

## RESEARCH ARTICLE

## The Role of Telehealth in Suicide Prevention: A Practice Framework for Primary Care

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## ABSTRACT

Globally, there are more than 700,000 suicide completions every year. With the continued shortage of mental health professionals, people are increasingly seeking care for mental health concerns in primary care settings. With the expansion of telehealth since the COVID-19 pandemic, more patients and providers are connecting virtually for appointments and are increasingly familiar with asynchronous tools to connect outside of appointments. Practitioners in primary care settings have an important role in identifying and mitigating risk of suicide regardless of the treatment modality. Utilization of the Screening, Brief Intervention, and Referral to Treatment (SBIRT) model for suicidal patients is both necessary and feasible in the current hybrid healthcare environment. This manuscript addresses the practical and procedural considerations for assessing for suicide and developing effective safety planning interventions when using telehealth as part of care.

**Keywords:** Safety planning, suicide, telehealth, direct to person, hub and spoke, primary care

## Introduction

Suicide remains a critical global health concern, ranking as a leading cause of death worldwide<sup>1</sup>. This trend is particularly pronounced in rural areas, where suicide rates consistently surpass those in urban settings<sup>2</sup>. While initial reports suggested decreased suicide rates during the COVID-19 pandemic, lagged effects are now contributing to an uptick in suicide-related deaths in recent years<sup>3</sup>. Globally, suicide stands as the third leading cause of death among 15-29-year-olds, with 73% of suicide completions occurring in low- and middleincome countries<sup>4</sup>.

Primary care settings play a critical role in suicide prevention. Due to behavioral health provider shortages and persistent stigma, general practitioners (GPs) often encounter more patients with suicidality than psychiatrists over the course of their careers<sup>5</sup>. Up to 75% of individuals who die by suicide have contact with primary care providers in the six months preceding their death<sup>6</sup>. Luoma and colleagues report that 45% of individuals who die by suicide have seen a medical provider other than a psychiatrist within 30 days prior to their death<sup>7</sup>. This positions GPs at the forefront of suicide prevention efforts. However, a significant gap exists in current practice: GPs typically do not assess suicidality<sup>8</sup>, and patients rarely disclose suicidal thoughts without direct inquiry<sup>6</sup>. This disconnect represents a critical missed opportunity for life-saving interventions.

Despite their crucial role, many GPs feel ill-equipped to assess and intervene in cases of suicidality <sup>8</sup>. However, evidence suggests that targeted training can significantly improve outcomes. Training GPs to screen for and treat depression has yielded positive results for patients and contributed to reduced suicide rates<sup>5</sup>. Furthermore, continuing education focused specifically on recognizing and treating suicidality has been shown to increase perceived competency and willingness to treat among GPs <sup>8</sup>.

To address these challenges, a multi-faceted approach is necessary. In addition to enhanced training for GPs, there is evidence supporting the integration of behavioral health providers within primary care settings 8. This integration can be facilitated through telehealth services, which can help alleviate some of the strain caused by provider shortages<sup>2</sup>. Recent research has demonstrated that telehealth is an effective delivery method for behavioral health care, with positive results in reducing suicide reattempts and completions<sup>9</sup>. Even before the COVID-19 pandemic, many GPs were using telehealth as an effective means and alternative for patient consultation and home visits<sup>10</sup>, and due to the pandemic, telehealth utilization was fast tracked and rapidly adopted by GPs<sup>11</sup>. Globally, we have seen telehealth embedded and utilized since the pandemic, which offers patients quality care from a distance with greater convenience<sup>12</sup>. This creates a unique need for GPs to utilize the evidence-based, and often reimbursable, Screening, Brief Intervention, and Referral to Treatment (SBIRT; SAMHSA, 2022) models for suicidal patients via telehealth.

Screening, brief intervention, and referral to treatment (SBIRT) is a model originally utilized with substance use

disorders<sup>13</sup>. The SBIRT model has been utilized across settings and is effective with suicidal patients and in primary care settings<sup>14,15</sup>. GPs can effectively screen for suicide, utilize a brief safety planning intervention, and refer to treatment with behavioral health providers. With the increased utilization of telehealth, the following will provide guidance through the SBIRT Model for suicide prevention in primary care via telehealth.

