenges to Accessing Traditional Face-to-Face Behavioral Health Care

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<th>TRADITIONAL CHALLENGES</th>
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<td>National provider shortage</td>
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Source: AbleTo
TELEBEHAVIORAL HEALTH AS AN OPPORTUNITY TO ENHANCE QUALITY OF CARE

There are several factors associated with quality of telebehavioral health care services that are important to mention including cybersecurity and adherence to evidence-based standards of care.

As telehealth has become mainstream practice, the need for specific telehealth quality guidelines has been recognized by accreditation organizations such as URAC and ClearHealth Quality Institute (CHQI). URAC recently released the first independent, third-party national telehealth accreditation (62); while not specific to behavioral health, the accreditation highlights that telehealth offers a unique opportunity for trained providers to administer standardized evidence-based treatment; engage in evidence-based practices; monitor, measure, and report on established performance indicators; ensure safety and privacy; and more (62). Similarly, CHQI in collaboration with the American Telemedicine Association recently drafted their first telehealth accreditation standards to help ensure that organizations providing telehealth services follow quality-based standards (63).

There are specific examples of how telehealth providers can ensure that the highest quality of care is provided. One is in considering the role that technology can play in standardizing telebehavioral health care delivery. While a telehealth platform in and of itself only serves to connect client and provider, technology has the unique potential to ensure quality and consistency in the delivery of behavioral health care. The use of electronic clinical records, for example, can facilitate standardized evidence-based assessment and follow-up through measurement of quality metrics, including documentation of adherence to behavioral therapy, symptom scores, self-management behaviors, and medication adherence and side effects where applicable (62). Protocols can be embedded within technology platforms to promote and ensure fidelity to evidence-based care in “real world” settings by establishing a defined intervention and trackable outcomes (64).
Technology can also open channels for collaboration and integration of care allowing behavioral health providers to “plug in” with a medical provider. Examples of such settings where the utilization of telebehavioral health care is being evaluated as part of these integrated care models are among Veterans, primary care, and chronically ill populations for the treatment of depression, chronic pain, and other common behavioral health conditions (25, 51).

In 2010, the Veterans Health Administration established a National Telemental Health Center; in 2013 alone the Center provided over 2,800 video encounters at 53 sites in 24 states (65). Care coordination among behavioral health providers, primary care providers, and other members of the care team is also facilitated by telehealth approaches, in particular those with technology-enabled platforms that support individual consent for information sharing and Health Insurance Portability and Accountability Act (HIPAA) compliant secure communication.

Finally, consumer satisfaction is a fundamental determinant of health care quality. The value of telebehavioral health care as an acceptable solution to individuals has been demonstrated by recent data, including high satisfaction scores and lower attrition rates among individuals who have engaged in telehealth delivered behavioral therapy versus face-to-face delivery (16, 20, 64). For example, telebehavioral health studies that have evaluated satisfaction using the client satisfaction scale have consistently shown very high satisfaction scores (20, 66, 67).
Consumers, providers, employers, payers, regulators, and legislators have increasingly recognized the value of telehealth as a delivery modality with specific applications for behavioral health, and are supporting payment models to promote telehealth. Medicare regulations have traditionally been narrow in scope, supporting payment for telehealth only when furnished by an eligible practitioner; delivered or received in an “originating site,” defined as certain hospitals, clinics, or health centers; and provided in a rural area or other designated area.
However, on February 9, 2018, President Trump signed the Bipartisan Budget Act of 2018 into law. Included in this law was the Creating High-Quality Results and Outcomes Necessary to Improve Chronic (CHRONIC) Care Act which seeks to expand access to telehealth services within several Medicare programs, the End Stage Renal Disease Program, select accountable care organizations, and for individuals with stroke (68, 69); further efforts will be needed to expand coverage more broadly. Another bill that has been introduced in the House and the Senate is the CONNECT for Health Act, which would increase the use of telehealth and eliminate many of the barriers to its accessibility (70). Specifically, it would expand telebehavioral health care by allowing the Secretary of Health and Human Services to lift current Medicare restrictions for some mental health services. Also, the Increasing Telehealth Access in Medicare Act passed a key House of Representatives committee and would allow telehealth services to be included as a basic benefit for Medicare Advantage recipients, rather than a supplemental service (71). Additionally, the Medicare Telehealth Parity Act of 2017 includes proposals to expand the types of practitioners who can provide telehealth services, expand services offered in certain geographic locations including Metropolitan Statistical Areas, and add homes as a covered originating telehealth site (72).

