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## Optimizing Telehealth Staff Education to Improve Medication Adherence in Adults with PTSD

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# Walden University

College of Nursing

This is to certify that the doctoral study by

Omotayo Abdul

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Walden University  
2026

Executive Summary: Staff Education Project  
Optimizing Telehealth Staff Education to Improve Medication Adherence in Adults with  
PTSD

by  
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MS, Walden University, 2019  
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Executive Summary Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Nursing Practice

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## Summary

This Doctor of Nursing Practice project was a staff education quality improvement initiative designed to optimize telehealth training for nurses to improve medication adherence in adults with posttraumatic stress disorder (PTSD). Telehealth has become an essential modality for delivering mental health care, yet its effectiveness depends heavily on nurses' ability to communicate effectively, build trust, and engage patients in treatment discussions. Medication nonadherence remains a significant challenge in PTSD care and is closely linked to the quality of clinician communication and patient engagement during care encounters. The practice-focused question guiding this project asked how a staff education project on PTSD telehealth could improve staff knowledge and self-reported confidence for nurses. The purpose of the project was to develop, implement, and evaluate a structured education program that strengthened nurses' knowledge regarding enhanced trauma-informed communication and supported adherence-focused care during telehealth visits. A pre- and posttest was used to assess for a change in knowledge and self-reported confidence. Using the normalized learning gain formula demonstrated a 57% gain in knowledge representing a moderate to high learning gain and a positive change in the nurses' level of knowledge and self-reported confidence. These findings support the effectiveness of structured telehealth staff education in improving nurse preparedness and reinforces the social change value of interactive, skills-based training for enhancing medication adherence and improving health for individuals with PTSD.

## Background

Medication adherence is a critical determinant of treatment effectiveness for adults diagnosed with PTSD. Pharmacologic management, including antidepressants and anxiolytics, is commonly prescribed to reduce symptom severity; however, adherence rates among individuals with PTSD are consistently suboptimal (Osterberg & Blaschke, 2005). Factors contributing to nonadherence include symptom avoidance, cognitive distortions, mistrust of healthcare systems, fear of side effects, stigma associated with mental illness, and difficulty maintaining consistent engagement in care (Sayer et al., 2010). These challenges may be further exacerbated when care is delivered through virtual platforms without intentional, trauma-informed communication strategies. The practice-focused question guiding this project asked how a staff education project on PTSD telehealth could improve staff knowledge and self-reported for nurses. The purpose of the project was to develop, implement, and evaluate a structured education program that strengthened nurses' knowledge regarding enhanced trauma-informed communication and supported adherence-focused care during telehealth visits.

Telehealth has emerged as an effective modality for increasing access to mental health services, particularly for individuals facing geographic, mobility, or transportation barriers. Evidence demonstrates that telehealth can produce clinical outcomes comparable to in-person care while improving appointment adherence and continuity of treatment (Fortney et al., 2015). For adults with PTSD, telehealth may reduce avoidance behaviors related to clinic attendance and offer a sense of psychological safety by allowing patients to engage from familiar environments. However, the effectiveness of telehealth depends

heavily on clinician competence, comfort, and communication skills within virtual settings.

Trauma-informed care (TIC) provides a framework for understanding how trauma affects patient behaviors, engagement, and responses to treatment. Core principles of TIC include safety, trustworthiness, collaboration, empowerment, and cultural humility (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). When applied to telehealth encounters, trauma-informed communication can help clinicians recognize adherence challenges as adaptive responses rather than patient noncompliance. Research suggests that patients are more likely to adhere to treatment recommendations when they feel emotionally safe, understood, and supported by clinicians, underscoring the importance of TIC within virtual mental health care (Goldstein et al., 2024).

Despite growing use of telehealth, gaps remain in nurse preparation related to trauma-informed virtual engagement and adherence-focused communication. Many nurses receive limited formal training specific to telehealth modalities, particularly in the context of mental health care. Addressing these educational gaps is essential to improving patient outcomes and ensuring high-quality, equitable telehealth services.