This data highlights the urgent need for enhanced suicide risk assessment and intervention strategies in primary care settings, positioning GPs as key players in the global effort to reduce suicide rates. By combining targeted training, integrated care models, and innovative delivery methods like telehealth, there is significant potential to improve suicide prevention efforts in primary care. This manuscript will explore practical and procedural considerations for assessing for suicide and developing effective safety panning interventions through the SBIRT model with remote patients via telehealth.

There are key patient factors increasing risk for suicidality. While women are more likely to have thoughts of suicide, men complete suicides at higher rates<sup>16</sup>. Women are also more likely to receive a diagnosis of and treatment for depression <sup>16</sup>. Additionally, individuals with mental health and physical health complications are also at higher risk for suicidality<sup>17,18</sup>. There is also substantial evidence for age effecting risk, such as adolescents and older adults being at a higher risk <sup>17,19</sup>.

Adolescence is a unique time of development with higher rates of impulsivity, the expansion of emotionality, and exploration of identities. Youth today face additional challenges and pressures related to mainstream and social media, which can increase suicidality <sup>19</sup>. Within the adolescent population there are an estimated 50-100 attempts for every suicide completion<sup>20</sup>. While youth may engage in less lethal means allowing for attempt survival, across the globe, suicide is a leading cause of death for 15-19-year-olds <sup>19</sup>. When working with depressed or suicidal youth, safety planning interventions are highly effective due to vacillating suicidality and crises commonly being shorter in duration<sup>21</sup>.

In addition to gender and age, social determinants such as relationship conflicts and unemployment can influence suicidality. Education level historically has had an inverse correlation with risk, which may be due to the higher income being associated with higher education<sup>17</sup>. Major life stressors or multiple life stressors such as death of a loved one, divorce, or job loss may also increase risk <sup>16</sup>. When patients have experienced significant changes within their social belongingness, providers utilizing the SBIRT model for suicide may prevent loss of life.

## Applying Telehealth Models in Primary Care

## DEFINING TELEHEALTH

In conceptualizing risk and the processes involved in managing safety via telehealth, it is important to consider key terms and models. From the Greek root, "tele"-health, most broadly means "health at a distance," and encompasses a range of services and technologies that are part of the healthcare experience "from a distance"<sup>22</sup>. Definitions of telehealth continue to evolve to capture the impact of technology on our healthcare experience with varied emphasis on the patient-provider interaction (whether synchronous or asynchronous) versus the use of technology to facilitate care<sup>23</sup>. The primary focus of this manuscript is on synchronous, patientprovider interactions that support the SBIRT model and its utility for suicide prevention but does not exclude other technological considerations for caring for patients remotely.

An important distinction emerging in patient-provider telehealth delivery models (influenced by technological advancements and reimbursement policies) is between the hub-and-spoke model and the direct-to-person model. In the hub-and-spoke model, one organization serves as the hub for providers, branching out to multiple endpoints such as hospitals, schools, or community agencies. The direct-to-person model allows patients to access services via mobile devices from any location, including their homes. Particular features of each model as they relate to suicide prevention and safety planning are described in subsequent sections.

#### **TELE-SAFETY**

Risk in telepractice can be conceptualized as a potential for emergency in either physical health (e.g., seizure, heart attack) or mental health (e.g., self-harm, substance use) when patients are physically distant. The approach to risk management varies based on the telehealth model employed. A hub-and-spoke telehealth model may offer additional supports for managing risk, depending on the type of access point the patient uses. For example, a remote GP might connect to a patient presenting at a health facility in another location, such as a rural hospital or clinic with medical staff on site, versus connecting to a community center or school with few, if any, medically trained personnel. Alternatively, direct-to-person services could be utilized from one's home or car, resulting in minimal availability of additional supports.

Safety in telepractice is determined by both personal and environmental factors. Patients have personal risk and protective factors, such as mental status and outlook on the future, as well as environmental factors, including interpersonal violence at home or access to means. Safety plans should be created for every patient reporting any suicidal thoughts<sup>24,25</sup>. Across disciplines, telehealth practice guidelines (such as the Guidelines for the Practice of Telepsychology produced by the American Psychological Association<sup>26</sup>) reinforce that the same ethical and professional practices conducted in-person (i.e., routine safety planning) should be upheld in telehealth encounters.

