

Increasing Screening Rates for Social Needs in an Adult Behavioral Health Unit

Brandi Hollar

College of Nursing, East Carolina University

Doctor of Nursing Practice Program

Dr. Bradley Sherrod

July 15, 2025

Notes from the Author

I dedicate this project to my husband, [REDACTED], and my daughters, [REDACTED], and [REDACTED]. Their unwavering support and encouragement have been instrumental in the completion of this work. I am deeply grateful for the love they have shown throughout this journey.

Abstract

This quality improvement (QI) project was centered on increasing the screening rate for social drivers of health (SDOH) within a 24-bed Adult Behavioral Health Unit (ABHU) located in an academic medical center (AMC). The SDOH screening encompassed five domains: food insecurity, housing instability, interpersonal safety, transportation needs, and utility difficulties. By implementing systematic strategies to enhance the capture of SDOH data, the project aimed to improve the identification and documentation of social factors impacting patient health. SDOH screenings were tracked for completeness over 18 weeks. Of the 311 patients who were eligible for the SDOH screening, 303 were screened across all domains, resulting in an overall screening rate of 97.43%. SDOH needs were identified in the five domains: (1) 25% screened positive for food insecurity; (2) 24% screened positive for housing instability; (3) 24% screened positive for interpersonal safety; (4) 21% screened positive for transportation needs; and (5) 16% screened positive for utility difficulties. These findings underscore the high prevalence of unmet social needs in the ABHU. Patients identified with positive screenings were provided with information on community resources. Future efforts should focus on measuring the impact of connecting patients to resources that address unmet social needs.

Keywords: social drivers of health; adult behavioral health unit; unmet social needs; food insecurity; housing instability; interpersonal safety; transportation needs; utility difficulties

Table of Contents

Notes from the Author.....	2
Abstract	3
Section I: Introduction.....	6
Background.....	6
Organizational Needs Statement	6
Problem Statement	7
Purpose Statement	8
Section II: Evidence	9
Literature Review	9
Evidence-based Practice Framework.....	13
Ethical Consideration and Protection of Human Subjects.....	15
Section III: Project Design	17
Project Site and Population	17
Project Team	18
Project Goals and Outcomes Measures.....	18
Implementation Plan.....	20
Timeline.....	22
Section IV: Results and Findings.....	24
Results	24
Discussion of Major Findings	25
Section V: Interpretation and Implications	26
Costs and Resource Management.....	26

Implications of the Findings.....	26
Sustainability.....	28
Dissemination Plan.....	28
Section VI: Conclusion	30
Limitations and Facilitators.....	30
Recommendations for Others	31
Recommendations for Further Study	31
Final Thoughts	32
References	34
Appendices.....	39
Appendix A: Literature Matrix.....	39
Appendix B: Collaborative Institutional Training Initiative (CITI Program) Modules.....	49
Appendix C: Nursing Leadership Letter of Support	50
Appendix D: ECU IRB Determination	51
Appendix E: Facility IRB Determination.....	52
Appendix F: Driver Diagram	54
Appendix G: High-Level Process Map	55
Appendix H: Project Timeline	56
Appendix I: Project Charter	57
Appendix J: Screening Rate by Week.....	59
Appendix K: Count of Positive Screenings.....	60
Appendix L: Project Cost Analysis	61

Section I. Introduction

Social drivers of health (SDOH) have a pivotal impact on a patient's overall health. Conducting screenings to identify each patient's unique social needs serves as a gateway to addressing underlying factors that influence health outcomes. Capturing these social drivers is essential to enhance patient engagement and mitigate health disparities.

Background

SDOH, also known as social determinants of health, affects each individual and their health attainment. SDOHs “are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks” (Centers for Disease Control and Prevention [CDC], 2023, para.1). What a patient experiences outside the physical health care system has a profound impact on their health, with up to 80% of health outcomes being affected by SDOH (County Health Rankings, 2024; Wark et al., 2021). SDOH factors impact length of stay, readmissions, mortality, and complications (Imran et al., 2022; Vo et al., 2023). Screening tools are needed to identify and assess SDOH-related needs and implement interventions to address them (Imran et al., 2022; Neshan et al., 2024). Implementation of screening tools is not just an intervention; it is a path to improving patient outcomes and reducing costs.

Organizational Needs Statement

The Centers for Medicare and Medicaid Services (CMS) will mandate the implementation of the social drivers of health-1 (SDOH-1) measure for inpatient psychiatry beginning in calendar year (CY) 2025 (Quality Reporting Center, 2024). SDOH-1 screening includes assessing patients for food insecurity, housing insecurity, transportation needs, utility difficulties, and interpersonal safety during hospital admission. This screening aligns with the

Joint Commission's (TJC; 2022) National Patient Safety Goal: 16, emphasizing the need to prioritize the reduction of health care disparities.

The Institute of Healthcare Improvement (IHI; n.d.) first released its Triple Aim in 2008. The Triple Aim framework takes a three-prong approach to improving health, which starts at the individual level and then grows to encompass the entire population, all while retaining a focus on the cost of care. Over time, reducing health disparities and workforce well-being became a key component of this aim, leading to its renaming as the Quintuple Aim. By incorporating screenings for SDOH, organizations can effectively align with the IHI framework and prioritize health equity to drive improvements in individual and population health while also reducing overall costs.

Conducting screenings is paramount for the identification of disparities. According to the data extracted from the electronic health record (EHR), the SDOH-1 screening rate in the Adult Behavioral Health Unit (ABHU) was approximately 3% from March 1, 2024, to July 31, 2024. Due to the required implementation date in CY 2025, CMS benchmarking data was currently unavailable for the behavioral health population. This organization has an enterprise goal for health equity that incorporates increasing the SDOH screening rate by 15% across all facilities within their health care system. Increased SDOH-1 screening within the ABHU is necessary to fulfill regulatory requirements and improve patient outcomes.

Problem Statement

There is not an established workflow to capture SDOH-1 criteria within the EHR on the ABHU. The capture of SDOH is necessary to improve patient and community outcomes, and reduce costs. Implementing a standardized workflow for SDOH data collection ensures complete

and consistent documentation; thus, facilitating better care coordination and improved health outcomes.

Purpose Statement

This project aims to increase the capture of SDOH-1 criteria within the EHR in an ABHU. This objective was accomplished through standardization of workflows to ensure the capture of all the necessary components of the SDOH-1 CMS required screening. SDOH-1 screening includes assessing patients for “food insecurity, housing instability, transportation needs, utility difficulties, and interpersonal safety during their hospital inpatient stay” (Quality Reporting Center, 2024, p. 1).

Section II. Evidence

Literature Review

The literature review for an evidence-based intervention was conducted electronically via a database search of PubMed/MEDLINE, ClinicalKey, Scopus, Ovid, and the Cumulative Index to Nursing and Allied Health Literature (CINAHL). The following filters were utilized within the database: published within the last five years and available in English. MeSH search terms included SDOH, SDOH Screenings, health-related social needs, HRSN screening, food insecurity, housing instability, transportation needs, utility difficulties, interpersonal safety, implementation, social determinants of health, social drivers of health, hospital, and nursing. An asterisk was added to search terms, where appropriate, to eliminate the need to type out each variation of a MeSH term. To aid in refining the search criteria, the Boolean operators “AND” and “OR” were utilized.

The database search yielded 281 initial results. Duplicates and articles that did not relate directly to the clinical situation were removed. Exclusion criteria included articles that primarily focused on the pediatric population and articles that were not directly related to the fundamental concepts of the search, such as screenings for food insecurity, housing instability, transportation needs, utility difficulties, interpersonal safety, or health-related social needs (HRSN). After applying these criteria, 16 articles were retained that addressed key concepts within SDOH screening implementation. Additionally, a review of the articles in their entirety to assess relation to the clinical issue narrowed the yield down to 12 (see Appendix A). The level of evidence, as adapted from Melnyk and Fineout-Overholt’s (2011) model, ranged from I to VI.

Current State of Knowledge

Social drivers of health are dynamic and complex. Previous studies have detailed that unmet social needs can lead to adverse health outcomes, increased care costs through an increase in emergency department utilization and readmissions, and the inability to follow care plans (Angah et al., 2024; Fiori et al., 2023). Despite the importance of these studies, there is limited literature on implementing a SDOH screening or increasing the capture of a SDOH screening measures within the adult psychiatric population. The majority of the literature focuses on screening for SDOH metrics within an outpatient setting. Additionally, there is not one set SDOH screening tool or a standardized screening method. This results in creating additional variability within the screening process. Not having a standardized screening process is a barrier that can lead to workflow disruptions, increased workloads, and frustration for staff (Angah et al., 2024; Berry et al., 2020; Dauner & Loomer, 2021; Fiori et al., 2023; Novilla et al., 2023; Wark et al., 2021). Addressing SDOH factors requires collaboration across disciplines.

