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Reducing Patient No-Show Rates in a Mental Health Outpatient Clinic

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College of Nursing

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John Kamau

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2025

Executive Summary: Staff Education Project
Reducing Patient No-Show Rates in a Mental Health Outpatient Clinic

by

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BS, Western Governor University, 2019

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Summary

This doctoral project is a quality improvement initiative to enhance staff knowledge and confidence through expert feedback validating educational interventions at a mental health outpatient clinic. The practice problem highlighted staff preparedness gaps to effectively address patient-specific barriers, impacting patient engagement and care delivery, resulting in high appointment no-shows. Addressing this issue within nursing practice was essential, as consistent care was critical for managing psychiatric conditions effectively.

The question guiding the project was as follows: How does implementing a specialized staff training program impact staff knowledge and confidence in reducing no-shows? This project aimed to equip staff with evidence-based tools to reduce appointment no-shows and validate this training's effectiveness through expert feedback using the ADDIE Model. Expert evaluations were prioritized to validate the educational content, followed by pre- and post-intervention assessments to measure staff knowledge and confidence differences. The evidence sources for this project were carefully selected to ensure reliability and credibility. Peer-reviewed journal articles were identified through comprehensive database searches on PubMed, CINAHL, and Google Scholar platforms. The project showed a quantifiable increase in staff knowledge and confidence. Recommendations included continuous education, helping nurses anticipate patient-specific challenges, personalized reminders as part of standard practice, addressing social determinants of health, and leveraging telehealth options. This project has broad implications for nursing practice, including fostering a culture of patient-centered care, reducing healthcare disparities, and enhancing diversity, equity, and inclusion.

Background

High patient no-show rates in outpatient clinics for mental health have become a major problem in the provision of healthcare. The continuity of care necessary for treating mental health issues like bipolar disorder, anxiety, and depression is disrupted by these missed sessions. According to studies, no-show rates in mental health settings vary from 10% to 60% worldwide, and in marginalized populations, some facilities report even higher rates (Milicevic et al., 2020). These missed visits lead to several adverse outcomes, including worsening patient symptoms, delayed recovery, increased hospitalizations, and higher healthcare costs. Patient engagement challenges highlight the need for focused staff training to address systemic barriers in care delivery (Milicevic et al., 2020). In the project setting, these missed appointments exacerbate existing challenges, such as resource limitations and long wait times, highlighting the need for targeted interventions to reduce no-shows and enhance operational efficiency.

This practice change stemmed from the limitations of current interventions, which rely primarily on generic reminder systems like phone calls and text messages. While these strategies are foundational, their efficacy is limited, particularly when they fail to address underlying barriers such as staff knowledge gaps and cultural competency. Mental health patients often face unique obstacles, including stigma, cognitive impairments, and comorbid conditions, which make adherence to appointments particularly challenging. The need for culturally competent, patient-specific strategies was urgent. Addressing these gaps required innovative staff training approaches to enhance knowledge and patient-centered engagement strategies.

The Project Question and Project Purpose

The following question guided the project: In adult patients with mental health disorders at a mental health outpatient clinic (P), how does the implementation of a specialized staff training program (I) impact staff knowledge and confidence in reducing no-shows compared to the existing reminder system (C)? This question underscored the importance of staff development and systemic change in reducing no-show rates. The project aimed to empower staff with tools and strategies to address patient-specific barriers, improve appointment adherence, and enhance the center's operational efficiency and patient outcomes. The project aimed to create a replicable framework for reducing no-shows in outpatient mental health settings by combining evidence-based practices with innovative tools

The Project Change or Gap in Practice

A robust body of evidence supported the need for practice changes to address this issue. A predictive modeling study by Milicevic et al., (2020), analyzed over 1.2 million appointments at Veterans Administration clinics, revealed that prior attendance behavior was the strongest predictor of future no-shows. The model showed that patients with a history of missed appointments were significantly more likely to miss subsequent ones, enabling targeted interventions. Similarly, Sumarsono et al., (2023) demonstrated that telehealth options reduced no-show rates by 29% in an urban safety-net population, with the most significant improvements observed in socially vulnerable groups. These findings highlight the potential of combining predictive tools with flexible care options to improve patient attendance.