Medication adherence among adults with PTSD is influenced by complex trauma-related and systemic barriers that can be intensified in telehealth settings without appropriate clinician preparation. While telehealth improves access and continuity of mental health care, its effectiveness depends on nurses' ability to apply trauma-informed communication strategies that promote safety, trust, and engagement. In this project, I addressed a critical gap in nurse education by developing and evaluating a structured telehealth education program focused on PTSD communication and adherence support.

Strengthening nurse knowledge and confidence in these areas is essential to improving patient engagement, supporting medication adherence, and ensuring high-quality, equitable telehealth care for adults with PTSD.

### **Staff Education Project Development**

This staff education project was developed and implemented at a practicum site where registered nurses provide telehealth services to adults diagnosed with PTSD. Participants included 12 staff nurses actively engaged in virtual mental health care delivery. The purpose of the project was to enhance nurse knowledge, self-reported confidence, and preparedness to support medication adherence through trauma-informed telehealth communication.

The project followed the analysis, design, development, implementation, and evaluation (ADDIE) framework to guide systematic development and execution of the education program. During the analysis phase, organizational readiness and staff learning needs were assessed through informal discussions with leadership and frontline nurses. Stakeholder engagement ensured alignment with institutional goals and promoted staff buy-in.

The educational content (Appendix A) was designed to address identified gaps in trauma-informed communication, virtual engagement strategies, and adherence-focused assessment techniques. Content included principles of TIC, strategies for exploring medication beliefs and barriers, use of empathetic language, and techniques for fostering therapeutic rapport in virtual encounters. Best practices for telehealth etiquette, privacy, and patient engagement were also incorporated.

The education program was delivered through structured training sessions that included didactic instruction and simulation-based learning. Simulation scenarios allowed nurses to practice telehealth communication skills in realistic, low-risk environments, an approach shown to enhance clinician self-reported confidence, clinical reasoning, and skill retention (Ryall et al., 2016). Scenarios focused on common adherence challenges encountered among adults with PTSD, such as medication avoidance, fear of side effects, and mistrust of treatment recommendations.

### **Evaluation Methods**

Data collection included a pre- and post-education knowledge and self-reported confidence assessment (Appendix B). Knowledge was measured using a structured questionnaire assessing understanding of trauma-informed telehealth principles and medication adherence support strategies. As part of the pre and post-test questions specifically addressed the participants changes in self-reported confidence to deliver adherence-focused care in telehealth settings.

### **Results**

Postimplementation results demonstrated meaningful improvements in both nurse self-reported confidence and knowledge following completion of the staff education intervention. Twelve nurses participated and completed both preintervention and postintervention assessments. Knowledge assessment results showed a mean increase of 13 percentage points, with average scores rising from 77% on the pretest to 90% on the posttest. All nurses achieved posttest scores between 85% and 100%, reflecting improved understanding of trauma-informed care principles, telehealth communication strategies, and adherence-support interventions.

For the five questions specifically related to self-reported confidence scores increased across all participants. Postintervention confidence scores ranged from four to five, indicating that all participating nurses reported improved confidence in applying trauma-informed telehealth strategies to support medication adherence in adults with PTSD. These findings suggest that targeted staff education can improve both effective and cognitive learning outcomes, strengthening nurse readiness to address medication adherence challenges during telehealth encounters.

**Table 1**

*Assessment Scores Before and After the Staff Education Intervention (N = 12)*

Nurse ID	Pretest score	Posttest score
Nurse 1	75	86
Nurse 2	77	90
Nurse 3	76	85
Nurse 4	78	92
Nurse 5	80	95
Nurse 6	76	88
Nurse 7	77	89
Nurse 8	75	87
Nurse 9	78	91
Nurse 10	76	88
Nurse 11	82	98
Nurse 12	77	90
<b>Mean Score</b>	<b>77</b>	<b>90</b>

*Note.* Knowledge scores represent the percentage of correct responses on a structured questionnaire assessing trauma-informed telehealth care principles and medication adherence support strategies for adults with PTSD.