Licensure of providers for telehealth has also proven a challenge and opportunity. Traditional in-person care delivery requires the provider to be licensed in the state in which they are providing care with extension of similar regulations even if the care is by telephone or secure video. Loosening of licensure regulation would enable providers to deliver care across state lines optimizing the availability and reach of telehealth services. This barrier is being addressed though interstate collaborations such as the Psychology Interjurisdictional Compact (PsyPACT) to facilitate tele-psychology practice across jurisdictional boundaries (73). Similar legislation has recently passed for nurses to practice telehealth in multiple states under one license, and the House Committee on Veterans’ Affairs (VA) has proposed legislation to remove restrictions on the ability of VA providers to practice telehealth across state lines (74, 75). Changes to the Ryan Haight Online Pharmacy Consumer Protection Act which took effect in 2009, are also under consideration. The Ryan Haight Act does not allow physicians to use telemedicine to prescribe controlled substances without first having an in-person exam (76). Taken together, while regulatory barriers persist, recent legislation is moving toward increasing access and simplifying availability of telebehavioral health care.

Taken together, while regulatory barriers persist, recent legislation is moving toward increasing access and simplifying availability of telebehavioral health care.
CONCLUSION AND NEXT STEPS

High quality behavioral health care leads to the best mental and physical health outcomes; however, access to high quality and easily available behavioral health care is a necessary prerequisite. More than 50% of diagnosed behavioral health conditions, including mental health and substance use disorders, go untreated.
Over the past decade, telebehavioral health care has gained recognition as a solution to enhance access to quality behavioral health care in the U.S. To underscore the value of working to overcome the challenges to telebehavioral health care implementation that remain, this report described what is known about the clinical efficacy and cost-effectiveness of telebehavioral health care, and how telebehavioral health care can improve access to high quality evidence-based care:

- **Clinical efficacy**: Telephone or video delivery of evidence-based therapy has been demonstrated effective for several behavioral health conditions including major depressive disorder, generalized anxiety disorder, and post-traumatic stress disorder.

- **Cost-effectiveness**: Telebehavioral health care can be comparable in cost to traditional face-to-face delivery of care and may result in cost savings attributable to reduced transportation costs, decreased work productivity impairment, avoided unnecessary medical utilization, and early identification and prevention of high-cost severe manifestations of untreated behavioral health conditions.

- **Access to care**: Telebehavioral health care has the potential to increase access to behavioral health care for those in need of treatment by overcoming challenges to care seeking and adherence related to geography, stigma, time constraints, physical health limits, transportation costs, privacy concerns, and provider shortages.

Federal policies related to telebehavioral health care remain narrow in scope to date, limiting implementation in places and populations where care is needed. Ongoing efforts by regulators and legislators to adapt federal legislation continue to extend the reach of telebehavioral health care to populations that require behavioral health treatment.

ABHW supports the use of telebehavioral health care where appropriate and advocates for the lifting of barriers that prevent its implementation and use.
References


ABHW & AbleTo

This report is the result of a collaboration between AbleTo, Inc. and Association for Behavioral Health and Wellness (ABHW), created out of a mutual passion for increased access to high quality, evidence-based behavioral health care and the desire to realize positive health outcomes by addressing behavioral health. This manuscript describes the great potential of telebehavioral health care to address and solve for many of the challenges that prevent progress on improving population health today. We hope this report informs our broad audience of readers about the multidimensional value of telebehavioral health care to improve cost, access, and quality of care.

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