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## Staff Education to Improve Clinical Staff Knowledge of the Social Determinants of Health in a Public Health Setting

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# Walden University

College of Nursing

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Alba Ayala

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Walden University

2025

Executive Summary: Staff Education Project  
Staff Education to Improve Clinical Staff Knowledge of the Social Determinants of  
Health in a Public Health Setting

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Executive Summary Submitted in Partial Fulfillment  
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## Summary

This Doctor of Nursing Practice project addressed a knowledge gap among local health department clinical staff regarding social determinants of health (SDOH). The staff have access to an SDOH screening tool and resources, as well as a statewide referral system; however, inconsistent use of these tools and limited knowledge of SDOH limit their integration into clinical decision-making, patient education, and interdisciplinary collaboration. This gap impedes health equity, efficient resource use, and patient outcomes, particularly in underserved communities. The practice-focused question was whether an educational intervention on SDOH for clinical staff at a public health department improved their knowledge and confidence. The purpose of the project was to implement and evaluate an educational intervention that enhances staff knowledge and confidence, as well as the use of SDOH in practice. I employed pre- and post-intervention assessments to evaluate staff knowledge and confidence. Data analysis involved descriptive and comparative statistics to assess the intervention's effectiveness. Results showed that, among 35 participants across three clinics, knowledge scores improved from an average of 68.7% to 93.1%, reflecting a 35.6 percentage point increase ( $t(34) = 12.62$ ,  $p < .001$ ). All participants reported high confidence post-training, and chart audits demonstrated a 30% increase in SDOH documentation. Recommendations include ongoing SDOH education, integrating workflows into electronic medical records, continuous evaluation of staff competencies, and increasing access to the referral system. This project promotes patient-centered care that addresses health disparities and demonstrates how clinical staff can advance health equity and foster diversity, equity, and inclusion through SDOH-informed practice in a community health setting.

## **Background**

The health department in a southeastern state uses an SDOH screening tool and participates in a statewide referral system; however, a persistent knowledge gap among clinical staff limits the consistent application of SDOH in patient care. During the initial implementation of the SDOH screening tool at the health department, staff received minimal training, and the rationale for the questions (linking social determinants to patient outcomes and health equity) was not clearly communicated. This gap compromises efforts to reduce disparities in the community and improve outcomes for those using public health services. The inconsistent use of SDOH resources across clinics is also alarming and often acts as a barrier to patients who need holistic care.

## **Project Question and Purpose**

The guiding project question was: Does an educational intervention on SDOH for clinical staff at a public health department improve their knowledge and confidence? The project's purpose was to implement and evaluate an educational intervention designed to strengthen staff knowledge, confidence, and competency in applying SDOH principles in a public health setting.

## **Supporting Evidence**

Evidence supported the need for this staff education project. Kreuter et al. (2021) emphasized that addressing social needs in healthcare reduces avoidable utilization and improves outcomes, thereby establishing a strong rationale for the systematic integration of these efforts. Novilla et al. (2023) highlighted that SDOH screening, provider training, and data integration into workflows can improve clinical decision-making, but these approaches are inconsistently applied. A quasi-experimental study by Amini-Rarani et al.

(2024) demonstrated that structured educational programs significantly improve knowledge and attitudes toward SDOH, representing high-level evidence for training interventions. Similarly, DeBonis et al. (2020) found that even brief educational sessions increased provider preparedness to address poverty and SDOH in practice.

When synthesized, this body of evidence supports targeted staff education as an effective strategy to close the identified practice gap. Consistent evidence suggests that education enhances knowledge, attitudes, and workflows related to SDOH, leading to more equitable, holistic, and patient-centered care.

### **Staff Education Project Development**

The participants in this project included clinical staff within the local health department. Clinic coordinators at three sites served as “SDOH champions” to reinforce training and provide peer support. The project was led by me, with oversight from the medical director and support from senior leadership.

To develop the project, I followed the instructional design framework for analysis, design, development, implementation, and evaluation. A needs assessment was conducted through informal staff interviews, review of clinic data, and collection of organizational feedback to identify baseline knowledge gaps in applying SDOH across departments. Based on the findings, I created the learning objectives and educational content, including a PowerPoint presentation and handouts. Pre- and post-training knowledge assessments were designed to align with the goals and to evaluate changes in participants' knowledge after the training.