### **Normalized Learning Gain**

The knowledge gained was calculated using the normalized learning gain (NLG) formula, as specified by the Brigham and Women's Hospital Center for Nursing Excellence (n.d.). The NLG formula is as follows:  $[(90 - 77) / (100 - 77)] \times 100$ . According to the calculation, the results showed roughly 0.57, equating to a 57% gain in knowledge representing a moderate to high learning gain. This demonstrates a positive change in the nurses' level of knowledge.

### **Impact on the Organization**

The results of this staff education project have the potential for a positive impact on the organization by strengthening workforce preparedness, standardizing telehealth practice, and supporting quality improvement initiatives in virtual mental health care. Improved nurse knowledge and confidence in PTSD telehealth communication enhance the consistency and reliability of care delivery across providers, reducing variability in how medication adherence is assessed and addressed during virtual encounters. Increased staff readiness also supports organizational goals related to patient safety, engagement, and continuity of care, as nurses are better equipped to identify adherence barriers early and intervene appropriately. From an operational perspective, integrating this education into existing training structures may improve staff satisfaction and retention by increasing professional competence and confidence in telehealth roles. Collectively, these outcomes position the organization to deliver higher-quality, patient-centered telehealth services while meeting regulatory, accreditation, and performance expectations associated with virtual mental health care delivery.

### **Limitations**

Several limitations should be considered when interpreting the postimplementation results of this staff education intervention. The small sample size ( $N = 12$ ) and inclusion of nurses from a single practice setting limit the generalizability of the findings to other populations or healthcare environments. Additionally, self-reported confidence measures are subject to response bias and may not accurately reflect actual clinical performance or sustained behavior change. Despite these limitations, the observed improvements in knowledge scores, confidence ratings, and normalized

learning gain provide meaningful preliminary evidence supporting the effectiveness of targeted staff education in nurse readiness for PTSD related telehealth care.

### **Conclusions**

This staff education project demonstrated that optimizing telehealth training for nurses improves self-reported confidence, knowledge, and readiness to support medication adherence among adults with PTSD. By integrating trauma-informed principles into telehealth education, nurses were better equipped to engage patients empathetically, explore adherence barriers, and promote therapeutic alliance within virtual care environments.

This project contributes to nursing practice by strengthening the consistency and quality of evidence-based telehealth care delivery while directly addressing a critical gap in mental health nurse education. By equipping nurses with structured training in trauma-informed communication, virtual engagement strategies, and adherence-focused assessment, the project enhances nurses' ability to deliver patient-centered care within telehealth environments. The findings support the integration of trauma-informed telehealth education into new nurse orientation programs to establish foundational competencies early in practice. Additionally, offering ongoing refresher training and simulation-based reinforcement can help sustain improvements over time, promote skill retention, and ensure alignment with evolving best practices in telehealth and mental health care delivery.

From a broader perspective, this project supports positive social change by improving access to high-quality mental health services for adults with PTSD, particularly those who face barriers related to geography, transportation, stigma, or

limited provider availability. By promoting trauma-informed, culturally responsive telehealth practices, the project advances equitable service delivery and fosters therapeutic environments in which patients feel safe, respected, and empowered to engage in their care. These efforts align with diversity, equity, and inclusion principles by acknowledging the impact of trauma and systemic inequities on health outcomes and by supporting care models that are responsive to the unique needs of diverse patient populations. Ultimately, enhancing nurse preparedness for PTSD telehealth practice contributes to improved engagement, medication adherence, and long-term mental health outcomes.