Current Approaches to Solving Population Problem(s)

In addition to the need to establish a workflow to capture SDOH measures, several additional themes emerged from the literature review to facilitate SDOH data capture. These additional themes should be utilized in conjunction with establishing a workflow to systematically increase the capture of SDOH measures. The additional themes include acceptability, stakeholder engagement, staff education and training, utilization of technology, and tool or screening standardization.

Acceptability. Involving those affected by the addition of the SDOH screening into workflows increases their acceptability (Byhoff et al., 2023; Dauner & Loomer, 2021; Rogers et al., 2022; Wark et al., 2021). Additionally, consideration should be given to the patient's perspective. Patients with low health literacy or who do not understand the purpose of the

screening are less likely to accept or participate in the screening process (Wark et al., 2021). Thus, it is essential to engage patients in the process and clearly explain the need for the assessment (Broaddus-Shea et al., 2022; Fiori et al., 2023).

Stakeholder Engagement. Stakeholder engagement was noted in the literature in the literature as part of SDOH screening implementation to increase buy-in (Byhoff et al., 2023; Dauner & Loomer, 2021; Rogers et al., 2022; Wark et al., 2021). Stakeholder engagement is instrumental in identifying barriers and facilitators to implementing SDOH screening tools (Byhoff et al., 2023; Rudisill et al., 2023). Stakeholder feedback plays a significant role in surmounting identified barriers. With ongoing feedback, stakeholders can increase the effectiveness of the process over time.

Staff Education and Training. Providing education and training to staff are noted to be facilitators to capturing SDOH data (McGowan et al., 2023; Novilla et al., 2023; Rudisill et al., 2023; Wark et al., 2021). For some staff, this may be the first time hearing the information on SDOH. At the formal educational levels, there needs to be robust training on SDOH for health care workers. Without additional education, this could limit their ability to administer and evaluate for SDOH needs purposefully.

Tool or Screening Standardization. The implementation of a standardized process along with a standardized tool is a facilitator to increasing SDOH data capture (Dauner & Loomer, 2021). Berry et al. (2020) found that making screening universal increased screening rates and reduced staff burden. Tool standardization ensures consistency and enables data comparison across multiple facilities.

Utilization of Technology. The unitization of technology, such as embedding the SDOH screening into the EHR, is a facilitator of SDOH data capture and is supported by staff (Berry et

al., 2020; Dauner & Loomer, 2021; Wark et al., 2021). Berry et al. (2020) found that implementing the SDOH screening capture within the EHR increased screening rates and reduced staff burden. However, this is unique to the specific EHR. Novilla et al. (2023) noted that previous studies were indicative of EHRs that needed to be more conducive to embedding the selected SDOH screening tool, or there were technical issues that allowed for inconsistent documentation within the EHR.

Workflow. Establishing a workflow is a facilitator to increasing capture of SDOH data and negating staff frustration (Angah et al., 2024; Berry et al., 2020; Dauner & Loomer, 2021; Fiori et al., 2023; Hao et al., 2023; Novilla et al., 2023; Wark et al., 2021). Whenever feasible, preference should be given to assimilating the SDOH screening into current workflows. Berry et al. (2020) found that not incorporating the SDOH screening into already established workflows led to increased noncompletion of screenings. Significant changes to workflow would require a culture shift (Angah et al., 2024).

Evidence to Support the Intervention

A few of the aforementioned themes identified within the literature review are already in place at the facility. First, a standardized tool, the first ten questions of the Accountable Health Communities Health-Related Social Needs Screen Tool, is defined for use across their entire health care system to capture SDOH screenings. This evidence-based screening tool meets CMS reporting requirements for SDOH screenings and demonstrates a commitment to assess for needs that will enable comprehensive patient care (Quality Reporting Center, 2024).

Second, the SDOH screening tool is built into the EHR infrastructure, which underscores the facility's strategic leverage of technology to streamline and enhance operational processes. This proactive approach reflects the organization's commitment to increase capture of SDOH

data within the EHR. The facility has enterprise goals related to SDOH capture which shows high-level leadership support. The strategic focus on SDOH emphasizes the facility's recognition of the broader societal factors that influence patient outcomes.

To further facilitate the capture of SDOH data, there is a need to establish a workflow on the ABHU (Angah et al., 2024; Berry et al., 2020; Dauner & Loomer, 2021; Fiori et al., 2023; Novilla et al., 2023; Wark et al., 2021). Engaging staff in the process of constructing a workflow can increase buy-in into the process and increase acceptability (Byhoff et al., 2023; Dauner & Loomer, 2021; Rogers et al., 2022; Wark et al., 2021). As noted facilitators of SDOH data capture, staff need education and training (McGowan et al., 2023; Novilla et al., 2023; Rudisill et al., 2023; Wark et al., 2021). The education and training should cover topics such as the rationale for the screenings, how to approach patients to access needs surrounding sensitive topics, and how to document the screening in the EHR.

Evidence-based Practice Framework

The define, measure, analyze, improve, and control (DMAIC) methodology was utilized to facilitate this project. DMAIC is a data-driven and phased process that combines Six Sigma and Lean (Monday, 2022). Six Sigma can be defined as, “an organized and systematic method for strategic process improvement and new product and service development that relies on statistical methods and the scientific method to make dramatic reductions in customer defined defect rates” (Linderman et al., 2023, p. 195). Six Sigma underscores reducing variation (McShane-Vaughn, 2023). DMAIC has roots in the West in the manufacturing process, which harnessed statistical modeling to improve efficiencies.

Lean can be defined as, “a systematic approach to identifying and eliminating waste through continuous improvement, flowing the product at the pull of the customer in pursuit of

perfection” (The National Institute of Standards and Technology [NIST], 2020, as cited in McShane-Vaughn, 2023). The origin of Lean can be found in post-WWII Japan’s vehicle production. Lean focuses on waste reduction.

Although DMAIC does not have its foundation built in health care, it is still very applicable to safety and quality improvement (QI) efforts within the health care arena (Monday, 2022). DMAIC began making an appearance in health care during the late 1990s. In 2020, a systemic review found 196 manuscripts that utilized Six Sigma in health care. This widespread adoption underscores the relevance and effectiveness of DMAIC in improving health care processes. To better understand its application, it is essential to delve into each phase of the DMAIC process. The first phase of DMAIC is define.

Define. This initial phase is crucial as it establishes the scope of the project and goals (McShane-Vaughn, 2023; Monday, 2022). In many respects, define is viewed as the most critical part of the DMAIC cycle because if it is not conducted thoroughly, it may cause the team setbacks (McShane-Vaughn, 2023). It is important the goals are in line with leadership and the organization. There must be a mutual understanding of goals between the team and management. Established goals should be specific, measurable, achievable, relevant, and time bound. During the phase, some tools that the team can utilize includes a project charter and a high-level process map. The project charter should be updated throughout the process. It covers critical areas such as the problem statement, the case for the project, goals, scope, a timeline for completion, and team membership.

Measure. During the second phase of the DMAIC process, data is collected, and emphasis is placed on understanding the current state of the process (McShane-Vaughn, 2023; Monday, 2022). Operational definitions are used to identify measurable indicators. The data

before any improvements are made is known as baseline data. Having good baseline data is imperative to identify needs and for a reference point to show progress over time. Examples of tools for this phase can include a data collection plan, Pareto charts, box plots, histograms, and control charts.

Analyze. During the analyze phase, efforts are focused on the identification of causes that are affecting the project goal (McShane-Vaughn, 2023; Monday, 2022). The tools and graphs from the previous phase are assessed to validate the cause of deviations. Work or steps in the process will be analyzed and classified as value-added or non-value added (McShane-Vaughn, 2023). Value-added or non-value-added steps are unique and are defined by the project or site. Additional tools for this phase include the Ishikawa diagram, gap analysis, and 5-Whys (McShane-Vaughn, 2023; Monday, 2022).