I collected evidence for this project through multiple measures: (a) participants' pre- and posttest scores to assess knowledge gain and confidence, (b) randomized chart

audits to evaluate documentation of SDOH needs and referrals before and after the education, and (c) tracking referral volume to community services via a state-wide referral system. Informal feedback interviews were conducted before and after the educational presentation to capture staff perceptions and experiences regarding SDOH integration. The posttest was administered immediately after the education session, and participants were given 1 week to complete it. I conducted chart reviews for 2 weeks before the intervention and 2 weeks after implementation to evaluate changes in SDOH documentation and referral practices.

Data analysis included descriptive statistics and *t*-tests to compare pre- and post-intervention knowledge scores. I analyzed referral rates and documentation compliance as process outcomes to achieve a 25% or greater increase in referrals and a 70% or greater documentation compliance rate.

The evaluation process was structured to monitor both short-term learning outcomes and early practice changes in the various departments. I summarized findings in visual reports for leadership and disseminated them at an all-staff meeting. The results demonstrated increased awareness and confidence among staff in addressing SDOH in clinical encounters. Sustainability plans include integrating SDOH education into new-staff onboarding, annual refreshers, and ongoing reinforcement by SDOH champions to maintain engagement and accountability across all teams.

## **Results**

Following the educational intervention on SDOH, staff knowledge and confidence improved. Among 35 participants, including registered and licensed practical nurses, medical office assistants, and counselors from three clinical areas, pretest scores averaged

3.43 out of 5 (68.7%) and increased to 4.66 out of 5 (93.1%) on the posttest, reflecting a 35.6% increase in knowledge. A paired-samples  $t$  test confirmed the improvement was statistically significant,  $t(34) = 12.62, p < .001$ . Table 1 presents the pre- and posttest scores.

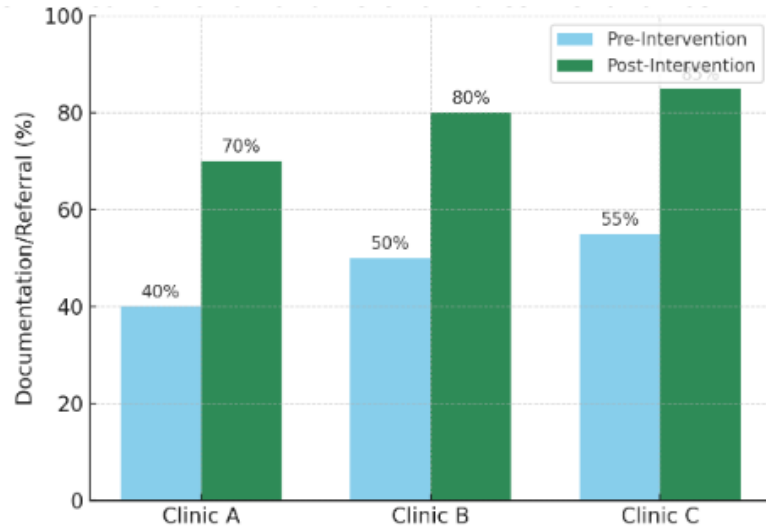
**Table 1**

*Pre- and Posttest Knowledge Scores (N = 35)*

Test	<i>M</i>	% correct	<i>SD</i>	<i>t</i>	<i>p</i>
Pretest	3.43	68.7%	.50		
Posttest	4.66	93.1%	.30	12.62	<.001

*Note.* *M* = mean; *SD* = standard deviation. Data are from staff pre- and post-intervention knowledge tests developed for this project.

All participants reported feeling “very confident” after the intervention. Chart audits of randomly selected patient records demonstrated a 30% increase in documentation of SDOH needs and referrals across clinics. Figure 1 displays the increase in documentation and referrals across sites. These outcomes confirmed that the training effectively strengthened staff competency and integrated SDOH into practice. The positive trend also suggests enhanced provider awareness and consistency in addressing social needs during patient encounters. Continued monitoring will help determine the long-term impact on patient outcomes and community resource utilization.