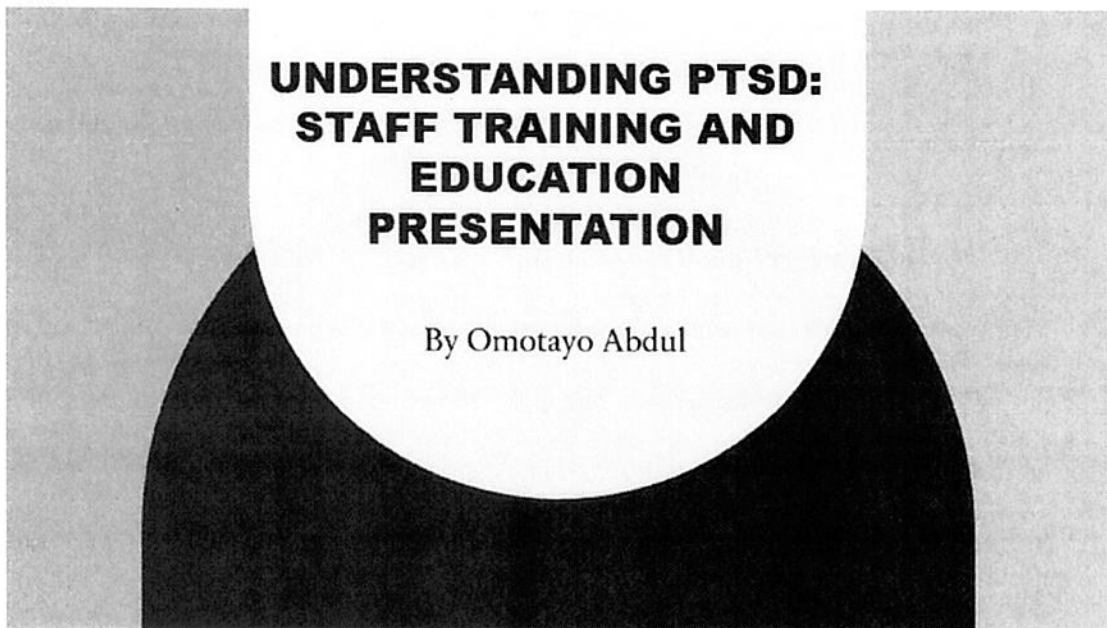
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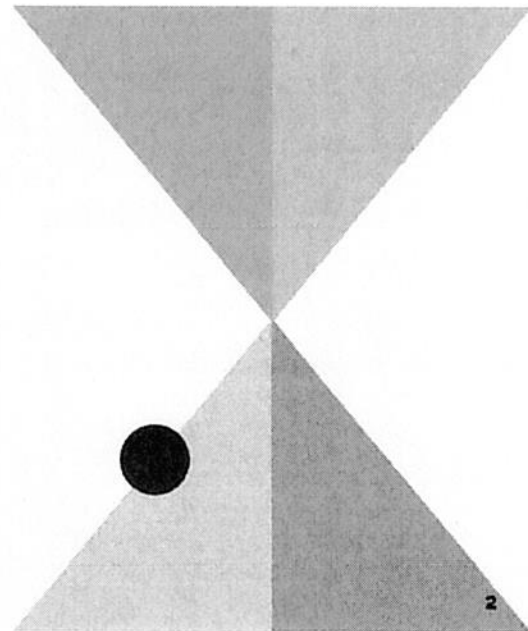
### **Appendix A: Staff Education PowerPoint Presentation**

Note. This appendix contains the PowerPoint slides used to deliver the staff education training on trauma-informed telehealth care for adults with PTSD. The slides present structured educational content, including trauma-informed care principles, an overview of PTSD, simulation-based learning activities, and telehealth workflow guidance.



## **AGENDA**

1. Introduction
2. Building confidence
3. Engaging the patient
4. Visual aids
5. Final tips & takeaways



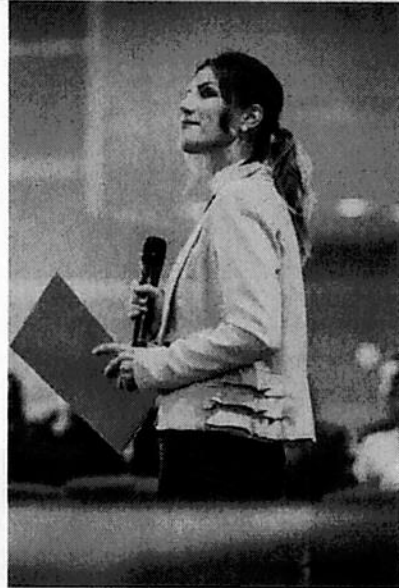
### **learning objectives (The power of communication)**

- Identify at least three common barriers to medication adherence in PTSD care.
- Apply two trauma-informed telehealth communication strategies in practice.
- Choose the most appropriate evidence-based telehealth intervention in simulated PTSD scenarios.

