

11-7-2025

## Staff Education to Enhance Nurse Practitioner Competency in the Identification and Management of Generalized Anxiety Disorder in an Outpatient Clinic

Obioma Linda Okeke  
*Walden University*

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Psychology Commons](#)

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Nursing

This is to certify that the doctoral study by

Obioma Linda Okeke

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

Review Committee

Dr. Julibeth Lauren, Committee Chairperson, Nursing Faculty

Chief Academic Officer and Provost  
Sue Subocz, Ph.D.

Walden University  
2025

Executive Summary: Staff Education Project  
Staff Education to Enhance Nurse Practitioner Competency in the Identification and  
Management of Generalized Anxiety Disorder in an Outpatient Clinic

by

Obioma Linda Okeke

MS, Walden, 2025

Executive Summary Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Nursing Practice

Walden University

December 2025

## Summary

This Doctor of Nursing Practice (DNP) staff education project was a quality improvement initiative focused on enhancing nurse practitioners' (NPs') competency in the identification and management of generalized anxiety disorder (GAD). The practice problem identified at the local project site through organizational feedback and observation was the inconsistent use of the Generalized Anxiety Disorder-7 (GAD-7) screening tool across NP encounters. The practice-focused question for this project was: In NPs in an outpatient clinic setting, how does staff education on GAD-7 and clinical guidelines influence their knowledge, confidence, and consistent use of anxiety screening practices? The purpose of this doctoral project was to improve NP knowledge, confidence, and adherence to guideline-based GAD screening. Review of the data confirmed that screening was performed in less than half of the eligible visits, revealing a critical practice gap. Supporting evidence from the literature confirmed the validity of the GAD-7 tool. The results of this project demonstrated measurable improvement in NP performance. The implications for the staff and organization included enhanced clinical consistency and improved patient follow-up. Based on the results of this project, I concluded that structured, evidence-based education can effectively improve NP competency and promote sustainability. My recommendations for future practice include extending the education to additional staff and evaluating long-term outcomes. The potential implications of this project on nursing practice are substantial, including increased clinical competency. This project also has the potential to positively impact social change by advancing equitable, accessible mental health screening for all patients and reducing disparities in anxiety detection and treatment.

## **Background**

This DNP staff education project was focused on improving the identification and management of GAD in outpatient care. The reason for this practice change was the underidentification and inconsistent management of GAD in outpatient care at the project site. GAD is one of the most common mental health conditions encountered in outpatient care, yet it often remains underidentified and inconsistently managed (Mehta et al., 2025). Epidemiological studies have estimated that around 3% of adults in the United States suffer from GAD every year, while the lifetime prevalence of the condition is nearly 6% (Sapra et al., 2020). Despite these conditions, almost 50% of people suffer from the condition and go untreated, which adds to the social and personal economic strain. The outcomes of untreated GAD are impaired functioning; lower quality of life; and an increased risk of either depression, substance abuse, or even cardiovascular disease (World Health Organization, 2023). All these factors highlight the need for detection and proactive management in outpatient settings.

The practice-focused question for this project was: In NPs in an outpatient clinic setting, how does staff education on GAD-7 and clinical guidelines influence their knowledge, confidence, and consistent use of anxiety screening practices? The purpose of this DNP project was to educate NPs on the use of the GAD-7 screening tool and evidence-based clinical guidelines for the management of GAD. The ultimate goal was to enhance NP competency, increase consistent screening and documentation, and improve timely and evidence-based treatment of patients with anxiety disorders in the outpatient setting. According to Sapra et al. (2020), NPs are usually the first health care providers to evaluate and treat patients with anxiety within the outpatient setting and, thus, are the first

to recognize the need for and implement care for the condition. However, a practice gap persists in the underutilization of validated screening tools, such as the GAD-7. Many NPs rely on subjective clinical impressions and open-ended questioning, which leads to variability in diagnosis and management (American Academy of Family Physicians, 2022). There is unequivocal evidence that the systematic application of the GAD-7 enables a more accurate diagnosis and proper evaluation of treatment response in addition to evidence-based adherence to the guided principles of care (Mathiasen et al., 2023; Sapra et al., 2020). Unfortunately, many clinics still do not apply routine structured screening, putting patients at higher risk for fragmented care and underdiagnosis.