When not in the same physical space as the patient, the provider cannot respond to a physical emergency such as a heart attack or seizure. Additionally, providers may have less control (or perceive having less control) over responding to a psychiatric emergency. To date, there are no studies or available data indicating if patients are more likely to disengage from safety planning via telehealth versus in-person appointments<sup>27</sup>. Providers may also be at risk of witnessing traumatic events (e.g., live suicide attempt) and inappropriate sexual exposures and should be empowered to disconnect calls if severe boundary violations like these occur<sup>28</sup>.

THE IN-PERSON/TELEHEALTH FALSE DICHOTOMY While there are unique considerations for maintaining a safe, ethical practice via telehealth, the distinction between telepractice and in-person practice is often overstated. Providers practicing in-person are not immune to having to handle crises from a distance. Across all medical practices, patients experience risk of crisis outside of their scheduled appointment time, and they may reach out to their provider by phone while in imminent danger. Many in-person providers can recount times when a patient has contacted them outside of an appointment and reported adverse health effects attention through emergency requiring medical departments or urgent care.

A common concern with managing risk via telehealth is the worry related to the lack of control over a patient disconnecting a tele-appointment while in crisis. However, even when in-person, patients may get up and leave the room or clinic despite the provider's verbal urgings. A patient may transition from engaging in safety planning or complying with moving to a greater level of care, such as hospitalization, to being afraid of this next step. This can be even more common in an in-person setting where a resident steps out to consult with a preceptor and a patient who is left unattended for a few minutes decides to leave.

Practicing appropriate precautions and engaging in thorough planning recommended for telehealth practice can reduce the risk for these concerns. By implementing appropriate protocols and leveraging the strengths of each telehealth model, providers can effectively manage risk and ensure patient safety in remote settings. Understanding the nuances of telehealth models and risk conceptualization is crucial for effective safety planning, recognizing that while telehealth presents unique challenges, many risk management strategies apply to both in-person and remote care.

## Screen, Brief Intervention, and Referral to Treatment for Suicidal Patients via Telehealth

ESTABLISHING SAFETY FOR PATIENTS VIA TELEHEALTH Planning for safety for patients served via telehealth should occur from the initiation of the clinic or agency before the first patient appointment ever occurs. Planning for safety includes the policies and procedures for various situations to ensure the safety of the patient and those on the care team. These policies and procedures may need to be reviewed and enhanced prior to initiating SBIRT for suicidality and are often specific to the agency based on the population served and the laws of the region and ethical guidelines of professional practice and licensure boards.

Providers and organizations can mitigate risk and improve quality of care by gathering and documenting the patient location. Prior to the first appointment, obtaining the patient's address provides an opportunity to ensure the provider is licensed or credentialed to serve the individual via telehealth as well as gather crucial information about mental health resources and crisis response agencies. If a provider calls 911 (or 112 etc.) it will typically connect them to the emergency dispatch physically closest to the provider, which is not necessarily the emergency dispatch closest to the patient. Local emergency numbers, local hospitals, and other local mental health resources could be documented in the patient file for easier access in a crisis. This step is particularly important for providers serving patients outside their immediate community, such as those practicing across state lines with multiple licenses or an approved interjurisdictional credential. In addition to planning before the first appointment, the patient's location should be obtained at the start of every telehealth visit because patients do not always log in from their home address and providers should be ready to dispatch emergency services to the correct location when the situation calls for that level of intervention.

While patients suitable for outpatient services are generally appropriate for telehealth treatment, determining eligibility should be unique to each provider or agency's policies and available resources to manage emergencies. Factors to consider may include symptom severity, current risk level, access to a secure internet connection, and an appropriate location for appointments.

Once initial eligibility is established, a consultation appointment with a medical assistant or other trained staff member can be beneficial. This appointment, though likely not reimbursable, is valuable for early risk management and saves time during the clinical intake. Guidelines for in person risk assessment can inform telehealth specific tasks<sup>29</sup>. Topics to cover in this consultation include:

- 1. Procedures for handling disconnected calls at any time during the appointment (non-emergency)
- 2. Procedures for handling situations where a patient reports self-harm intent to the provider and then disconnects from the appointment (emergency)
- 3. Policies regarding self-harm or substance use during appointments
- 4. Protocols for requesting the patient's location at the start of each appointment
- 5. Policies for contacting providers or the organization for emergencies (e.g. consider platforms like patient portals and social media as well as contacts made outside of business hours)

When working with minors, it's crucial to discuss safety procedures and circumstances under which a parent or guardian will be informed of potential self-harm or harm to others. This pre-work allows for smoother crisis management if needed, as patients who are minors will know what to expect.