## **OVERCOMING NERVOUSNESS**

Confidence-building strategies  
Knowledge pretests and posttests, Likert-scale surveys on perceived competence, and feedback from participants and managers on relevance and applicability.

Remember, evidence shows that telemedicine significantly improves access, engagement, and outcomes in PTSD care, with collaborative care models and cognitive processing therapy delivered via telehealth leading to measurable symptom reduction and greater treatment adherence (Fortney et al., 2015; Kruse et al., 2023; Taggart Wasson et al., 2018).

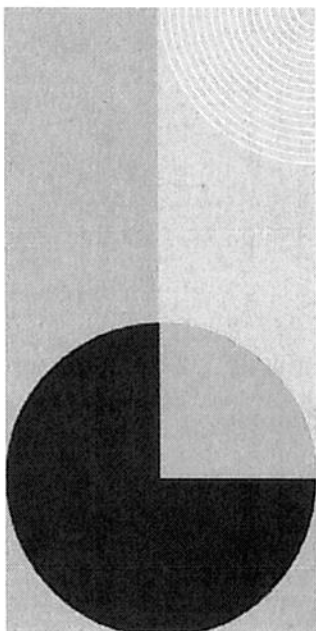


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## **ENGAGING WITH PATIENTS**

- Make eye contact with your patient to create a sense of intimacy and involvement
- Weave relatable stories into your presentation using narratives that make your message memorable and impactful
- Encourage questions and provide thoughtful responses to enhance their participation
- Use live polls or surveys to gather opinions, promoting engagement and making sure the patient feels involved

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## Trauma-informed Techniques

- \*Using calm, respectful tones
- \*Validating patient experiences without judgment
- \*Asking permission before changing topics
- \*Offering choices supports adherence by improving engagement
- \*Greeting the patient by name and confirming comfort with the technology
- \*Briefly reviewing the purpose of the visit
- \*Asking open-ended questions about adherence
- \*Exploring challenges
- \*Setting one concrete follow-up action

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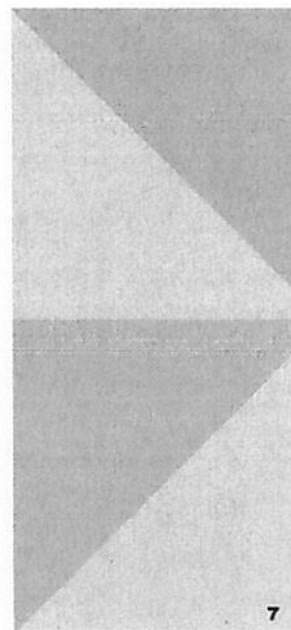
## EFFECTIVE DELIVERY TECHNIQUES

**Positive body language enhances your message, making it more impactful and memorable.**

- Meaningful eye contact
- Purposeful gestures
- Maintain good posture
- Control your expressions

**Proper documentation promotes patient safety and streamlines clinical workflow.**

- . Follow standardized documentation protocols.
- . Record PTSD screening and symptom severity
- . Document interventions and patient responses
- . Ensure accurate coding for trauma-focused care
- . A short quiz with case-based multiple-choice and scenario questions will evaluate:
  - . Understanding of barriers to adherence
  - . Appropriate use of trauma-informed strategies
  - . Decision-making around eHealth tools



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## **NAVIGATING THROUGH SESSIONS**

- Maintaining composure during the session is essential for projecting confidence and authority. Consider the following tips for staying composed:
- Stay calm
- Actively listen
- Pause and reflect
- Maintain eye contact



## **SPEAKING IMPACT**

Your ability to communicate effectively will leave a lasting impact on your audience. Speak with empathy and listen without judgement. Every conversation has the power to comfort, build trust and promote recovery.

Effectively communicating involves not only delivering a message but also resonating with the experiences, values, and emotions of those listening.



## DYNAMIC DELIVERY

Learn to infuse energy into your delivery to leave a lasting impression.

One of the goals of effective communication is to motivate your audience.