The evidence supporting this project was derived from site-level observations and de-identified, aggregate information shared by clinic leadership. Leadership feedback highlighted inconsistent practices in screening and management of anxiety and reported that documentation of follow up after anxiety screening was often missing. Clinic leadership also reported observations of inconsistent practices concerning gaps in uniform care pathways. The variation in practices observed lacks a framework for managing anxiety, and patient outcomes are compromised. Addressing this issue through targeted NP education offers an opportunity to establish consistent, guideline-based care while also improving clinician confidence and efficiency (see Mahta et al., 2025).

The evidence in the literature that supports this change in practice was comprehensive and robust. A total of 20 peer-reviewed articles met the inclusion criteria, and I critically appraised them using the Johns Hopkins nursing evidence-based practice appraisal tools. Of these 20 articles, two were Level I studies, five were Level II, five were Level III, and eight was Level IV. The evidence base suggests that staff training is

an appropriate strategy to bridge this practice gap. Clinical practice guidelines from the National Institute for Health and Care Excellence (2020), World Health Organization (2023), and the World Federation of Societies of Biological Psychiatry (2022) recommended the GAD-7 and other validated screening tools and structured, stepped care that combines psychological and pharmacological management. Similarly, when systematically applied, first-line pharmacological agents and cognitive behavioral therapy optimally integrated (Fagan & Baldwin, 2023) and thoroughly integrated (Sakurai et al., 2023) yield the best outcomes. Research further indicated that provider-targeted educational initiatives enhance the consistent application of screening tools, guideline-based care, and sustained care improvements (Magellan Healthcare, 2024; Mathiasen et al., 2023).

Research further supports the role of NPs in addressing mental health conditions effectively. In a systematic review, Turi et al. (2023) found that a NP-led care model is beneficial for patients suffering from mental health conditions when evidence-based tools and protocols are applied. Quality improvement in primary care and addiction treatment clinics showed that staff training significantly improves the completion rate of GAD-7 and the proactive start of necessary treatments.

Stakeholder engagement at the project site provides additional assurance of feasibility. The clinic manager can assist in policy changes and scheduling, while the finance department can analyze the costs of the training materials, and external training providers can offer the courses. NPs were the intervention targets and also the primary implementers. I developed and delivered the educational components of the project as well as supervised the use of resources and oversaw the assessments used to evaluate

outcomes. By coordinating with leadership and staff, I ensured the education was implemented as planned and aligned with the project goals.

### **Staff Education Project Development**

#### **Outcome Variables for the Evaluation**

The outcome variables for this project were focused on measuring the improvement in NPs' knowledge, confidence, and adherence to evidence-based screening and management of GAD. I measured the specific outcomes by pre- and post-education assessments of the participants' knowledge of the GAD-7 screening tool and their comprehension of clinical guidelines. The surveys were intended to gauge the participants' confidence levels on GAD diagnosis and treatment, with the knowledge of the standardized assessment and the management of GAD. Furthermore, as process indicators, the proportion of eligible patient visits that accounted for a completed GAD-7 screening and the number of cases documented as per guideline-based care were examined as objective outcome measures (see Sapra et al, 2020; Turi et al, 2023).

Leadership support and integration of work practices through the electronic health record (EHR) were important facilitators; both ensured that education delivery was available within the context of clinical practice and that the education was relevant. The use of both perceptual and process outcome measures gave the evaluation both the cognitive and behavioral impacts of the intervention. Collectively, these outcome variables provided an encompassing understanding of the impact of NP education on the consistency of GAD screening, treatment adherence, and the overall quality of care provided to patients suffering from GAD ( see Fagan & Baldwin, 2023).

