

# Pilot Study: A Multisite Investigation into Improving Clinical Decision-Making Skills:

## 2-Day Workshop for NP students, a Focus on Underserved Communities

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### Abstract

The purpose of this study was two-fold. **Firstly, to assess the efficacy of a two-day workshop in improving the confidence in clinical decision-making skills and as clinical knowledge levels in of graduating nurse practitioner (NP) students in general.** The workshop comprised of didactic lectures that focused on the most commonly seen chief complaints in primary care, to bolster clinical decision-making and confidence in the primary care setting. **Secondly, the study aimed to evaluate if the workshop would be particularly beneficial for NP students from underserved populations with limited clinical rotation opportunities** who may experience lower clinical confidence levels. Participants will complete a pre- and post-workshop surveys that evaluated their confidence levels in clinical decision-making, clinical knowledge and their satisfaction with the workshop and paired t-tests will be used to compare the pre-test and post-test survey results.

### Introduction

Lack of confidence has been identified as a significant barrier for nurse practitioner (NP) graduates in pursuing a career as an NP. According to the National Council of State Boards of Nursing (NCSBN), **only 80% of NP graduates reported practicing as an NP one year after graduation.** Furthermore, a survey by the American Association of Nurse Practitioners (AANP) found that over **25% of NP graduates cited a lack of confidence as a reason for not pursuing a career as an NP.** Additionally, research suggests that NP students from underserved communities and those who attend programs with limited clinical rotation opportunities have lower clinical confidence levels. To address the a lack of clinical confidence, there is a need for interventions that can improve this issue to level the playing field for all students. The purpose of the multisite pilot study conducted at CMSV and WC was to assess the efficacy of a two-day workshop in improving the clinical decision making and confidence levels of graduating nurse practitioner students, with a particular focus on those from underserved communities. **Greater equity and access to quality healthcare education by empowering NPs from underserved communities is the main goal of this study.**

### Hypothesis

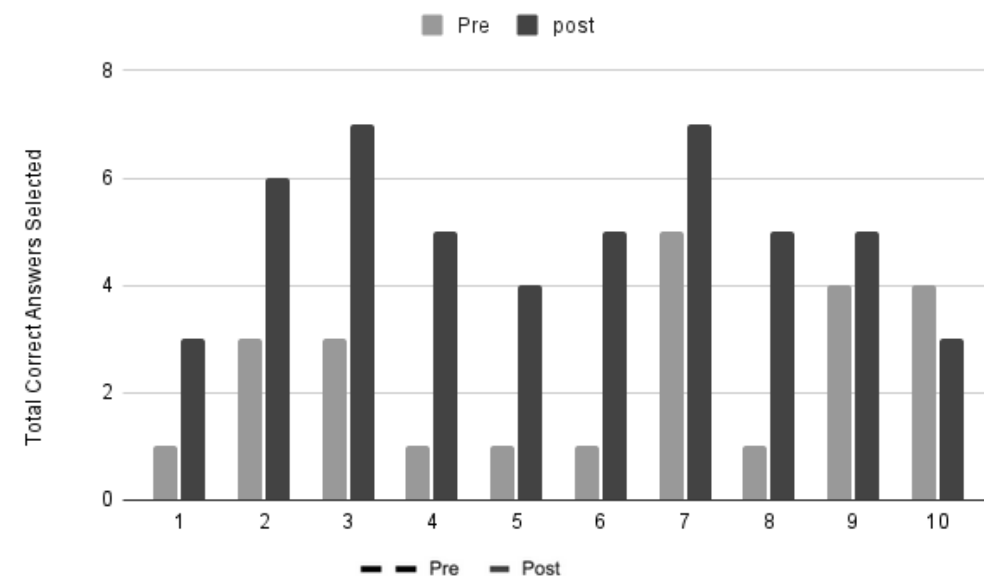
A two-day workshop will significantly improve NP students' confidence and clinical decision-making skills, with an enhanced impact on students from underserved communities or programs with limited clinical rotation opportunities.