Metric	Measurement	Target	Actual
Audience attendance	# of attendees	150	120
Engagement duration	Minutes	60	75
Q&A interaction	# of questions	10	15
Positive feedback	Percentage (%)	90	95
Rate of information retention	Percentage (%)	80	85

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## FINAL TIPS & TAKEAWAYS

- Consistent rehearsal
  - Strengthen your familiarity
  - Refine delivery style
  - Pacing, tone, and emphasis
  - Timing and transitions
  - Aim for seamless, professional delivery
    - Be persistent in your approach
  - Enlist colleagues to listen & provide feedback
  - The takeaway is understanding, treating them with respect, and being considerate of their feelings.
- Seek feedback
  - Reflect on performance
  - Explore new techniques
  - Set personal goals
  - Iterate and adapt

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## **Appendix B: Pretest and Posttest Questionnaires**

Note. This appendix provides the knowledge and self-reported confidence assessment Likert scale used for the pre- and post-education evaluation.

### **1. What is a common barrier to medication adherence in adults with PTSD?**

- A. Access to online pharmacies
- B. Poor telehealth platform connection only
- C. Stigma, avoidance behaviors, and cognitive impairment
- D. Lack of medication stock in hospitals

**Answer: C**

### **2. Which of the following strategies is most effective in promoting adherence in PTSD patients through telehealth?**

- A. Sending prescription reminders via social media
- B. Integrating trauma-informed communication and education
- C. Switching patients to over-the-counter medications
- D. Scheduling appointments without patient input

**Answer: B**

### **3. According to evidence, what is a critical nursing skill for effective PTSD telehealth support?**

- A. Technical troubleshooting of software
- B. Trauma-informed communication and empathy
- C. Manual data entry accuracy
- D. Knowledge of hospital building layout

**Answer: B**

**4. What does the term “interactive eHealth” include in relation to adherence strategies?**

- A. Manual medication administration
- B. Live video consults, mobile apps, or automated messages
- C. Paper charting systems
- D. Non-verbal body language interpretation

**Answer: B**

**5. Which outcome was associated with the Telemedicine Outreach for PTSD (TOP) model?**

- A. Higher medication adherence due to trauma-informed education
- B. Decline in PTSD severity with in-person visits only
- C. Increase in hospitalization for veterans
- D. Worsened outcomes due to internet fatigue

**Answer: A**

**6. What is one way nurses can support medication adherence during a telehealth session?**

- A. Ask yes/no questions only
- B. Use medical jargon for clarity
- C. Explore patient beliefs and address side-effect concerns
- D. End session once medication is mentioned

**Answer: C**

**7. Which of the following is true about mobile telehealth education?**

- A. It eliminates the need for patient engagement
- B. It supports nursing staff in reaching remote patients with consistent follow-up
- C. It is limited to urban areas only
- D. It requires psychiatric certification for all nurses

**Answer: B**

**8. A trauma-informed telehealth approach should include all of the following EXCEPT:**

- A. Validating the patient's experience
- B. Encouraging medication compliance through threats
- C. Providing calm and nonjudgmental support
- D. Ensuring privacy and confidentiality

**Answer: B**

**9. What is a measurable benefit of telehealth-based education interventions?**

- A. Higher staffing costs
- B. Reduced appointment scheduling accuracy
- C. Improved medication adherence rates and symptom control
- D. Increased documentation burden

**Answer: C**

**10. Why is it important for nurses to understand evidence-based telehealth strategies for PTSD care?**

- A. To create advertising content
- B. To take over prescribing duties
- C. To enhance patient trust, communication, and adherence
- D. To replace psychiatric specialists

**Answer: C**

**Likert Scale**

**1 = Very low confidence, 2 = Low confidence, 3 = Moderate confidence, 4 = High confidence, 5 = Very high confidence**

11. How confident are you in using trauma-informed communication techniques during telehealth visits with adults who have PTSD?

12. How confident are you in discussing medication adherence challenges with patients during telehealth encounters?

13. How confident are you in recognizing patient cues related to distress, avoidance, or disengagement during virtual visits?

14. How confident are you in supporting patients to problem-solve barriers to medication adherence using telehealth strategies?

15. How confident are you in delivering telehealth care that promotes patient trust, engagement, and follow-through with prescribed medications?