Systematic reviews have also reinforced the efficacy of open-access scheduling and reminder systems. Mazaheri Habibi et al., (2024) found that 62.5% of studies reported significant reductions in no-show rates using open-access models, although results varied based on patient demographics and implementation strategies. Another study by Valero-Bover et al., (2022), involved over 54,000 outpatient appointments, showed that predictive modeling combined with targeted phone call reminders reduced non-attendance by up to 50% in dermatology and pneumology clinics. These results underscore the importance of tailored approaches in addressing no-show rates, as standardized interventions often fail to account for patient-specific needs and barriers.

Strength of Evidence

The evidence supporting this project included Level I systematic reviews and Level II observational studies. These sources consistently highlighted the effectiveness of staff training in improving knowledge and engagement strategies. Systematic reviews strongly support educational interventions, demonstrating their impact on staff confidence and patient outcomes in diverse healthcare settings. Observational studies validated the applicability of such interventions to outpatient mental health clinics, strengthening the case for their use in this project. The combination of high-level evidence ensured the training program was grounded in robust, credible research.

The impact of these findings on nursing practice is significant. They highlight the importance of adopting a proactive, patient-focused approach to care, with an emphasis on overcoming systemic obstacles to attendance. Nurses played a key role in executing these changes, often serving as the main point of contact for patients. By providing nurses with resources such as predictive modeling tools and cultural competency training, the

initiative sought to improve their capacity to engage with patients effectively and tackle underlying barriers to care. Predictive modeling tools were included in the training to help nurses foresee specific patient challenges, like predicting the likelihood of no-shows and allowing for customized interventions.

Staff Education Project Development

Participants and Procedures

A multidisciplinary team of registered nurses, care coordinators, administrative personnel, receptionists, and Advanced Practice Registered Nurses (APRNs) participated in the staff education project. These positions were chosen to guarantee that the clinic's workflow covered operational and patient-facing duties. A broad group was included to encourage adopting evidence-based practices and promote a cooperative strategy for lowering patient no-show rates.

The project unfolded in five main steps: (1) Development of content material to be used for staff education (Appendix A), (2) External experts reviewed the training materials, confirming their alignment with best practices and providing recommendations for refinement (Appendix B), (3) Pre-training assessment of staff knowledge and confidence to identify gaps (Appendix C), (4) Delivery of training content validated by expert reviewers (Appendix D), and (5) Post-training assessments to measure knowledge and confidence improvement (Appendix E). The project focused exclusively on staff education and did not evaluate the impact on patient outcomes or operational efficiency.

Pre-assessment surveys were conducted to gauge baseline staff knowledge and confidence regarding patient engagement strategies. The training emphasized actionable strategies such as personalized reminders, flexible scheduling, and overcoming

socioeconomic barriers. The curriculum was delivered through interactive workshops, simulations, and case-based learning modules, using content reviewed by experts. This process was guided by principles from the Johns Hopkins Evidence-Based Practice (JHEBP) framework, ensuring alignment with clinical best practices and organizational objectives.

Expert Evaluation

Expert evaluation played a critical role in validating the effectiveness of the staff education program implemented to address patient no-show rates in a mental health outpatient clinic. The evaluation process involved a multidisciplinary panel of professionals, including APRNs specializing in mental health, nursing educators with advanced degrees, data scientists skilled in healthcare analytics, and administrators with expertise in healthcare operations. These experts assessed the educational content's relevance, evidence-based foundation, and practical application in addressing patient-specific barriers. Their feedback underscored the importance of incorporating real-world scenarios and case-based learning exercises to enhance staff contextual understanding.

Collection and Analysis of Evidence

The project's evaluation process utilized pre- and post-training assessments to measure staff knowledge and confidence with expert evaluations validating the training materials. A diverse panel of reviewers, including APRNs specializing in mental health, nursing educators, healthcare data scientists, and administrators, ensured the training content was evidence-based, practical, and aligned with industry standards. Feedback from experts emphasized the importance of using real-world scenarios and case-based

exercises to enhance the educational experience, ensuring the program's alignment with the clinic's mission to improve care quality.