Improve. After finding the root cause in the previous step, the focus now shifts to fixing the identified issues (McShane-Vaughn, 2023; Monday, 2022). Tool examples for this phase include brainstorming, control charts, education, mistake-proofing, monitoring plans, multi-voting, and pilots. These tools help to ensure that solutions are effectively implemented and sustained over time, thus leading to continuous improvement.

Control. In the concluding phase of the DMAIC process, the main project work is complete, and a hand-off occurs with a process in place to maintain the improvements (McShane-Vaughn, 2023; Monday, 2022). Tools during this phase are pivotal in ensuring improvements are sustained overtime and provide a framework for continuous monitoring. Examples of tools from this phase include control charts, control plans, and Six Sigma storyboards.

Ethical Consideration & Protection of Human Subjects

This QI project seeks to increase the capture of SDOH data within the ABHU. SDOH screenings are captured electronically within the facility's EHR. Capturing SDOH data in this manner is an established standard as it is built by the EHR vendor to aid in data capture standardization and to meet regulatory-required reporting (Epic, 2022). All patients admitted to the ABHU were screened for SDOH needs; thus, eliminating the potential for discrimination. As one part of the intervention, all nursing staff were provided education on SDOH factors and the screening process. Data from the QI project, including dashboards, were presented at the aggregate level to protect HIPAA.

East Carolina University (ECU) and the project facility required Collaborative Institutional Training Initiative (CITI) training. CITI training at ECU included the course in human research (curriculum group) and social/behavioral research investigators and key personnel as the course learner group (see Appendix B). Facility specific education included CITI training on human research (curriculum group) and biomedical investigators as the course learner group. A course from the Clinical and Translational Science Institute (CTSI) regarding research study staff orientation was also completed. These trainings are paramount to ensure ethical standards are maintained during this project.

On July 5, 2024, a letter of support was received from the Director of Nursing with oversight of the QI project unit (see Appendix C). Per the project site's guidelines, the project was sent through ECU's process for internal review board (IRB) determination before the project site would complete IRB determination. ECU's IRB determination letter was received on September 6, 2024, where it was determined that the project was a QI initiative (see Appendix D). The project was then sent through the project site's IRB process. The project site determined the project to not be human subject research on September 20, 2024 (see Appendix E).

Section III. Project Design

Project Site and Population

The project location was an adult behavioral health unit located within an academic medical center (AMC). The AMC is part of a more extensive health care system that spans multiple states, providing a wide range of medical services and specialties. The AMC serves a diverse patient population from urban to rural areas in the Piedmont of North Carolina. The unit is staffed by a team that included one care coordination team member and 23 nurses. These team members were the primary focus of this project.

Description of the Setting

The project setting was an ABHU unit within a large AMC. The average daily census is 18 for this 24-bed unit. The AMC is part of a larger nonprofit health system dedicated to providing comprehensive health care services. The ABHU unit provides 24-hour care for patients who are being treated for conditions such as alcohol addiction, anxiety disorders, bipolar disorder, depression, drug addiction, mood disorders, schizophrenia, and more. The unit is staffed by a multidisciplinary team of healthcare professionals. The healthcare professionals included psychiatrists, psychologists, nurses, social workers, and therapists, all working collaboratively to deliver personalized and evidence-based care.

Description of the Population

The nursing population was responsible for the collection of SDOH data and included 25 nurses who worked primarily on the ABHU unit. Of the nursing staff that participated in the project, 23 were female, and 2 were male. One nurse had a diploma in nursing, 6 had an associate's degree, 15 had a bachelor's, and 2 had a graduate degree in nursing. One nurse's highest nursing degree level was not yet available within the system. Three nurses were certified,

demonstrating a commitment to advanced knowledge and skills in their specialty. Care coordination and nursing staff were responsible for the collection of SDOH data in the EHR.

The ABHU was staffed by one care coordination team member. She was a supervisor and held a master's degree in social work. She was responsible for collection of SDOH data if initial collection was not completed by nursing and she was responsible for follow-up on assessment where the patient screened positive for a SDOH need.

Project Team

The core project team included the Vice President of Quality, who served as the site champion, nursing leadership, information technology, care coordination supervisor, quality, and the ECU DNP faculty advisor. I served as the project lead. The Director of the Center for Nursing Research provided assistance and guidance throughout the IRB process. Each team member brought their unique skills, perspectives, and knowledge, which made a well-rounded QI team. Nursing leadership was supportive of this QI project endeavor.

Additionally, the information technology team ensured seamless integration of data collection. Care coordination facilitated dialog and the flow of information surrounding resources available to patients who screen positive for SDOH needs. The quality team member focused on meeting regulatory definitions for the screening and supporting the QI process. The ECU faculty advisor offered insights and mentorship, enriching the project's approach with evidence-based practices. This collaborative team effort was instrumental in driving the project's success and achieving its goals.

Project Goals and Outcome Measures

The project goal was to establish a workflow on the ABHU to increase SDOH-1 capture from 3% at baseline to 75%. A workflow was established utilizing the identified themes from the

literature review: acceptability, stakeholder engagement, staff education and training, tool screening standardization, and the use of technology. Additionally, SDOH-2 data was captured. The SDOH-2 measure takes individuals who screened positive in SDOH-1 and stratifies them into the five aforementioned health-related social needs (HRSN) from the SDOH-1 screening: “food insecurity, housing instability, transportation needs, utility difficulties, and interpersonal safety during their hospital inpatient stay” (Quality Reporting Center, 2024, p. 1). This allows the facility to see where there are potential opportunity areas to focus resources within the patient population. Due to the low screening rate for SDOH-1 during the baseline period, it was not possible to determine SDOH-2 rate baselines. However, it should be noted that this is an inverse measure, with lower rates meaning better outcomes.

Moreover, screening patients without offering support is not beneficial to the patient, nor does it meet the intent of the CMS SDOH measures. Effective screening should be coupled with actionable steps to address any identified needs. This helps to ensure a holistic approach to patient care.

Description of the Methods and Measurement

This project utilized DMAIC methodology to ensure a structured and practical approach. During the define phase, the team identified key drivers within the ABHU for SDOH-1 capture and set clear objectives for the project (see Appendix F). In the measure phase, relevant data was collected, including SDOH screening data, to establish a baseline and understand the current state. The analyze phase involved examining the collected data to identify root causes and areas for improvement. In the improve phase, the team implemented the screening tool. The previously administered nursing educational modules provided a solid foundation of knowledge for screening implementation. During this phase, adjustments were made based on ongoing feedback

and data analysis. Finally, during the control phase, the team established procedures to sustain the improvements. This included regular monitoring and dissemination of results to ensure long-term success and integration into everyday practice.

Discussion of the Data Collection Process

Baseline data was collected from March 1, 2024, to July 31, 2024, through a structured query language (SQL) EHR workbench template. Intervention data was collected from January 1, 2025, through April 30, 2025, via the same process. The numerator and denominator information were collected on all three aforementioned measures and entered into an Excel® workbook for analysis through an add-in, QI Macros®. Data analysis included the use of control charts. Control charts allow for the analysis of processes over time, predict the expected range, identify points outside of the acceptable range, and help to enhance process consistency (American Society for Quality [ASQ], 2024).

The control charts were updated each Monday containing the information for the week prior, and sent to the team for review. These data were discussed during the bi-monthly QI project team meetings. The care coordinator and nurses were able to view real-time screening data for SDOH-1 and SDOH-2 data within an Epic dashboard. This data was represented visually with line charts and had the flexibility to drill down from years to quarters, months, weeks, and days. This interactive dashboard allowed the nurse manager to review screening data and contact individual nurses to complete any missed screenings.

Implementation Plan

This QI project garnered approval from ECU and the facility's IRB before intervention implementation. The implementation plan was approved by the Site Champion, nursing leadership, and care coordination. Meetings were systemically conducted bi-monthly during the

QI project as the team worked through the DMAIC process. Team members were provided with hyperlinks to an agenda, PowerPoint® slides, previous meeting minutes, and any supplemental materials for review in advance of each meeting. These preparatory materials were securely stored in a shared OneDrive® folder with managed permissions that limited access to the QI team members.