It's important to note that some patients may feel uncomfortable disclosing their location due to factors such as citizenship status or belonging to a marginalized group. Providers should collaborate with patients to find safe solutions, such as obtaining emergency contact information or allowing patients to join appointments from public locations with verifiable addresses. Welfare checks should be used only as a last resort.

SCREENING FOR SUICIDE RISK IN TELEHEALTH SETTINGS Suicide risk screenings can be highly effective even when brief. In one study, 338 patients were screened with a 20-item measure after their appointment with their GP, and while the GPs identified suicidality in 7 patients, the 20-item measure identified 42 patients with suicidality<sup>30</sup>. However, even single-question screenings enhance detection without significantly impacting appointment time constraints<sup>31</sup>.

The Columbia Suicide Severity Rating Scale-Screen (C-SSRS-S), a validated 6-item verbal tool, has shown strong evidence of effectiveness across various populations, including children, adolescents, and adults<sup>32,33</sup>. Its versatility makes it suitable for use in diverse settings, from hospitals and clinics to schools and correctional facilities, and its verbal format adapts well to telehealth applications. Another widely used tool is the Patient Health Questionnaire-9 (PHQ-9), which assesses depressive symptoms based on DSM-IV criteria<sup>34</sup>. It includes one item specifically addressing suicidal ideation. An adolescent version, the PHQ-A, is available for ages 12-18<sup>35</sup>. Both versions are easily administered via telehealth using fillable PDFs, virtual whiteboards, or smart forms, and are often integrated into electronic health records.

When designing suicide prevention strategies, it's crucial to respect and adapt to the diverse beliefs, practices, and cultural and linguistic needs of different groups. While race and ethnicity are important factors, a comprehensive approach must also consider age, education, physical and mental health status, gender identity, sexual orientation, occupation, religion, and other individual characteristics. This holistic consideration allows for more culturally sensitive and effective prevention efforts<sup>36</sup>.

When conducting screenings via telehealth, providers should prioritize patient privacy and relationshipbuilding at the start of each appointment. It's advisable to perform suicide risk screenings with enough time remaining to develop a safety plan if necessary. Healthcare agencies should establish protocols for warm handoffs in situations where the primary care provider cannot complete the entire SBIRT model, such as during medical emergencies with other patients.

#### DEVELOPING A SAFETY PLAN FROM A DISTANCE

Planning for safe telehealth practice as described above, is foundational for remote applications of safety planning for suicide prevention. Safety planning in telehealth should begin before the first appointment with the patient <sup>24,25</sup>. Safety planning is a widely utilized and effective brief intervention strategy for suicide prevention<sup>37</sup>. An agency may choose to initiate risk assessment during a phone screening or patient eligibility check, though response protocols should be in place with immediate access to a provider if the patient discloses suicidal ideations in the screening.

A comprehensive safety plan should include the patient's warning signs, coping strategies, reasons to live, social support, places and activities for distraction, and emergency numbers<sup>38,39</sup>. Means restriction is a crucial part of effective safety planning<sup>5</sup>. When providing direct-to-person telehealth, the provider can watch as the patient disposes of pills or disassembles their gun and places it in a lock box with the bullets stored separately

in another area of the home. In a hub-and-spoke model, patients can be provided with paper copies of a blank safety plan. However, many telehealth providers prefer electronic alternatives, such as smartphone applications like "MoodTools - Depression Aid app"<sup>29</sup>. These apps allow patients to create individualized safety plans and store them on their mobile devices at no cost. Regardless of the modality used, providers should document the final plan in the patient's chart for future reference and continued care.

In a hub-and-spoke model, providers can leverage the support of staff and other providers to coordinate higher levels of care when necessary. For direct-to-person models, it's recommended that providers stay on the call with patients while using other means of communication to consult with clinical team members or reach out to emergency contacts. In cases requiring involuntary hospitalization, providers should call local mobile crisis response teams or emergency services for patient transport.