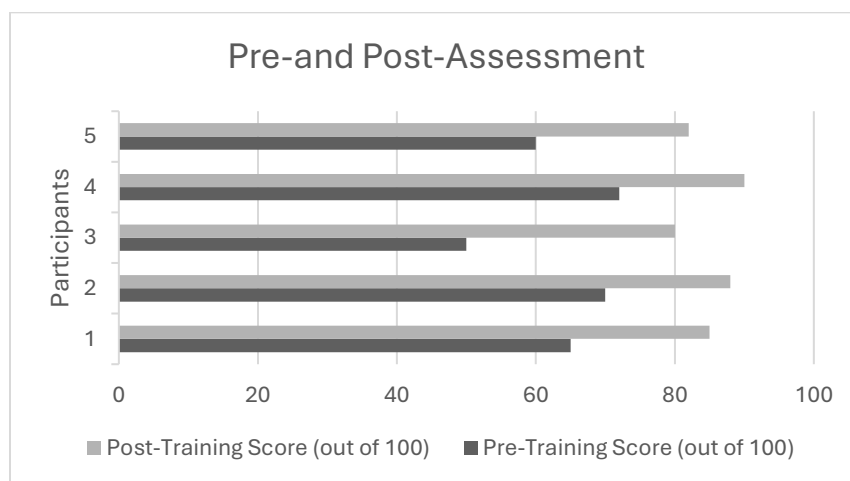
Results

Post-Implementation Results

Post-implementation results demonstrated increased staff knowledge, highlighting the program's effectiveness in addressing barriers to patient engagement. Staff reported enhanced abilities to engage patients and overcome attendance challenges, supported by personalized reminder strategies like tailored phone calls. These outcomes reflect the project's success in fostering a patient-centered care environment, promoting consistent attendance, and improving mental health through staff proficiency and patient engagement practices.

Figure 1

Knowledge Levels (Pre- and Post-Assessment)

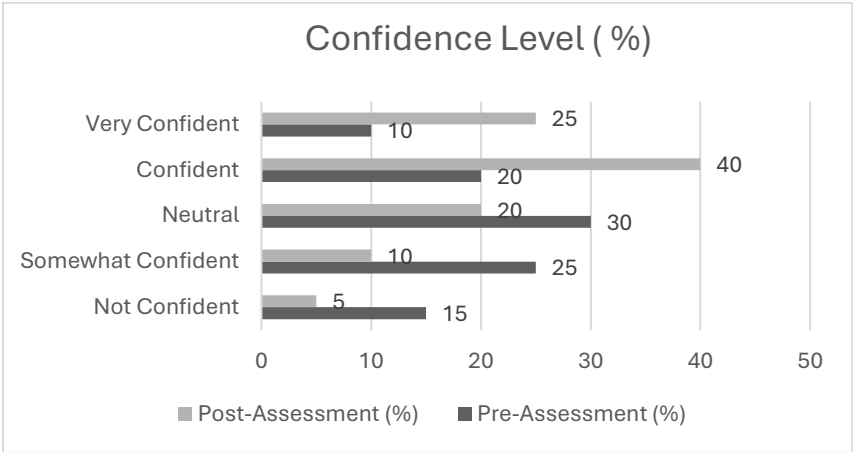


Note. A comparison of individuals' self-reported knowledge of reducing no-shows before and after an intervention.

All five assessed individual staff in the above Figure 1 show an overall improvement in knowledge since post-training knowledge scores are consistently higher than pre-training scores, suggesting that the intervention successfully enhanced staff understanding of patient no-shows. Figure 2 show an overall improvement in confidence post-training.

Figure 2

Confidence Levels (Pre- and Post-Assessment)



Note. A comparison of staff confidence in reducing no-shows before and after an intervention.