During one of the first QI team meetings, while validating a high-level process map (see Appendix G), it was noted that the predetermined SDOH screening tool was not available during the admission process as the screening was not added to the ABHU nursing admission navigator after a recent update to the EHR instance. Establishing the screening process into the care coordinator and nurse's routine workflow was of paramount importance to the success of the project. During a scheduled meeting, staff nurses were given the opportunity to provide input on where within the admission navigator the assessment should be located to facilitate the capture of the data elements. Involving care coordination and nursing staff in decisions and discussions about the project helped to increase acceptability and engagement. The utilization of technology, by capturing the SDOH screening within the admissions navigator, helped to ensure seamless incorporation into the workflow of the nurses. Completion of adding the SDOH screening to the ABHU nursing admission navigator was facilitated by the information technology QI team member. The SDOH screening was also marked as a required document to facilitate completion on each patient admitted to the unit. If the screening was not complete, the nurses would visualize a red circle under their required documentation notification as a visual reminder to complete the SDOH screening. Once the SDOH screening was completed, the circle turned green.

Training and education were provided to the ABHU care coordinator and nursing staff via the facility's online learning platform in December 2024. The information technology QI team member facilitated the build of a facility "Tips and Tricks" sheet to enhance communication about the process, ensure process standardization, improve documentation accuracy and efficiency. Before implementation, the QI team was provided the opportunity to provide feedback and make any necessary changes to the education. The training and education online module included the following topics: the rationale behind the screenings (i.e., impact on health outcomes and regulatory requirements), techniques for engaging patients to discuss topics that can be perceived as sensitive in nature, resources available to the patients that screen positive, and the methodology for entering the screenings in the EHR. Through testing, it was estimated that completion of the educational module would take 30 minutes to complete. The care coordinator completed the educational module during November 2024. The nurses completed the educational module during one of their scheduled shifts or at their convenience during the month of December 2024. Nursing training completion was monitored by the ABHU nurse manager via the online platform, and compliance was reported during the scheduled QI project meetings.

Timeline

The project started in April 2024 when the project issue was identified (see Appendix H for timeline). After the problem was identified, a literature search was conducted to identify evidence-based interventions that would address the issue. The aim statement was created, and the project goal was determined. CITI modules and specific site training were completed during this timeframe to ensure compliance with institutional and ethical standards. During the timeframe of September to November 2024, IRB submissions were prepared and submitted to

ECU and the facility for determination. Concurrently, the project team was organized, and bi-monthly team meetings were scheduled to maintain consistent communication and coordination throughout the project. In December 2024, the nursing staff completed a required SDOH educational module designed to equip them with the necessary knowledge and skills for SDOH screening implementation. The team continued to hold regular meetings to discuss progress, refine strategies, and address emerging issues. A Project Charter was maintained throughout the project (see Appendix I).

The implementation phase began on January 1, 2025. This date was the start of care coordination administering the SDOH screening tool to all admitted patients to the ABHU with nursing as back-up. During this period, data collection and analysis were conducted to evaluate the effectiveness of the intervention. The team continued to meet regularly to review data, discuss findings, and make any necessary adjustments to the project. The implementation process continued until April 30, 2025.

The final phase of this project was from May 1, 2025, to July 31, 2025. During this time, results were disseminated to both ECU and the project site. This included preparing detailed reports, as well as creating presentations, to communicate the project's outcomes, insights, and recommendations.

Section IV. Results and Findings

Results

Data from the implementation phase of the QI project was collected from January 1, 2025, through April 30, 2025. Within this period, 311 patients were eligible for the SDOH screening. Of the eligible patients, 303 were screened across all five SDOH domains for needs during their admission per CMS SDOH-1 requirements. This resulted in a SDOH-1 screening rate of 97.43%. The screening rate was monitored for stability by the utilization of a control chart (see Appendix J).

During the first two weeks of the project, the screening compliance rate was below 72%. During the third week of the project, the nurse manager of the unit added the SDOH screening to the nightly required documentation review conducted by nursing staff. This resulted in a screening compliance rate of 100% for the third week. There was some variability within the data until week 10. From week 10 through week 18, the compliance screening rate was maintained at 100%. Due to the consistency of the screening rates during these weeks, the statistical software recognized this as a process change and recalculated the upper and lower control limits (see Appendix J).

The percentage positive rate was calculated for all five measures that comprise the SDOH measures: food insecurity, housing instability, interpersonal safety, transportation needs, and utility difficulties. Of the 303 patients screened: (1) 24.8% (n=75) screened positive for food insecurity; (2) 23.8% (n=72) screened positive for housing instability; (3) 23.8% (n=72) screened positive for interpersonal safety; (4) 20.8% (n=63) screened positive for transportation needs; (5) 16.2% (n=49) screened positive for utility difficulties (see Appendix K). All patients who screened positive for a SDOH need were seen by the unit's Care Coordinator.

During the month of November 2024, the unit's Care Coordinator completed the required SDOH screening educational activity. The educational model was released to nursing staff during the month of December 2024, and 22 out of the 25 staff completed the required educational activity before the December 31, 2024, deadline. This resulted in an educational compliance rate of 88% among the nursing staff.

Discussion of Major Findings

The literature did support the findings of the project. The literature search found that several interventions were crucial for the implementation of a SDOH screening process. These interventions included a standardized screening tool (electronic when possible), incorporating staff into establishing the workflow, providing stakeholders a way to engage, and providing staff education, all of which were enablers to effectively implement the SDOH screening initiative (Angah et al., 2024; Berry et al., 2020; Byhoff et al., 2023; Dauner & Loomer, 2021; Fiori et al., 2023; Hao et al., 2023; McGowan et al., 2023; Novilla et al., 2023; Rogers et al., 2022; Rudisill et al., 2023; Wark et al., 2021). One additional intervention that the team implemented that was not explicitly covered within the literature review was the use of a second nurse reviewing for SDOH screening completion each day. This was part of a more extensive standardized charting review process, which covered multiple elements outside of the scope of this project.

Section V. Interpretation and Implications

Costs and Resource Management

Twenty-three nurses successfully completed the online SDOH educational module. It was estimated that the module would take approximately 30 minutes to complete. If the mean wage of the nurses was \$35 per hour, the estimated cost of education for the project was \$437.50. Additionally, the construction of the “Tips and Tricks” sheet required an estimated 4 hours to complete. At the same hourly wage, the cost would equate to \$140. Therefore, the total cost of these educational and preparatory activities was \$577.50. These figures highlighted the investment that was required for the successful implementation of the educational component of the QI project (see Appendix L). However, these figures represent only the direct costs associated with the educational module and the creation of the supplementary materials. It is also important to account for the indirect costs, such as the potential reduction in productivity due to the time that nurses spend away from their primary responsibilities to complete the module.

Additionally, because the mode of the QI project was electronic (i.e., meeting materials, education, and supplemental materials), there was no associated cost for paper products. This resulted in significant cost savings during the project. The avoidance of physical paper ensured consistency across materials and aligned with environmentally sustainable practices.

Implications of the Findings

The implementation and sustainability of SDOH screenings within health care have far-reaching implications. Effective SDOH screenings can lead to more personalized care and affect patient health outcomes (CDC, 2023). The following sections will delve deeper into the implications of the findings for the patient, nursing practice, and the broader health care system.

Implications for Patients

SDOH are multifaceted and encompass areas such as the individual's environment. SDOH has a profound impact on a wide range of health issues, risks, and quality outcomes (CDC, 2023). SDOH factors have such an impact on outcomes that it is noted that they influence up to 80% of all health outcomes (County Health Ranking, 2024; Wark et al., 2021). Factors related to SDOH can impact the length of hospital stays, readmissions, mortality, and the occurrence of complications (Imran et al., 2022; Vo et al., 2023). Thus, screening for and addressing SDOH needs is pivotal in addressing the needs of individuals and the health of communities. This QI project's SDOH-1 screening implementation phase successfully screened 97.43% (n=303) of patients and provided them with resources to help address their SDOH needs.

Implications for Nursing Practice

Nurses play a pivotal role in the implementation of SDOH screenings. Their extensive time spent with patients allows them to build trusting relationships, which are essential for effective SDOH screenings. This relationship-driven approach enables nurses to ask sensitive questions and gather comprehensive information about patients' social needs, which ultimately fosters better patient outcomes. Historical figures, such as Florence Nightingale, laid the groundwork for this practice (Matthews et al., 2020). Nightingale's pioneering work in nursing emphasized the importance of understanding patients' environments and social conditions, which aligns with modern SDOH screening practices. Furthermore, Nightingale was known as a catalyst for change, which is a skill still needed for nurses to assess and address SDOH needs.