#### EVALUATING AND MODIFYING THE SAFETY PLAN

Monitoring safety plan effectiveness is crucial, especially for patients with suicidal thoughts and behaviors. Between appointments, providers should engage in verbal check-ins to promote wellbeing and encourage the use of coping skills outlined in the safety plan. Standardized measures such as the Patient Health Questionnaire-9 (PHQ-9) and the Columbia-Suicide Severity Rating Scale (C-SSRS) can provide valuable information about the patient's recent experiences with depressive symptoms and suicidal thoughts or behaviors<sup>34,33</sup>.

The safety plan should be viewed as a dynamic document, improving gradually as treatment progresses and the patient learns new coping skills and strategies. Regular updates to the safety plan not only maintain the safety focus but also serve as a meaningful way to process growth and improvement. When interventions prove ineffective in reducing suicidal thoughts and behaviors, it may be more ethically responsible to transfer a patient to in-person services, reassessing the mode of therapy as needed.

Safety planning in telehealth settings requires careful consideration of the unique challenges and opportunities remote presented by care. By implementing comprehensive assessment procedures, leveraging technology for safety plan development and modification, and maintaining open communication with patients, providers can effectively manage risk and promote patient safety in telehealth environments. As telehealth continues to evolve, ongoing evaluation and refinement of safety planning practices will be essential to ensure the highest quality of care for patients at risk of self-harm or suicide.

## REFERRAL TO TREATMENT IN TELEHEALTH CONTEXTS

Effective suicide prevention in healthcare settings hinges on a multifaceted approach that begins with comprehensive knowledge of local referral resources. By establishing inter-agency relationships proactively, care coordination with local mental health services can be significantly streamlined. This preparatory work extends to the appointment process itself; when feasible, conducting pre-appointment consultations or technology tests allows support staff to assess patients' interest in behavioral health referrals. Such a proactive approach equips primary care physicians with curated resource lists before conducting suicide screenings, enhancing the efficiency and effectiveness of these critical interventions.

The integration of behavioral health or collaborative care models within healthcare institutions represents a significant advancement in this field. Research demonstrates that general practitioners report increased competence in utilizing the Screening, Brief Intervention, and Referral to Treatment (SBIRT) model with suicidal patients when working alongside behavioral health providers <sup>6</sup>. These integrated settings facilitate seamless warm handoffs between primary care and behavioral health services during the SBIRT process. Furthermore, Candon and colleagues found that most patients with suicidality engage in behavioral health treatment when it is co-located within primary care settings, ensuring continuity of care, and addressing concerns about followup treatment adherence<sup>40</sup>.

However, recognizing that integrated models may not be feasible for all healthcare providers, alternative solutions have emerged<sup>41</sup>. Partnerships with universities offering behavioral health services present a valuable option. Implementing fee-for-service or block models, where healthcare agencies purchase session blocks from behavioral health providers, offers a cost-effective solution, particularly beneficial for medical clinics with insufficient patient volume to justify full-time behavioral health staff. In the context of a global shortage of behavioral health care providers, these innovative agreements, especially when leveraging telehealth capabilities, can significantly improve access to treatment, addressing a critical gap in care delivery<sup>42</sup>.

By adopting these strategies – from comprehensive resource knowledge and inter-agency collaboration to integrated care models and innovative partnerships – healthcare providers can significantly enhance their capacity to address suicide risk effectively, ensuring that patients receive timely, appropriate, and coordinated care.

#### PRACTICAL CONSIDERATIONS

Comprehensive provider training in telehealth suicide assessment is a crucial component of suicide prevention in primary care settings <sup>8</sup>. While many healthcare professionals receive initial training during medical school or residency, evidence suggests that regular, ongoing training for all clinic staff and providers every few years is effective in reducing suicide rates<sup>5</sup>. Furthermore, research indicates that general practitioners are more likely to engage in Screening, Brief Intervention, and Referral to Treatment (SBIRT) when patients proactively inquire about depression and suicidality <sup>8</sup>. This finding underscores the importance of implementing social messaging campaigns in both physical and virtual waiting rooms to encourage patients to discuss suicidal thoughts with their healthcare providers.

Before implementing telehealth services, it is imperative for providers to thoroughly review the legal and ethical considerations specific to both their location and the region they are serving. Given that laws and ethical codes vary across jurisdictions and professions and are subject to frequent updates, it is recommended that providers conduct annual reviews of these guidelines to ensure compliance and best practices.