Impact on the Organization

The intervention significantly improved staff knowledge and confidence, improving their ability to address patient-specific barriers. Expert evaluations validated the training’s relevance and impact on organizational learning. The project will enhance the center’s capacity to deliver timely mental health care to its underserved community, aligning with its mission to improve access to services. According to a study by Valero-Bover et al. (2022), telehealth usage surged by 63% in 2020, with 85% of healthcare

providers incorporating it into their practices to enhance patient access and care efficiency. Expanding telehealth options can further support organizational goals of reducing health disparities by offering flexible alternatives to in-person visits. These advancements position the organization as a leader in evidence-based practices for reducing no-show rates, serving as a model for other mental health outpatient settings.

Importance Beyond the Local Site

The project's conclusions have important ramifications for outpatient mental health clinics in general. To improve the delivery of patient-centered care in various healthcare settings, staff education programs that fill in knowledge and confidence gaps and improve interaction tactics are crucial. The project emphasized the importance of implementing evidence-based education to close gaps in staff readiness and patient engagement in outpatient settings. Demonstrating the effectiveness of predictive modeling, personalized reminders, and culturally competent care, the initiative provides a replicable framework for outpatient mental health clinics (Callejo-Black et al., 2021). Incorporating telehealth as a flexible alternative further illustrates the potential of technology-driven solutions to overcome systemic barriers to care, particularly for underserved populations.

The project addressed social determinants of health by equipping healthcare providers with the knowledge and skills to identify and mitigate barriers faced by vulnerable populations, fostering equitable care practices. The lessons learned from this intervention can guide regional and national policy changes and resource allocation as mental health services adjust to changing patient requirements, fostering better access and results in various healthcare settings.

Conclusions

The project demonstrated a measurable improvement in staff knowledge and confidence, validated by pre- and post-training and expert training evaluations. The training effectively equipped staff with strategies to address patient-specific barriers and improve engagement, integrating tools like predictive modeling and culturally competent communication. Experts praised the program's relevance and practicality while recommending more scenario-based learning to enhance its impact. This initiative highlights the value of evidence-based teaching interventions in fostering professional growth, improving patient engagement, and refining care delivery in mental health outpatient settings. Future efforts should focus on sustaining knowledge gains and incorporating expert recommendations to enhance training outcomes.

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Appendix A: Outline of Training Content

1. Introduction to Patient-Specific Barriers

Overview of common barriers in outpatient mental health settings.
Importance of addressing cultural and individualized patient needs.

2. Evidence-Based Strategies for Patient Engagement

Techniques to enhance communication and build trust.
Approaches to improve adherence and reduce no-show rates.

3. Interactive Training Modules

Role-playing scenarios and case studies.
Feedback sessions with healthcare experts.

4. Evaluation and Assessment Tools

Pre- and post-training assessments to measure staff knowledge.
Surveys and feedback forms for ongoing improvement.

Appendix B: Content Expert Evaluation Form

Project: Educating staff on strategies to reduce no-show rates in mental health clinics

Instructions:

- **Rating Scale:** Use a 1–5 scale where 1 is "Poor", 2 is "Fair", 3 is "Average," 4 is "Good", and 5 is "Excellent."
- **Comments:** Provide feedback for each section to explain your ratings or suggest improvements

	CRITERIA	RATING	COMMENT
Purpose & Relevance	Content aligns with the intended goals and objectives of the project.		
	Content is relevant to the target audience.		
	Content provides value or useful insights.		
Relevance to Barriers	Content addresses the main barriers patients face in attending appointments.		
	Material addresses the needs of diverse patient populations.		
Practicality and Evidence Base	Proposed strategies are feasible for staff to implement within		

	their current workload and resources.		
	Proposed strategies align with evidence-based practices in reducing no-shows.		
	Strategies will have a measurable impact on reducing no-show rates.		
	Strategies are sufficiently detailed to guide staff in their application.		
Accuracy & Credibility	Information is factually accurate.		
	Sources are cited and credible.		
Identification of Gaps	No areas where the content lacks sufficient detail or misses important considerations.		
	Teaching content is comprehensive in addressing the issue of no-shows.		
	Language is clear and easy to understand.		