Impact on Healthcare System(s)

CMS introduced two new SDOH measures into the inpatient psychiatry program beginning with CY 2025 (Quality Reporting Center, 2024). Meeting these new requirements necessitates time and monetary investments for systems that are required to report under the

program. The investment in time and resources underscores an organization's commitment to enhancing the capture of SDOH data. This is expected to translate into improved patient care outcomes. However, it is essential to critically evaluate if the financial and temporal investments made during SDOH screenings are scalable in the future. Individual facilities will need to analyze their data further to determine the long-term benefits and potential cost savings associated with the implementation of SDOH screenings.

Sustainability

The use of technology (EHR) with an integrated screening tool helped to streamline the process and accurately capture data. By embedding the screenings into the routine workflow process, rather than treating the screening as an additional task, the screening became a routine process at the time of the patient's admission. Because the data is captured within the EHR, any needed updates to the screening can be seamlessly pushed without requiring a lot of additional resources. EHR utilization will enable the facilitation of screening changes, like additional questions, into the current workflow without significant interruption to the screening process.

This project had strong leadership support. Their support will be necessary in the future to secure the needed resources to ensure that the project remains sustainable. Leadership fostered a culture that recognized the importance of patients receiving holistic care.

Dissemination Plan

The QI project results were disseminated to the project site on May 5, 2025. The dissemination was accomplished through a Teams meeting and included the entire QI project team, along with additional nursing leaders. They were provided with the opportunity to provide feedback and ask any additional questions. Additionally, the project summary and findings were

presented in poster format to ECU's College of Nursing on July 09, 2025, during poster presentation day. This paper was also submitted to ECU's "The ScholarShip" upon approval.

Section VI. Conclusion

Limitations and Facilitators

There were several limitations identified within the project. One limitation found during the project was siloed communication regarding the SDOH screening process in behavioral health. The project site, being part of a larger health care system, faced challenges due to the size of the system. This led to opportunities for missed communication. Initially, the regional behavioral health service line (BHSL) made the initial decision that SDOH data would be collected by Care Coordination at the local level, including my project site, throughout all the psychiatric facilities/units within the region. However, the local project site was not aware of this decision.

In speaking with the project site staff about the workflow, staff deemed that the Care Coordinator collecting the data for the SDOH screening would be problematic due to the staffing of only one Care Coordinator for the unit. This information was relayed to the executive leadership of the BHSL, and the project site was subsequently allowed to align workflow with the medical side, which included nursing being responsible for the SDOH screening. This demonstrated leadership flexibility, enabling the project site to determine its own best workflow.

Another significant limitation within the SDOH project is the competing demands faced by the nursing leadership and staff. Nursing staff is often tasked with balancing multiple responsibilities, which can lead to challenges in the prioritization of SDOH screenings. This dynamic needs systems in place, such as screening integration into current workflow and visual cues, to facilitate the capture of the required data.

The culture of the project site was a strong facilitator of the project. Even though screening for the SDOH-1 metric is a regulatory requirement, the project site and the entire

enterprise had already recognized the importance and need to address SDOH. Screening goals were established by executive leadership at the enterprise level, not site-specific, even before the CMS required reporting requirements took effect. As a result, IAS teams, leadership, nursing staff, and Care Coordination had some level of familiarity with SDOH before the project started.

Recommendations for Others

It is essential to acknowledge the complexity of large health care systems and the potential for siloed communication. There are many competing demands on staff and resources. Leadership support and stakeholder buy-in helped to propel the process forward. By utilizing technology, creating a sustainable workflow process, leadership support, and stakeholder buy-in, this project was successful in increasing the SDOH screening rate (Angah et al., 2024; Berry et al., 2020; Byhoff et al., 2023; Dauner & Loomer, 2021; Fiori et al., 2023; Hao et al., 2023; McGowan et al., 2023; Novilla et al., 2023; Rogers et al., 2022; Rudisill et al., 2023; Wark et al., 2021).

Of note, a limited number of patients were initially screened as negative for needs by nursing staff and later screened positive when asked follow-up questions by care coordination. From this experience, it is recommended that patients have a secure place to be screened where they feel comfortable answering the screening questions and are allotted enough time to think through their responses (Rudisill et al., 2023). This aspect should be incorporated into the screening process.

Recommendations for Further Study

On April 30, 2025, CMS released to the Federal Register the FY 2026 Inpatient Psychiatry Facilities Prospective Payment System – Rate Updated as a proposed rule (CMS, 2025). Under this proposed rule, CMS is noting their intent to remove the SDOH-1 and SDOH-2

screening measures from the inpatient psychiatry facility (IPF) reporting program. This determination was made due to the costs associated with implementing these screening measures. According to CMS (2025), “We have previously heard from some IPFs concerned with the costs and resources associated with screening patients via manual processes, manually storing such data, training hospital staff, and altering workflows for these measures” (p. 76). CMS further clarified that the SDOH measures did not meet the objective of connecting patients who have SDOH needs with available resources. Moreover, there was no way to discern whether the screening provided a benefit to the patient, which does not align with the program’s goal to improve health outcomes.

If the proposed rule is finalized in its current state, facilities will need to determine the best way to move forward without the CMS reporting requirements for screening. They need to carefully analyze whether the facility or the patient obtained any benefit from the SDOH screening and if the benefit outweighs the cost of the screening. While connecting patients with resources to address their SDOH needs is imperative, there should be processes and monitoring in place to ensure that the connection is actually of benefit to the patient, which was not measured in this QI project. The decision of whether to continue to complete SDOH screenings in spite of decreased regulatory requirements involves considering financial as well as the potential long-term impacts on patient care outcomes.

Final Thoughts

The literature review highlighted numerous ways in which SDOH needs have an impact on clinical care outcomes. The QI project was successful in increasing SDOH screening rates on the ABH unit and facilitated connecting patients with community-based resources to help address current and future SDOH needs. While this represents meaningful progress, the long-

term impact of the project requires further evaluation. If the screening remains in place, regardless of the changing regulatory requirements, there is a need to measure the impact of connecting the patients to resources. There is currently not a clearly defined mechanism in place to assess whether the individuals followed up with the community resources provided or if the connection to resources had any impact on their care or quality of life within this project department. Without this feedback loop, it is difficult to determine the true value of the interventions. Establishing a SDOH screening process and connecting the patient to community resources to address their needs are only the initial steps needed to comprehensively address SDOH needs.

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Appendix A

Literature Matrix

Authors	Year	Article Title	Journal	Purpose and Message	Design/ Analysis /Level of Evidence	IV DV or Themes Concepts and Categories	Comments/ Critique of the Article/ Methods GAPS
Dauner, K.N., & Loomer, L	2021	A qualitative assessment of barriers and facilitators associated with addressing social determinants of health among members of a health collaborative in the rural Midwest	<i>BMC Health Services Research</i>	Understand SDOH needs in context of a rural setting.	Qualitative assessment case study	Three major themes: organization, community, and external/state.	The authors found that there are three major themes to enabling SDOH assessments. Limitations: sampling methodology (position), may not be representative of others in same position at other institutions within the study. Usefulness: Screening allowed for detailed description. Synthesis: Need for common protocols and collaboration across systems.

Berry, C., Paul, M., Massar, R., Marcello, R. K., & Krauskopf, M.	2020	Social needs screening and referral program at a large US public hospital system, 2017	<i>Am J Public Health</i>	Identify and address SDOH factors in order to improve health of the population in the identified clinics.	Qualitative evaluation of process	Five challenges/facilitators identified: integration of screen into workflow, burden on staff, patient-related factors, tracking capability, and history of community-based partnerships and colocated services.	The authors found that the respondents thought the tool was beneficial to the patient population. Limitations: Small scale. Piloted in three clinics. Usefulness: Provides additional context into screening of patients and barriers. Synthesis: Provides context on implementation of SDOH screenings.
Wark, K., Cheung, K., Wolter, E., & Avey, J. P	2021	Engaging stakeholders in integrating social determinants of health into electronic health records: a scoping review	<i>International Journal of Circumpolar Health</i>	Identify barriers and facilitators to integrating SDOH data into the EHR.	Systematic review	Identified six barriers and facilitators of incorporating SDOH data into EHRs: domain indicators, screening and measurement, data collection methods and procedures, patient-provider relationships, the health system, and payers.	The authors found that there are many endeavors to integrate SDOH into medical care. Limitations: Most recent articles in the review were from 2018. Potential for MeSH terms not to be appropriately labeled on all applicable articles. Usefulness:

							Insight on how to engage stakeholders in the endeavor to capture SDOH factors. Synthesis: Review of stakeholder engagement. Of note, mentioned the consideration of integrating non-medical sensitive data into the EHR.
Rogers, C. K., Parulekar, M., Malik, F., & Torres, C. A	2022	A local perspective into electronic health record design, integration, and implementation of screening and referral for social determinants of health	<i>Perspectives in Health Information Management</i>	Incorporating the SDOH assessment and referral process into a EHR aids in population health management . Article provides structure for implementation.	Prospective study	Key concepts: stakeholder engagement EHR design automation of process where possible.	The authors found that EHR integration is a key component to assess for SDOH. Limitations: Only one facility. Usefulness: Hospital specific interventions to SDOH screening implementation. Setting is an academic medical center, which will be the setting of my project. Synthesis: EHR

							integration via Epic or other vendor is a key component of assessing SDOH.
Novilla, M. L. B., Goates, M. C., Leffler, T., Novilla, N. K. B., Wu, C., Dall, A., & Hansen, C.	2023	Integrating social care into healthcare: A review on applying the social determinants of health in clinical settings	<i>International Journal of Environmental Research and Public Health</i>	Multiple gaps still exist in the integration of SDOH into clinical settings.	Narrative literature review	No consistent screening tool for SDOH, screening impacted by internal and external factors, need for training, appropriate screening tools, and incorporating technology.	The authors found that current literature more focused on individual level interventions and not community level interventions. Also, literature does not account for protective factors. Limitations: Not a systematic review of the literature. Usefulness: Identifies gaps in current literature. Synthesis: Literature review revealed that

							health care needs to focus more on upstream interventions.
Fiori, K., Levano, S., Haughton, J., Whiskey-LaLanne, R., Telzak, A., Hodgson, S., Spurrell-Huss, E., & Stark, A.	2023	Learning in real world practice: Identifying implementation strategies to integrate health-related social needs screening within a large health system	<i>Journal of Clinical and Translational Science</i>	SDOH screening necessary to decrease poor health outcomes.	Retrospective review with analysis	Integration of screening into current workflows, universal screening, specific staff to implement the intervention.	The authors found several themes to implementing SDOH screenings. Limitations: retrospective review, potential for recall and selection bias. No concrete process (i.e., some only screening new patient, patients assumed to have HRSN, or scheduled annual visits). Usefulness: Defines some facilitators for implementation

							ion. Synthesis: SDOH screening necessary to decrease poor health outcomes.
Angah, N., Meedzan, B., Pruzinsky, N., O'Connell, A., Hart, L., Cobbs-Lomax, D., & Vanderwoode, P.	2024	Leveraging technology and workflow optimization for Health-Related Social Needs Screening: An improvement project at a large health system.	<i>Joint Commission Journal on Quality and Patient Safety</i>	Purpose of the project was to increase HRSN screening rates. Inpatient increased for 0% to 66%.	Quality Improvement Project	For nursing, the screening was integrated into the current nursing workflow. A Best Practice Advisory (BPA) prompt was built into the EHR to remind nursing staff to consult Social Work for positive screens.	The authors found that they were able to increase HRSN screening rates. Limitations: Screening did not include the more recent CMS required domains. Part of the project crossed into the COVID-19 timeframe which could have some impact on the data. Usefulness: Screening

							for inpatient were in-person (same as project unit). Synthesis: Provided some key attributes for nursing (i.e., screening integrated into workflow).
McGowan, D. A., Mather, C., & Stirling, C.	2023	Use of Social Determinants of Health Screening among Primary Health Care Nurses of Developed Countries: An Integrative Review	<i>Nursing Reports</i>	The identification of themes for SDOH screening by nursing staff.	Integrative Review	Supports are needed to enable SDOH screenings, nurses can be reluctant to screen due to attitudes or discomfort, need to build relationships with patients for adequate screenings	The authors found that there is not a standardized screening tool. Limitations: Reviews stopped in 2020, so years of other potential data. Usefulness: Identified themes Synthesis: Themes identified in nursing screening for SDOH.

Rudisill, A. C., Eicken, M. G., Gupta, D., Macaуда, M., Self, S., Kennedy, A. B., Thomas, D., Kao, E., Jeanty, M., & Hartley, J.	2023	Patient and care Team perspectives on social determinants of health screening in primary care	<i>JAMA Network Open</i>	Implementation guidance on improving SDOH screenings within clinician workflows.	Qualitative study	Barriers: time, resources, referrals, patient hesitancy to complete screening, and the screening itself (i.e., redundancy, number of questions), lack of training. Facilitators: support for patient needs, communication, and champions for the endeavor	The authors found that Limitations: Might not be generalizable. Usefulness: Provided barriers and facilitators. Synthesis: Implemented a screening tool to screen for SDOH needs in a primary care practice.
Broadbush-Shea, E. T., Duarte, K. F., Jantz, K., Reno, J., Connelly, L., & Nederveld, A.	2022	Implementing health-related social needs screening in western Colorado primary care practices: Qualitative research to inform improved communication with patients.	<i>Health & Social Care in the Community</i>	To improve communication to facilitate SDOH screenings.	Qualitative	Normalize the process, assure patients about privacy, respect patient autonomy, clarify purpose of screening, build trusting relationships, treat screening as an ongoing process, emphasize benefits, etc..	The authors found that communication is vital for the SDOH screening process to be successful. Limitations: Unable to track patients that declined screening. Usefulness: Shows the importance of communication during the implementation and screening process. Synthesis: Implemented

							d a screening tool to screen for SDOH needs in a primary care practice.
Byhoff, E., LeClair, A. M., Smith, C. N., Roy, T. K., & Drainoni, M.	2023	Designing an implementation strategy to increase health-related social needs screening: Applying the PRISM framework in a resource-limited clinical setting.	<i>Translational Behavioral Medicine</i>	Disseminate implementation strategies for HSRN screenings.	Qualitative, PRISM framework	Barriers- Internal: re-confirming the organizations priorities, staff perceptions of screening, concern over follow-up/resources, limitations of the EHR, workflow, staffing External: Lack of knowledge about resources for patients and regulatory requirements	The authors found that there were eight themes identified in the implementation of a HRSN screening. Limitations: Might not be generalizable to other settings/areas. Usefulness: Barriers and facilitators were included. Synthesis: Implementation strategies discussed to increase HRSN screenings.

Hao, S. B., Pitts, S. B. J., Iasiello, J., Mejia, C., Quinn, A. W., Popowicz, P., Mitsakos, A., Parikh, A. A., & Snyder, R. A.	2023	A mixed-methods study to evaluate the feasibility and acceptability of implementing an electronic health record social determinants of health screening instrument into routine clinical oncology practice	<i>Annals of Surgical Oncology</i>	SDOH implementation in the EHR was feasible. Staff were overall supportive.	Mixed-methods	Staff perspective: adaptability, available resources to address SDOH needs, lack of time to address needs, positive view of screening value.	The authors found that SDOH implementation in the EHR was feasible. Staff were overall supportive. 95.5% of patient had at least one SDOH need. Limitations: Might not be generalizable to other settings/areas. Usefulness: Shows that SDOH screening within the EHR are feasible and accepted by staff. Synthesis: Implemented a screening tool to screen for SDOH needs in a primary care practice.
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Appendix B**Collaborative Institutional Training Initiative (CITI Program) Modules**

  Completion Date 31-Oct-2023
Expiration Date 31-Oct-2026

This is to certify that:

Brandi

Has completed the following CITI Program course:

Human Research
(Curriculum Group)
Group 2.Social / Behavioral Research Investigators and Key Personnel
(Course Learner Group)
2 - Refresher Course
(Stage)

Under requirements set by:

East Carolina University

Verify at

Not valid for renewal of certification through CME.


Collaborative Institutional Training Initiative
101 NE 3rd Avenue, Suite 320
Fort Lauderdale, FL 33301 US
www.citiprogram.org

  Completion Date 23-Apr-2024
Expiration Date 23-Apr-2027

This is to certify that:

Brandi

Has completed the following CITI Program course:

Human Research
(Curriculum Group)
Biomedical Investigators
(Course Learner Group)
2 - Refresher Course
(Stage)

Under requirements set by:

Generated on 23-Apr-2024. Verify at

Not valid for renewal of certification through CME.