Technological challenges are an inherent aspect of telehealth services. These issues can range from varying levels of technological literacy among patients and providers to service outages and system failures. To mitigate these risks, healthcare organizations should establish comprehensive policies and procedures to address technological disruptions, particularly during SBIRT for suicide risk assessment. Contingency plans may transitioning to telephone include appointments, contacting the patient's emergency contact, or engaging local mobile crisis units. By anticipating and preparing for these potential challenges, providers can ensure continuity of care and maintain the integrity of suicide risk assessments in telehealth settings.

# Future Directions and Research Needs for Telehealth and Suicide Prevention

Digital health offers diverse approaches to support and intervene with suicidal patients. These range from webbased safety planning applications to mobile applications and chatbots<sup>37,43,18</sup>. While these emerging technologies present promising avenues for patient support, current evidence for their efficacy and adherence to clinical guidelines remains limited.

Healthcare providers should consider these digital tools as potential supplementary resources for patients under their care. However, it is crucial that practitioners thoroughly evaluate these technologies, including any crisis contact information provided, to ensure the accuracy and reliability of the information.

The field of digital health for suicide prevention is still in its nascent stages. With further research, including rigorous randomized controlled trials, these technologies have the potential to evolve into effective tools for suicide prevention. As the field progresses, ongoing assessment and integration of these digital solutions into comprehensive care plans will be essential to maximize their impact on patient outcomes.

## Conclusion

General Practitioners (GPs) occupy a pivotal position in addressing the global suicide crisis. This critical role is

underscored by the fact that a substantial proportion of individuals who die by suicide have contact with a medical provider in the year preceding their death, with many accessing care within the final month of their lives. By implementing the Screening, Brief Intervention, and Referral to Treatment (SBIRT) model for suicidality, GPs can effectively identify at-risk patients, provide timely support, and facilitate connections to specialized behavioral health services.

The integration of telehealth services presents a promising avenue to enhance access to care for patients at risk of suicide. These platforms enable the delivery of high-quality care while mitigating time constraints and financial burdens associated with traditional in-person visits. This increased accessibility is particularly beneficial for individuals in remote or underserved areas, as well as those with mobility limitations or demanding schedules. By leveraging these strategies and technologies, GPs can make significant contributions to suicide prevention efforts. The synergy of proactive screening, timely interventions, and improved access to care through telehealth has the potential to reduce suicide rates and enhance overall mental health outcomes on a global scale. As the field of digital health for suicide prevention continues to evolve, ongoing research, assessment, and of these integration innovative solutions into comprehensive care plans will be essential to maximize their impact on patient outcomes.

The implementation of these approaches, however, requires careful consideration of practical aspects. Comprehensive and ongoing training for healthcare professionals in telehealth suicide assessment is crucial. Additionally, the development of social messaging campaigns to encourage patient-initiated discussions about mental health can significantly enhance the effectiveness of screening efforts. Furthermore, healthcare providers must remain vigilant in addressing the legal, ethical, and technological challenges inherent in telehealth service delivery.

As we move forward, it is imperative that the healthcare community continues to evaluate and refine these strategies, ensuring that they remain responsive to the evolving needs of patients and the capabilities of emerging technologies. By doing so, we can work towards a future where accessible, effective suicide prevention is an integral part of primary care, contributing to a significant reduction in global suicide rates.

## References

- Gaynes BN, West SL, Ford CA, et al. Screening for suicide risk in adults: a summary of the evidence for the U.S. Preventive Services Task Force. Ann Intern Med. 2004;140(10):822-835.
- Tarlow KR, Johnson TA, McCord CE. Rural status, suicide ideation, and telemental health: Risk Assessment in a Clinical Sample. The Journal of Rural Health. 2019;35(2):247-252. doi:10.1111/jrh.12310
- Asarnow JR, Chung B. Editorial: COVID-19: Lessons learned for suicide prevention. Journal of Child Psychology. 2021;62(8):919-921. doi:10.1111/jcpp.13489
- 4. Suicide. World Health Organization Accessed October 1, 2024. <u>https://www.who.int/news-room/fact-sheets/detail/suicide</u>
- Mann JJ, Michel CA, Auerbach RP. Improving suicide prevention through evidence-based strategies: A systematic review. Am J Psychiatry. 2021;178(7): 611-624. doi:10.1176/appi.ajp.2020.20060864
- Feldman MD, Franks P, Duberstein PR, et al. Let's not talk about it: suicide inquiry in primary care. Ann Fam Med. 2007;5(5):412-418. doi:10.1370/afm.719
- Luoma JB, Martin CE, Pearson JL : Contact with mental health and primary care providers before suicide: a review of the evidence. Am J Psychiatry 2002; 159: 909-916
- Graham RD, Rudd MD, Bryan CJ. Primary care providers' views regarding assessing and treating suicidal patients. Suicide and Life-Threatening Behavior. 2011;41(6):614-623.

