Improving SDOH Screening in an Inpatient Setting: Executive Summary

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Author Note

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- This project aimed to improve social determinants of health (SDOH) screening rates by 10% on an inpatient unit by introducing an educational toolkit to the nursing staff.
- Screening rates increased by 1.8% by the end of the project, and the percentage of positive screenings for each SDOH domain remained within one percentage point of pre-intervention numbers.
- Survey results showed no increase in factual knowledge of SDOH or motivational interviewing techniques.
- Survey results indicate nurses had increased comfort levels in asking the SDOH screening questions by the end of the intervention, and most nurses found the toolkit to be helpful.
- Survey-identified barriers to screening compliance include patient unwillingness to be screened, nursing discomfort in asking screening questions, lack of time, and a difficult and tedious screening form.
- More studies are needed to identify better ways to improve screening rates and to determine the best course to help patients who have screened positive.

Background and Purpose

Social determinants of health (SDOH) refer to the factors and conditions within which people live their day-to-day lives that affect their health and well-being (Office of Disease Prevention and Health Promotion [ODPHP], n.d.). SDOH greatly impact people's health and quality of life, accounting for almost 50% of health outcomes and having a larger impact than genetics and healthcare services (ODPHP, n.d.; Domestic Policy Council & Office of Science and Technology Policy, 2023; U.S. Centers for Disease Control and Prevention, 2024).

With a growing body of evidence surrounding SDOH's impact on health, both Healthy People 2030 and the Centers for Medicaid and Medicare Services (CMS) have prioritized identifying and addressing SDOH needs (ODPHP, n.d.; Centers for Medicare and Medicaid Services, 2022). By identifying and addressing SDOH, patient and population health will be improved, supporting the quadruple aim of healthcare.

Although organizations and healthcare providers agree that SDOH impact health, screening is not always performed. One study reported that only 24.4% of inpatient practices and hospitals screened for all five SDOH domains, and 8% perform no screenings, further suggesting this is a widespread issue (Fraze et al., 2019). Other studies agree that providers are inconsistent in screening for SDOH (Schickedanz et al., 2019; Yelton et al., 2023).

Research reveals that specific language, empathy, and transparent communication between the patient and provider are required for a successful SDOH screening process (Yelton et al., 2023; Rogers et al., 2020; Signer et al., 2023).

Residents of Wake County, North Carolina, face SDOH needs including homelessness, food and utility insecurity, and lack of transportation (Feeding America, n.d.; Live Well Wake, 2022; Office of Community Planning and Development, 2023; Wake County Continuum of Care-NC 507, 2023; United States Census Bureau, 2024). To address patients' SDOH needs, thorough and prompt identification of those with SDOH needs must occur.

One community hospital within Wake County, North Carolina, identified low SDOH screening compliance amongst nursing staff. Without proper identification, these needs cannot be addressed before discharge, creating the opportunity for adverse outcomes. This project sought to improve SDOH screening by educating nurses on the importance of SDOH and how to approach the screening process empathetically.

Methods

Setting and Design

This quality improvement study utilized Donabedian's structure, process, outcomes model as a framework. To educate nurses conducting the SDOH screenings, a toolkit was developed that included information about SDOH, local population SDOH statistics, and strategies for motivational and empathetic interviewing. The toolkit was distributed in both a printed form placed on the unit and digitally via email to nursing staff. The goal was to increase the screening rate by 10% during the implementation period.

Outcome measures included the total number and percentage of patients who were screened for the five CMS-mandated SDOH domains (housing, utilities, transportation, food, and interpersonal safety and violence (IPS/IPV)). Additional measures included the number of positive screenings for those domains and nursing responses to pre- and post-surveys. The surveys were developed specifically for this project and were completed anonymously.

The project took place on a 24-bed adult, intermediate unit, staffed by 49 nurses, within a community hospital. The study took place over 12 weeks (January 20-April 13, 2025).

Data Collection and Analysis

Screening data were collected weekly throughout the implementation period. Screening rates were obtained directly from the electronic health record (EHR) using Hospital Quality and Innovation (HQI) software, with support from the study site liaison. Pre-survey data collection began four days before implementation and continued through the first week of implementation. Post-survey data were collected during weeks 8–12. All survey data were collected and analyzed using the online platform Survey Sparrow.

Results

During the implementation period, 237 of 323 patients (73.4%) were screened for SDOH needs. The pre-implementation screening rate was 71.6%, representing only a 1.8% increase following the intervention. Positive screening rates for each SDOH domain during implementation remained within one percentage point of pre-implementation rates.

Survey results showed no increase in factual knowledge about SDOH domains or motivational interviewing. However, comfort levels in asking SDOH-related questions improved, and most nurses reported that they found the toolkit helpful. Barriers to screening identified in the survey included limited time, discomfort among nurses, patient unwillingness, competing priorities, and a cumbersome screening form.

Discussion

Strengths, Limitations, and Barriers of the Work

Strengths of this study include the simplicity of the design, ease of replication, and the positive reception of the toolkit by nursing staff and site leadership. The limitations include the author's relationship with the intervention unit and limited generalizability, as the study was conducted over a short time and on a specific type of unit.

Barriers to success included limited contact hours with staff, different work scheduling requirements of part-time and per-diem staff, a tedious screening form, and others listed in the survey results.

Implications

Despite this project's minimal improvement in screening rates, any increase in identifying patients in need of SDOH help can impact the community. The necessity of improving identification of those with SDOH needs remains, as the importance of SDOH will not change. SDOH plays a large role in people's health and quality of life. To improve outcomes

and the health of the population, further studies are needed to identify people with SDOH needs and to address these needs in healthcare. Although this project focused specifically on screening patients for SDOH, future studies should also address how to help those who screened positive. Survey respondents indicated the toolkit helped them when completing SDOH screenings, suggesting the information had an impact despite minimal changes in screening rates. Further studies with different approaches to SDOH screening information and improved delivery methods could improve screening in the future.

Conclusion

Although this study did not reach its goal of a 10% increase in SDOH screening rates, it demonstrated a modest improvement of 1.8%. Even small increases in screening can help identify more patients with SDOH needs, ensuring aid is given before discharge. Survey responses indicated that nurses found the toolkit useful. However, barriers to success included dissatisfaction with the screening form and perceived patient unwillingness to be screened. Further research is needed to address the issue of SDOH screening and to identify effective approaches to help those with SDOH needs.

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