Collaborative Institutional Training Initiative
101 NE 3rd Avenue, Suite 320
Fort Lauderdale, FL 33301 US
www.citiprogram.org

Appendix C

Nursing Leadership Letter of Support

7/5/2024

Dear Brandi Hollar

I am pleased to offer our support and give you permission to conduct your DNP Project: Data-Driven Health Equity: Improving Capture of Social Drivers of Health. I understand that the purpose of the project is to increase the capture of social drivers of health information with the electronic health record (EHR). Targeted participants will include staff on the adult behavioral health unit.

The Department of Nursing grants you permission for the following activities to be conducted at _____, pending IRB approval/determination from _____.
_____ will provide education to staff and assess compliance with data capture via the EHR. You will be responsible for the preservation of the privacy of project participants and data. Any data presented must be in the aggregate form and not contain names or other identifying information of the site or any participants. We also ask that prior to any publication of this project, your onsite mentor(s) have an opportunity to review the manuscript and be included as an author, if appropriate.

_____ will provide you with the data to evaluate capture of social drivers of health. Prior to obtaining data, you will need to submit to the Center for Nursing Research a copy from East Carolina University, stating that your project has been reviewed and approved. If you have not done so already, please register your project using the following link: _____. In addition to any IRB requirements, you are also required to submit an abstract to the Center of Nursing Research once you have completed your project and disseminate your findings within the _____.

Good luck with your project. Please let me know if I can be of any assistance.

Sincerely,

Director of Nursing II

Appendix D**ECU IRB Determination**

Based on your responses, the project appears to constitute QI and/or Program Evaluation and IRB review is not required because, in accordance with federal regulations, your project does not constitute research as defined under 45 CFR 46.102(d). If the project results are disseminated, they should be characterized as QI and/or Program Evaluation findings. Finally, if the project changes in any way that might affect the intent or design, please complete this self-certification again to ensure that IRB review is still not required. Click the button below to view a printable version of this form to save with your files, as it serves as documentation that IRB review is not required for this project. 9/6/2024

Appendix E
Facility IRB Determination

Office of Research

INSTITUTIONAL REVIEW BOARD

MEMORANDUM

To:

Quality Resource Center

From:

Institutional Review Board

Date:

9/20/2024

Subject:

Not Human Subjects Research:
Data-Driven Health Equity: Improving Capture of Social Drivers of Health

The Institutional Review Board has reviewed your protocol and determined that it does not meet the federal definition of research involving human subject research as outlined in the federal regulations 45 CFR 46. 45 CFR 46.102(f) defines human subjects as “a living individual about whom an investigator (whether professional or student) conducting research obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information.”

The information you are receiving is not individually identifiable. In recent guidance published by the Office of Human Research Protections (OHRP) on the Guidance on Research Involving Coded Private Information or Biological Specimens, OHRP emphasizes the importance on what is being obtained by the investigator and states “if investigators are not obtaining either data through intervention or interaction with living individuals, or identifiable private information, then the research activity does not involve human subjects.”

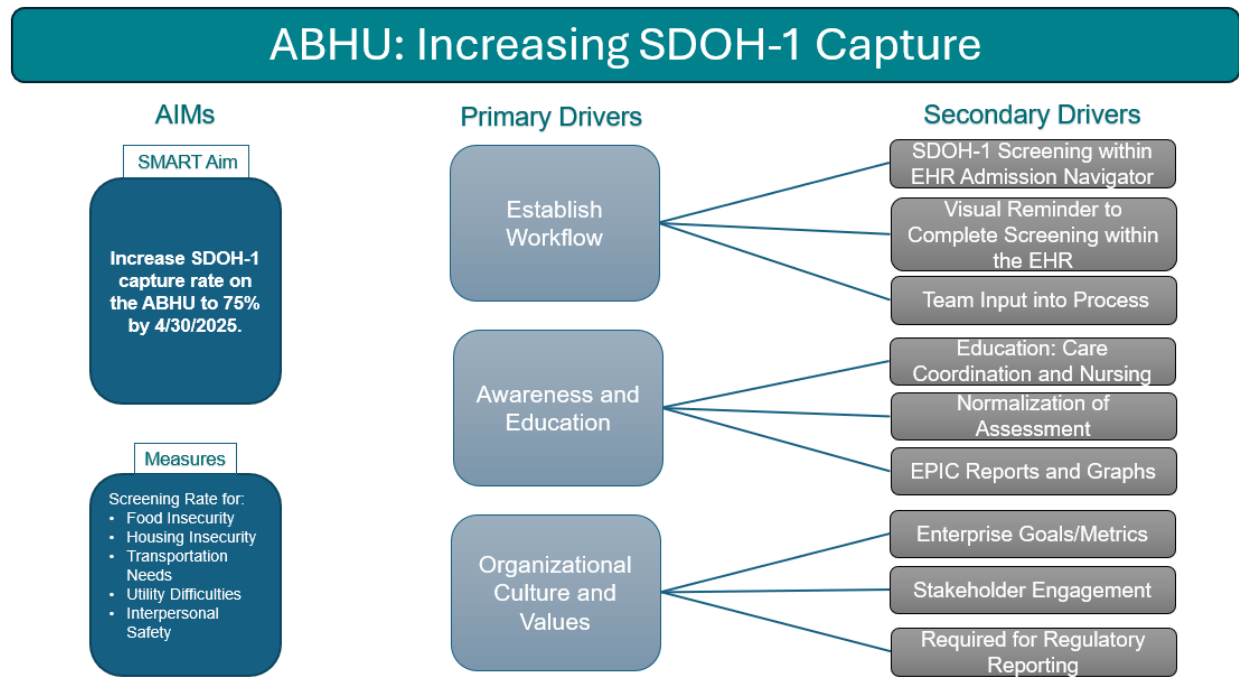
Note that only the IRB can make the determination for its investigators that a research study does not meet the federal definition of human subject research. Investigators do not have the authority to make an independent determination that a study does not meet the federal requirements for human subject research. Each project requires a separate review and determination by the Board. The Board must be informed of any changes to this project, so that the Board can determine whether it continues to not meet the federal requirements for human

subject research. If you have any questions or concerns about this information, please feel free to contact our office at .

IRB has been continually fully accredited by the Association for the Accreditation of Human Research Protection Programs (AAHRPP) since 2011.

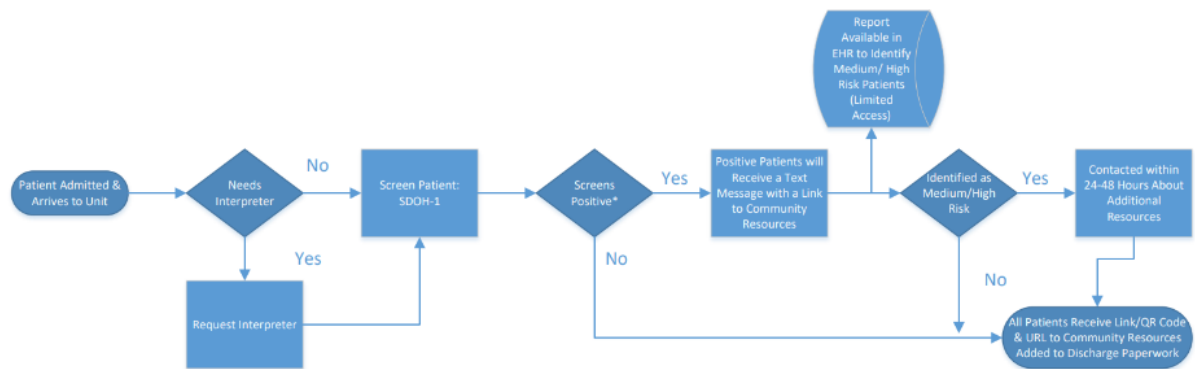


Appendix F
Driver Diagram



Appendix G

High-Level Process Map



Screening Domains:

- Food Insecurity
- Housing Instability
- Transportation Needs
- Utility Difficulties
- Interpersonal Safety

*Positive Screening = 'yes' to question(s) in one or more of the five screening domains.

Appendix H

Project Timeline



Appendix I

Project Charter

Project Charter: Data-Driven Health Equity: Improving Capture of Social Drivers of Health

AIM: What are we trying to accomplish?

S.M.A.R.T. STATEMENT

Using the format: "Improve {metric} from {baseline level} to {target level} by {timeframe MM/YY}."

Improve SDOH-1 screening from 3% (March-July baseline) to 75% by April 30th, 2025.