doi:10.1111/j.1943-278X.2011.00058.x

- Shoib S, Shaheen N, Anwar A, et al. The effectiveness of telehealth interventions in suicide prevention: A systematic review and meta-analysis. Int J Soc Psychiatry. 2024;70(3):415-423. doi:10.1177/00207640231206059
- Atherton H, Brant H, Ziebland S, et al. Alternatives to the face-to-face consultation in general practice: Focused ethnographic case study. Br J Gen Pract. 2018;68(669):293300. doi: 10.3399/bjgp18X694853
- Vodička S, Zelko E. Remote consultations in general practice – a systematic review. Zdr Varst. 2022;61(4):224-230. doi:10.2478/sjph-2022-0030
- Ndwabe H, Basu A, Mohammed J. Post pandemic analysis on comprehensive utilization of telehealth and telemedicine. *Clinical eHealth*. 2024;7:5-14. doi:10.1016/j.ceh.2023.12.002
- Agerwala SM, McCance-Katz EF. Integrating screening, brief intervention, and referral to treatment (SBIRT) into clinical practice settings: A brief review. J Psychoactive Drugs. 2012;44(4):307-317.
- 14. Carmel A, Ries R, West II, et al. Suicide risk and associated demographic and clinical correlates among primary care patients with recent drug use. Am J Drug Alcohol Abuse. 2016;42(3):351-357. doi:10.3109/00952990.2015.1133634
- 15. Doupnik SK, Rudd B, Schmutte T, et al. Association of suicide prevention interventions with Subsequent suicide attempts, linkage to follow-up care, and depression symptoms for acute care settings: A systematic review and meta-analysis. JAMA

Psychiatry. 2020;77(10):1021-1030.

doi:10.1001/jamapsychiatry.2020.1586

- Haste F, Charlton J, Jenkins R. Potential for suicide prevention in primary care? An analysis of factors associated with suicide. Br J Gen Pract. 1998;48(436):1759-1763.
- Berkelmans, G., van der Mei, R., Bhulai, S. et al. Identifying socio-demographic risk factors for suicide using data on an individual level. BMC Public Health 21, 1702 (2021). https://doi.org/10.1186/s12889-021-11743-3
- Martinengo L, Van Galen L, Lum E, et al. Suicide prevention and depression apps' suicide risk assessment and management: A systematic assessment of adherence to clinical guidelines. BMC Medicine. 2019;17(1):231. doi:10.1186/s12916-019-1461-z
- Forte A, Sarli G, Polidori L, et al. The role of new technologies to prevent suicide in adolescence: A systematic review of the literature. *Medicina*. 2021;57(2):109. doi:10.3390/medicina57020109
- 20. Shain B, Braverman PK. Suicide and suicide attempts in adolescents. *Pediatrics*. 2016;138(1):e20161420. doi:10.1542/peds.2016-1420
- 21. McManama O'Brien KH, Almeida J, et al. A safety and coping planning intervention for suicidal adolescents in acute psychiatric care. Cognitive and Behavioral Practice. 2021;28(1):22-39. doi:10.1016/j.cbpra.2019.08.003
- 22. Global diffusion of eHealth: Making universal health coverage achievable. Report of the third global survey on eHealth. Geneva: World Health Organization; 2016. Licence: CC BY-NC-SA 3.0 IGO.
- 23. Telehealth basics. American Telemedicine Association. Accessed October 2, 2024. https://www.americanantelemed.org/resources/why -telemedicine/
- 24. Stanley B, Brown GK. Safety Planning Intervention: A brief intervention to mitigate suicide risk. Cogn Behav Pract. 2012;19(2):256-264. doi:10.1016/j.cbpra.2011.01.001
- 25. Joint Task Force for the Development of Telepsychology Guidelines for Psychologists. Guidelines for the practice of telepsychology. Am Psychol. 2013;68(9):791-800. doi:10.1037/a0035001
- 26. Americal Psychological Association (2024). Proposed Revision of Guidelines for the Practice of Telepsychology. Retrieved from https://www.apa.org/practice/guidelines/telepsych ology-revisions.pdf
- 27. Ponciano C, Philip J, Tarlow KR, et al. Self-reported client concerns in telehealth counseling services with minority groups. Poster presented at: APA Division 45: Society for the Psychological Study of Culture, Ethnicity and Race Annual Conference; 2018.
- McCord CE, Rosner C, Walsh MVV, et al. A cube model for competency development in telepsychology. J Clin Psychol. 2020;76(6):1060-1082. doi:10.1002/jclp.22954
- 29. McCord CE, Console K, Jackson K, et al. Telepsychology training in a public health crisis: A case example. Couns Psychol Q. 2020. doi:10.1080/09515070.2020.1782842