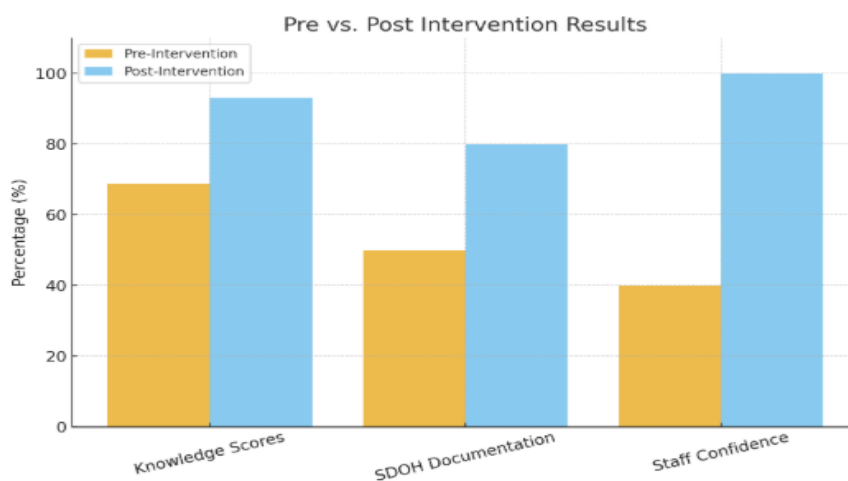
**Figure 1***SDOH Documentation and Referral Rates Pre- and Postintervention*

*Note.* Chart audits involve randomly sampling patient records (approximately five per day for 2 weeks). Documentation of SDOH needs and referrals increased by approximately 30% following the intervention.

Figure 2 presents a comparison of all outcome measures, illustrating pre- and postintervention results for SDOH knowledge, documentation practices, and staff confidence.

## Figure 2

*SDOH Pre- and Postintervention Results for Knowledge, Documentation, and Confidence*



## Impact on the Organization

The intervention positioned the organization to deliver more equitable, patient-centered care across all departments, improving documentation and staff confidence in applying SDOH principles, enhancing care coordination, and reducing missed opportunities for prevention and intervention. The project also fostered a culture of accountability and continuous learning, aligning with the organization's strategic planning goals to advance health equity.

## Project Limitations

Several limitations may have influenced the results. The relatively small sample size ( $N = 35$ ) and single-site setting limit the generalizability of the findings to other health departments or healthcare systems. The postintervention evaluation took place shortly after training, which prevented an assessment of long-term knowledge retention

or the sustainability of the workflow changes. Self-reported measures of confidence may also be subject to response bias. Additionally, tracking referrals through a statewide referral system was not feasible because most clinical staff lacked direct access to the platform, thereby limiting the ability to measure referral completion and follow-up outcomes. Despite these limitations, the findings provide strong evidence of immediate impact.

### **Implications Beyond the Project Site**

This project has implications that extend beyond the health department. By demonstrating that structured staff education can close knowledge gaps and improve integration of SDOH into clinical practice, the project offers a model that can be replicated in other healthcare organizations. Scaling such interventions has the potential to reduce disparities, improve population health outcomes, and promote diversity, equity, and inclusion across broader community settings. Ultimately, the project underscores the crucial role of nurses in driving system-level change to address upstream social factors that impact population health.

### **Further Recommendations**

Sustaining these improvements will require embedding SDOH education into staff onboarding and annual refreshers, empowering SDOH champions within clinics, leveraging workflow prompts in the electronic health record to ensure consistency, and maintaining strong buy-in and support from senior leadership. Continued evaluation of patient outcomes and referral completion rates will help track long-term impact in the organization. At the same time, recognition of staff engagement can reinforce a culture of learning and accountability while encouraging patient-centered care.

## Conclusions

The implementation of an educational intervention on SDOH had a significant impact on the project site organization, improving staff knowledge and confidence and integrating SDOH into clinical workflows. With visible improvement in posttest scores and staff reporting high levels of confidence, the health department is now better positioned to provide equitable, holistic patient care. Enhanced screening and referral practices, facilitated through a statewide referral system, are expected to strengthen care coordination, reduce missed opportunities for intervention, and support improved health outcomes in the community.

This project highlights the key role of nurses in addressing social factors that affect health outcomes. By equipping staff to integrate SDOH into everyday practice, the organization advances health equity, reduces disparities, and fosters trust between providers and patients alike. More broadly, this project demonstrates the potential for nursing staff and leadership to promote diversity, equity, and inclusion in public health, thereby contributing to positive and lasting social change.

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