### **Method of Obtaining De-Identified Data**

The de-identified and aggregate reports were provided by clinic leadership to ensure compliance with privacy and ethical standards. For this project, I did not directly access or review any individual patient charts. Rather, leadership created a summary data report that depicted the total number of GAD-7 screenings done and the proportion of documented encounters that were guideline-based care (see Park & Park, 2025). This data on the improvement of practices over time did not disclose any confidential information. There were no patient identifiers on the data and protected health information was preserved or not disclosed in the report.

I obtained the data for this staff education project from two main sources: pre- and post-education knowledge assessments completed by NPs and aggregate EHR audit summaries. The preeducation knowledge assessments measured NPs' baseline knowledge, confidence, and frequency of GAD-7 use, identifying gaps in screening consistency and guideline-based management. Posteducation knowledge assessments, administered 4 weeks after the training, measured changes in these same areas to evaluate improvements in participant competency and practice behavior. Additionally, de-identified aggregate EHR data, provided by leadership, showed the total number of GAD-7 screenings completed and the proportion of encounters that included guideline-based documentation. This approach provided both subjective and objective data with which to determine whether the education improved NP performance and adherence to evidence-based practices.

## **Method of Data Analysis**

The methods for data analysis used for the evaluation of this project included both descriptive and comparative approaches. I employed descriptive statistics to summarize the participants' pre- and postassessment responses, calculating mean scores and percentage changes in NP knowledge and confidence levels. Comparative analysis was then applied to evaluate differences in the frequency of GAD-7 screenings and guideline-based documentation before and after implementation. These methods provided measurable insight into changes in provider practice and supported evaluation of the intervention's impact (see Mathiasen et al., 2023; Sakurai et al., 2023).

All the data were analyzed in aggregate via Microsoft Excel to minimize errors and enhance reliability. My analysis focused on determining whether the educational program produced statistically and clinically meaningful improvements in screening consistency and documentation quality. This was an effective means to achieve an optimal view of quantitative improvement alongside qualitative provider feedback, proving the project's success (see Tindong, 2025).

## **Results**

The postimplementation results were positive and demonstrated measurable improvements in NP knowledge, confidence, and clinical practice regarding the identification and management of GAD. After the educational intervention, the postknowledge assessments demonstrated that the NPs had higher confidence in administering and interpreting the GAD-7 tool compared to their baseline levels. There was an increase of at least 35% in knowledge scores in posteducation assessments compared to baseline scores, indicating the structured training helped in improving the

NPs' understanding of GAD assessment and guideline-driven care (see Sakurai et al., 2023). In addition, feedback from participants showed improved clarity in differentiating between mild, moderate, and severe anxiety symptoms during assessment and increased confidence in appropriate management and referral initiation.

Aggregate and postimplementation reports indicate improvement in clinician use of the screening tool. The percentage of preimplementation eligible patients screened using the GAD-7 was an average of 40%, and this increased to 78% postimplementation. Documentation of guideline-based management, such as appropriate follow-up scheduling, referrals, and/or pharmacologic intervention, increased from 52% to 85%, which indicates an increased emphasis on evidence-based practice. The providers' comments emphasized that electronic prompts and posteducation handouts aided in the integration of workflow. These results support the assertion that NP education, particularly on the GAD-7, leads to increased screening and improved adherence to guidelines, subsequently enhancing outpatient mental health care (see Turi et al, 2023).

**Table 1**

*Pre- and Postimplementation Scores*

Measure	Preimplementation (%)	Postimplementation (%)	Change
NP knowledge scores	60	95	+35
GAD-7 screening completion	40	78	+38
Guideline-based documentation	52	85	+33

**Impact on the Organization**

The project's impact on the organization was significantly positive, particularly in improving the consistency and quality of mental health screening within the outpatient

setting. Prior to the project, anxiety management and detection gaps existed because NPs used the GAD-7 screening inconsistently. During and after implementation, the clinical intervention improved practice standardization, workflow integration, and clinical practice. With reinforced care through use of the GAD-7, continuity of follow up has significantly improved for anxiety patients as the clinic capably delivered evidence-based care (see Fagan & Baldwin, 2023).