### Methodology

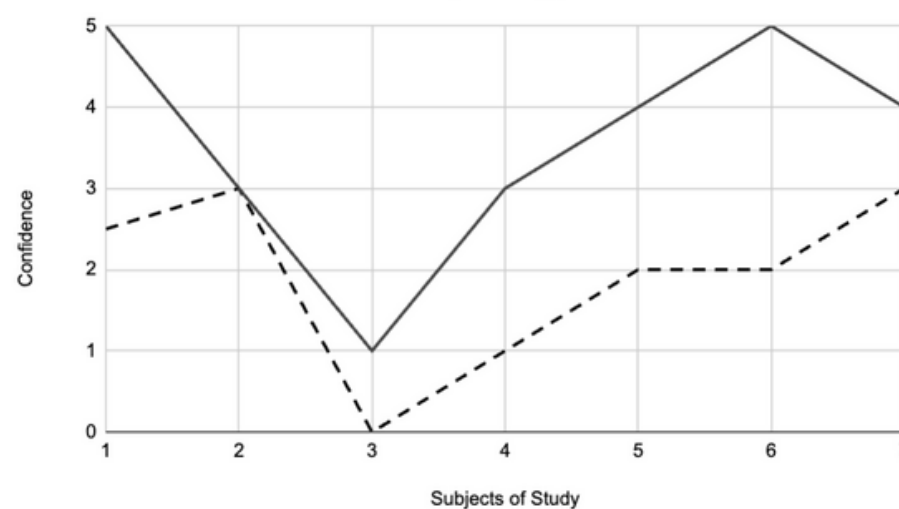
We will use a validated pre and post course survey tool, designed specifically for the assessment of clinical decision-making skills and confidence levels in NP students, for data collection.

### Results

A total of 7 Nurse Practitioner (NP) students participated in the two-day workshop. The participants completed the pre- and post-workshop surveys, providing data for the paired t-test analyses. Descriptive statistics for the pre- and post-workshop scores are presented in the charts below.



**Figure 1:** Pre- and post-workshop scores showing a statistically significant increase in correct answer selection per question of a standard clinical knowledge SATA assessment after attending EG Prep Course ( $p < 0.005$ ,  $n = 7$ ).



**Figure 2:** Likert Scale self-assessment data given by participants before and after the study shows a statistically significant increase in the scores for confidence in participant's perceived ability in performing their role as a Nurse Practitioner ( $p < .005$ ,  $n = 7$ ).

### Potential Bias

Potential biases in this study include the possibility of social desirability bias in participants' survey responses, and the effect of participants' prior knowledge or experiences on their post-workshop confidence levels. We will attempt to control for these factors by ensuring anonymity and confidentiality of responses.

### Implications

The findings of this study could have significant implications for NP education, particularly in underserved communities. It could inform the design of future interventions aimed at boosting confidence and improving clinical decision-making skills among NP students which the researches feel will be significantly need as the mandatory hours for NP clinical practice will be increasing in the very near future (NONPF). Future research should focus on larger-scale implementation of similar workshops, potentially including a control group for more robust comparisons.

### Discussion

Our findings indicate that a targeted two-day workshop, focusing on clinical decision-making related to the most common primary care complaints, **can significantly enhance both the confidence (Figure 2) and clinical knowledge of graduating Nurse Practitioner (NP) students (Figures 1)**, particularly those from underserved communities where clinical experiences are limited. The statistically significant increase in confidence and knowledge scores post-workshop supports this conclusion. **However, a larger study with a more diverse sample would bolster these findings.**

The effectiveness of the workshop is likely attributable to the unique format, which centers on the most common chief complaints seen in primary care. By focusing on these prevalent issues, the workshop provides students with knowledge and skills that are directly applicable to their forthcoming practice. Additionally, this design allows students to enhance proficiency and confidence in clinical decision-making processes, a fundamental aspect of NP practice. However, potential social desirability bias may have influenced the students' self-reported increase in confidence and clinical knowledge.

### Conclusion

In conclusion, this pilot study underscores that a targeted, intensive two-day workshop can be a substantial asset to nurse practitioner programs. This is especially beneficial for students who may not have attained adequate clinical confidence through their existing clinical rotation sites, given the variances in resource availability. **Importantly, this workshop significantly bolsters the clinical decision-making confidence and knowledge of graduating NP students, potentially compensating for disparities in educational resources.**

Though this study did not differentiate between students from underserved populations and others, we can extrapolate from previous research which suggests that NP students, particularly those identifying as minorities or from underserved communities, often experience lower confidence levels. **Given that this workshop had a notable impact on the overall participant group, we can posit that its implementation may offer more pronounced benefits for these underserved students.** However, further research with larger, more diverse samples is warranted.

In the current landscape of Nurse Practitioner (NP) education, where an escalating demand to augment clinical hour requirements prevails, interventions like this workshop are critical. Without proactive steps to address disparities, changes in educational standards may inadvertently widen the gap in clinical confidence and knowledge among students from underserved communities, exacerbating existing inequalities. Therefore, the results of this study underline the urgent need for additional supportive resources and interventions, such as the workshop evaluated here, to ensure all NP students—particularly those from underserved communities—can confidently and competently enter the field.