PROBLEM

What is the problem? What happens, when, how often/how much, to whom does it happen? 2-3 sentences

SDOH-1 data is not being captured in the EHR on all inpatients within the adult behavioral health unit.

PURPOSE

How will the improvement benefit patients? How does the project impact quality and/or patient safety? What is the potential downside of this effort for patients? 4-5 sentences

Up to 80% of a patient's health outcome is impacted by SDOH. SDOH screening is necessary to improve patient outcomes and decrease disparities. SDOH-1 is required for reporting by CMS. Compliance with this data will be reported to the public.

MEASURES: How do we know if a change is an improvement?

METRICS

Define the outcome and process metrics that will be used to monitor the impact of this improvement effort.

Increase in SDOH-1 screening rate. (Outcome)

SDOH-2 (Process/Monitor)

Increase in screenings resulting in an increase of referrals to Case Management. (Outcome)

All nursing staff to receive/acknowledge education. (Process)

ACTIONS: What changes can we make that will lead to an improvement?

CHANGES

What are the proposed changes for this project?

Design and establish a workflow. Education to staff on the importance of SDOH screenings and how to screen. Provide support on how to approach patients to discuss this sensitive matter.

COMMUNICATION STRATEGY

Audience (Nursing, Providers)	Content	Media (email, in person)	Messenger	Delivery Date
Nursing	SDOH Screenings	Module & Staff Meeting		12/31/24
Care Coordination	SDOH Screenings	Module		11/30/24

FINANCIAL EVALUATION

Potential Costs (Resources, Training, etc.)	Estimated Costs (\$)	Potential Savings/Gains (Indirect or Direct)	Estimated Savings/ Gains (\$)
Nursing training	$\$35 \times 23 \times .5 = \402.5	Potential reduction in readmissions, ED visits, etc.). <i>Regulatory required.</i>	To be assessed at a later date once data is available.
Construction of Tips and Tricks Sheet	$\$35 \times 4 = \140		

BARRIERS

What are the major challenges you anticipate?

Staff resistance to change. Barriers in identification of workflow.

STAKEHOLDERS

Who are the key parties affected by this project (people, groups, departments, etc.)?

Nursing, Care Management, patients, providers, IAS, leadership

SCOPE

In Scope:	Out of Scope:
Adult BH unit	All other units

TIMELINE

Anticipated time to complete project.

Project start: 09/2024

Education to staff: 12/2024

Confirmation that all received education by: 12/31/2024

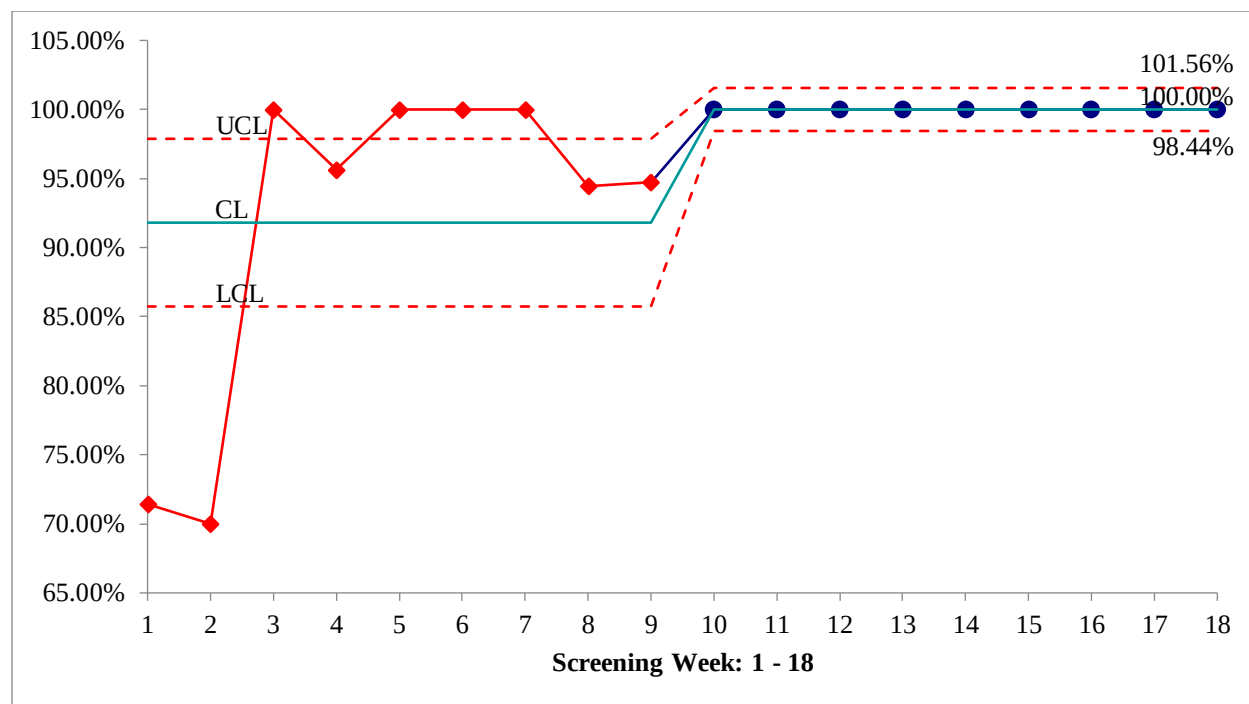
Data Monitoring: 1/1/2025 – 4/30/2025

Project completion: 4/30/25

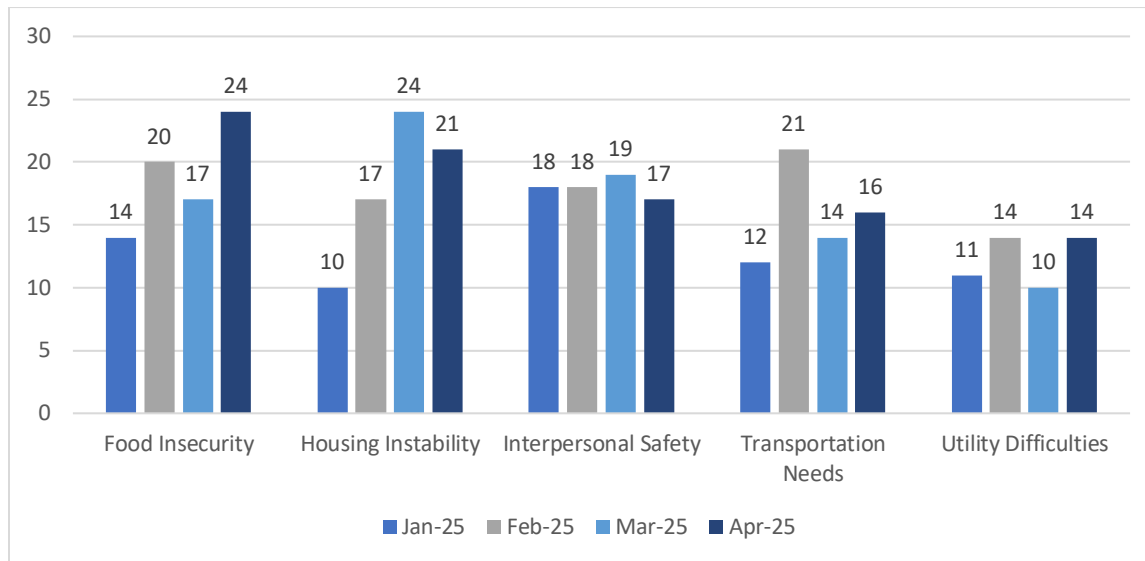
PROJECT TEAM

Team Member	Project Role (Executive Sponsor, Project Lead, Subject Matter Expert (SME), Facilitator)
	Executive Sponsor
	Facilitator/Project Lead
	SME (Nursing Leadership)
	SME (Quality IAS)
	SME (Care Coordination)
	SME (Quality)
	(Ad-Hoc: IAS Infrastructure)
	(Ad-Hoc: Behavioral Health IAS Trainer)

Appendix J
Screening Rate by Week



Note. This control chart shows the screening rate across all five CMS SDOH domains.

Appendix K**Count of Positive SDOH Screenings by Domain and Month**

Appendix L**Project Cost Analysis**

Activity	Estimated Hourly Mean	Estimated Time (hours)	Cost
Completion of SDOH educational module by nurses	\$35	30 minutes (per nurse) *25	\$437.50
Construction of Tips and Tricks sheet	\$35	4 hours	\$140
Total			\$577.50