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- Brown GK, Wolk CB, Green KL, et al. Safety planning intervention and follow-up: A telehealth service model for suicidal individuals in emergency department settings: Study design and protocol. Contemporary *Clinical Trials.* 2024;140:107492. doi:10.1016/j.cct.2024.107492
- Olfson M, Weissman MM, Leon AC, et al. Suicidal ideation in primary care. J Gen Intern Med. 1996;11(8):447-453. doi:10.1007/BF02599038
- 32. Bjureberg J, Dahlin M, Carlborg A, et al. Columbiasuicide severity rating scale screen version: Initial screening for suicide risk in a psychiatric emergency department. *Psychological Medicine*. 2022;52(16):3904-3912. doi:10.1017/S0033291721000751
- 33. Posner K, Brown GK, Stanley B, et al. The columbiasuicide severity rating scale: Initial validity and internal consistency findings from three multisite studies with adolescents and adults. Am J Psychiatry. 2011;168(12):1266-1277. doi:10.1176/appi.ajp.2011.10111704
- Kroenke K, Spitzer RL, Williams JB. The PHQ-9: Validity of a brief depression severity measure. J Gen Intern Med. 2001;16(9):606-613.

doi:10.1046/j.1525-1497.2001.016009606.x

- 35. Johnson JG, Harris ES, Spitzer RL, et al. The patient health questionnaire for adolescents: validation of an instrument for the assessment of mental disorders among adolescent primary care patients. J Adolesc Health. 2002;30(3):196-204. doi:10.1016/s1054-139x(01)00333-0
- 36. Culturally Competent Approaches, Suicide Prevention Resource Center. Accessed October 3, 2024. https://sprc.org/keys-to-success/culturallycompetent-approaches/

- 37. Boudreaux ED, Brown GK, Stanley B, et al. Computer administered safety planning for individuals at risk for suicide: Development and usability testing. J Med Internet Res. 2017;19(5):e149. Published 2017 May 15. doi:10.2196/jmir.6816
- Fremouw WJ, de Perczel M, Ellis TE. Psychology practitioner guidebooks. Suicide risk: Assessment and response guidelines. Pergamon Press; 1990.
- 39. Stanley B, Brown GK. The safety plan treatment manual to reduce suicide risk: Veteran version. United States Department of Veterans Affairs; 2008.
- 40. Candon M, Wolk CB, Kattan Khazanov G, et al. Treating individuals with suicidal ideation in primary care: Patient-level characteristics associated with follow-up in the Collaborative Care Model. Suicide and Life-Threatening Behavior. 2024;54(1):15-23. doi:10.1111/sltb.13012
- 41. Zubatsky, M, Edwards, TM, Wakabayashi, H, et al. Integrated behavioural health in primary care across the world: three countries, three perspectives, Family Practice, Volume 35, Issue 6, December 2018, Pages 645–648,

https://doi.org/10.1093/fampra/cmy034

- Lombardi BM, Zerden Ld, Krueger DK, et al. When interruption becomes innovation: How integrated behavioral health in primary care adapted during COVID-19. Fam Med. 2024;56(9):548-554. https://doi.org/10.22454/FamMed.2024.168465.
- 43. O'Grady C, Melia R, Bogue J, et al. A mobile health approach for improving outcomes in suicide prevention (SafePlan). J Med Internet Res. 2020;22(7):e17481. Published 2020 Jul 30. doi:10.2196/17481