In addition, the project advanced organizational goals related to quality and safety by reducing variability in assessment and supporting early intervention. Better screening accuracy, which reduces the costs associated with long-term untreated anxiety disorders such as prescription medications, frequent clinic visits, and stabilization in mental health crises, would be justified from a financial standpoint. The leadership team also recognized that the educational framework employed in this project could be used for other initiatives. The initiative enhanced the practice, effectiveness of patient care, and reputation of the organization in providing mental health care in compliance with guidelines.

### **Limitations and How They Impacted Results**

This project had limitations that impacted the results, including a small sample size, time constraints, and reliance on self-reported data. The project was carried out based on a small subset of NPs, which may limit the applicability of the results to broader populations. The 4-week period following implementation was too short to accurately assess the participants' retention of knowledge and the sustained use of the GAD-7 screening tool.

Another limitation was that part of the evaluation relied on self-reported confidence assessments, which can be influenced by participant bias. While the EHR audit data showed objective proof of improved screening rates, including some longitudinal data would be beneficial to determine if the improvements are sustained over time. Even with the limitations stated, there were some positive results that showed a meaningful change and a solid basis for future improvement practices, alongside an education-focused quality initiative (see Fagan & Baldwin, 2023).

### **Importance Beyond the Local Site**

This project has importance beyond the local site because the underidentification and inconsistent management of GAD are widespread issues in outpatient and primary care settings across the country. Many different medical institutions face the same issues of time shortages, training, and the lack of proper screening. The fact that an educational program positively impacted NP competency on GAD-7 care (i.e., guideline care) screening, along with adherence to evidence-based care, highlights the importance of the project as a model that is replicable and can be utilized in other outpatient clinics, community health centers, and integrated care systems (see Magellan Healthcare, 2024).

The project's emphasis on early detection and standardized management also aligns with national mental health goals. It supports initiatives from organizations, such as the World Health Organization (2023) and the National Institute for Health and Care Excellence, that advocate for universal screening and integrated behavioral health (Zhong et al 2025). The expansion of this educational model is likely to address gaps in evidence-based care for anxiety across numerous populations; reduce health inequalities; and achieve sustainable, high-quality outcomes at both regional and country-wide levels.

## **Conclusion**

The impact of this DNP project on the project site was significantly positive. The staff education initiative enhanced NPs' knowledge, confidence, and adherence to evidence-based screening and management of GAD. The project standardized the use of the GAD-7 tool, resulting in improved consistency of anxiety screening and documentation, better workflow integration, and increased continuity of care. There was an organizational improvement in the culture of quality and safety, evidenced by an increase in screening rates from 40% to 78% and an increase in documentation that met established clinical guidelines from 52% to 85%. The benefits of such improvements included positive patient outcomes, reduced care variability, and a strengthened organizational reputation for providing evidence-based mental health services.

Future recommendations for this organization include expanding the educational intervention to additional clinical staff and conducting ongoing refresher sessions every 6 months to reinforce learning and sustain improvements. Having automated GAD-7 prompts in the EHR system would also help sustain consistent screening and lessen the need for manual reminders. A longitudinal evaluation of 6 to 12 months is also recommended to assess the retention of knowledge and evaluate the long-term sustainability of the improved screening practices. Moreover, the organization could offer similarly structured education for other mental health conditions, like depression and posttraumatic stress disorder, to expand their comprehensive mental health care delivery.

The potential implications of this project on nursing practice include improved provider competency in mental health assessment, enhanced decision-making through evidence-based guidelines, and strengthened interprofessional collaboration. Through

guideline-focused and structured training for NPs, this education intervention has resulted in positive outcomes in care quality and patient engagement.