Readability, Clarity, and & Comprehensibility	Content is well-structured and logically organized.		
	The presentation format (slides) enhances understanding of the material.		
	Key points are presented in a clear and concise manner.		
Engagement & Tone	Engages the audience effectively.		
	Uses a suitable tone and style.		
	Includes visuals or examples to support content.		
Overall Evaluation	Overall, content is of good quality.		
	The staff education project, as presented, will effectively improve patient attendance and reduce no-shows.		
	You would recommend implementing this program in your practice setting		

Name of Content Expert: _____ **Date:** _____

Appendix C: Pre-Assessment Form for Staff Knowledge and Confidence

Title: Pre-Assessment for Staff Training on Reducing Patient No-Shows

Purpose: To evaluate current knowledge, confidence, and practices regarding strategies to reduce patient no-show rates.

Section 1: Demographics

Name (optional): _____

Job Title: _____

Years of Experience in Mental Health Care:	<input type="checkbox"/>	Less than 1 year
	<input type="checkbox"/>	1–5 years
	<input type="checkbox"/>	6–10 years
	<input type="checkbox"/>	More than 10 years

Section 2: Knowledge Assessment

Rate your agreement with the following statements:

(Use a scale of 1 = Strongly Disagree to 5 = Strongly Agree)

	1	2	3	4	5
I understand the common reasons for patient no-shows.					
I am aware of strategies to engage patients and reduce barriers to attendance.					
I am confident in identifying patients at high risk for missing appointments.					
I understand how cultural competency can influence patient engagement.					

Section 3: Confidence Level

Rate your confidence in the following areas:

(Use a scale of 1 = Not Confident to 5 = Very Confident)

	1	2	3	4	5
Addressing patient-specific barriers such as stigma and patient concerns					
Using reminder systems effectively (e.g., phone calls, text messages).					
Explaining the importance of appointment adherence to patients.					

Section 4: Current Practices

What strategies do you currently use to reduce no-show rates? (Check all that apply)

- A. Phone call reminders
- B. Text message reminders
- C. Open scheduling
- D. None of the above

Other:

Section 5: Open-Ended Questions

What do you think are the biggest challenges in reducing no-show rates?

What additional tools or knowledge would help you better engage patients?

Appendix D: Post-Assessment for Staff Knowledge and Confidence

Title: Post-Assessment for Staff Training on Reducing Patient No-Shows

Purpose: To evaluate knowledge and confidence after staff training.

Years of Experience in Mental Health Care:	<input type="checkbox"/>	Less than 1 year
	<input type="checkbox"/>	1–5 years
	<input type="checkbox"/>	6–10 years
	<input type="checkbox"/>	More than 10 years

Section 2: Knowledge Assessment

Rate your agreement with the following statements:

(Use a scale of 1 = Strongly Disagree to 5 = Strongly Agree)

	1	2	3	4	5
I understand the common reasons for patient no-shows.					
I am aware of strategies to engage patients and reduce barriers to attendance.					
I am confident in identifying patients at high risk for missing appointments.					
I understand how cultural competency can influence patient engagement.					

Section 3: Confidence Level

Rate your confidence in the following areas:

(Use a scale of 1 = Not Confident to 5 = Very Confident)

	1	2	3	4	5
Addressing patient-specific barriers such as stigma and patient concerns					
Using reminder systems effectively (e.g., phone calls, text messages).					
Explaining the importance of appointment adherence to patients.					

Section 4: Practice Adoption

After the training, which strategies do you now use to reduce no-show rates?

(Check all that apply)

- A. Phone call reminders.
- B. Text message reminders
- C. Open scheduling
- D. Predictive modeling for high-risk patients

Other:

How frequently do you plan to use these strategies?

- A. Always
- B. Often
- C. Sometimes
- D. Rarely
- E. Never

Section 5: Training Feedback

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The training content was relevant to my role.					
The training improved my ability to address patient-specific barriers.					

What aspect of the training did you find most helpful?

What improvements would you suggest for future training sessions?