The real impact of this project to effect positive social change lies in its promotion of equitable and accessible mental health care for all patients. By minimizing underdiagnosis and applying uniform screening tools in a more consistent manner, this initiative directly addresses the health disparities and underlines the importance of inclusion in outpatient behavioral health. In addition, this initiative addresses the principles of diversity, equity, and inclusion by training clinicians to perform culturally congruent, patient-centered care that acknowledges and addresses the differences in the manifestation of anxiety and the treatment required to address their unique needs.

## References

- American Academy of Family Physicians. (2022). Generalized anxiety disorder and panic disorder in adults. *American Family Physician*, *106*(3), 145–156.  
<https://www.aafp.org/pubs/afp/issues/2022/0800/generalized-anxiety-disorder-panic-disorder.html>
- Fagan, H. A., & Baldwin, D. S. (2023). Pharmacological treatment of generalized anxiety disorder: Expert consensus and current recommendations. *Expert Review of Neurotherapeutics*, *23*(5), 407–419.  
<https://doi.org/10.1080/14737175.2023.2211767>
- Magellan Healthcare. (2024). *Clinical practice guideline for the assessment and treatment of generalized anxiety disorder in adults*.  
<https://magellanpcptoolkit.uat.kaminoprod.magellanhealth.com/documents/d/magellan-pcp-toolkit-3/gad>
- Mathiasen, M., Bjerregaard, L., & Pilegaard, M. S. (2023). Implementing a revised online screening tool in a routine care online clinic treating anxiety and depression. *Frontiers in Digital Health*, *5*, 1128893.  
<https://doi.org/10.3389/fdgth.2023.1128893>
- Mehta, U. V., Wilt, G. E., Roscoe, C., Okereke, O. I., Coull, B. A., James, P., ... & Hart, J. E. (2025). The association between multiple environmental exposures and symptoms of generalized anxiety disorder in a prospective, US-based cohort study. *Environmental Health Perspectives*, *133*(6), 067008.  
<https://doi.org/10.1289/EHP14458>

- National Institute for Health and Care Excellence. (2020). *Generalised anxiety disorder and panic disorder in adults: Management (NICE Clinical Guideline CG113)*.  
<https://www.nice.org.uk/guidance/cg113>
- Sakurai, H., Inada, T., Aoki, Y., et al. (2023). Management of unspecified anxiety disorder: Expert consensus. *Neuropsychopharmacology Reports*, 43(1), 80–92.
- Sapra, A., Bhandari, P., & Sharma, S. (2020). *Using Generalized Anxiety Disorder-2 (GAD-2) and GAD-7 in a primary care setting*. StatPearls Publishing.  
<https://doi.org/10.7759/cureus.8224>
- Park, S. H., & Park, S. K. (2025). An updated systematic review and meta-analysis of the predictive validity of the general anxiety disorder (GAD)-7 and GAD-2 in screening for anxiety disorders. *Journal of Affective Disorders*, 119913.  
<https://doi.org/10.1016/j.jad.2025.119913>
- Turi, E., McMenamin, A., Kueakomoldej, S., Kurtzman, E., & Poghosyan, L. (2023). The effectiveness of nurse practitioner care for patients with mental health conditions in primary care settings: A systematic review. *Nursing Outlook*, 71(4), 101995.
- Tindong, N. (2025). *The Generalized Anxiety Disorder 7-Item (GAD-7) tool for anxiety screening* [Doctoral executive summary, Walden University]. ScholarWorks.  
<https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=18992&context=dissertations>
- World Health Organization. (2023). *Mental Health Gap Action Programme (mhGAP) guideline for mental, neurological and substance use disorders*.

<https://iris.who.int/bitstream/handle/10665/374250/9789240084278-eng.pdf?sequence=1>

Zhong, X., He, M., Guo, X., Li, X., Wang, B., Pan, C., ... & Wu, H. (2025). Psychometric testing of Chinese version of screening tools (PASS) and GAD among perinatal population: Hospital based evidence 2023. *BMC Psychiatry*, 25(1), 230.

<https://doi.org/10.1186/s12888-025-06670-1>