Leveraging Social Determinants of Health Screening to Improve Health Disparities in Primary Care Settings

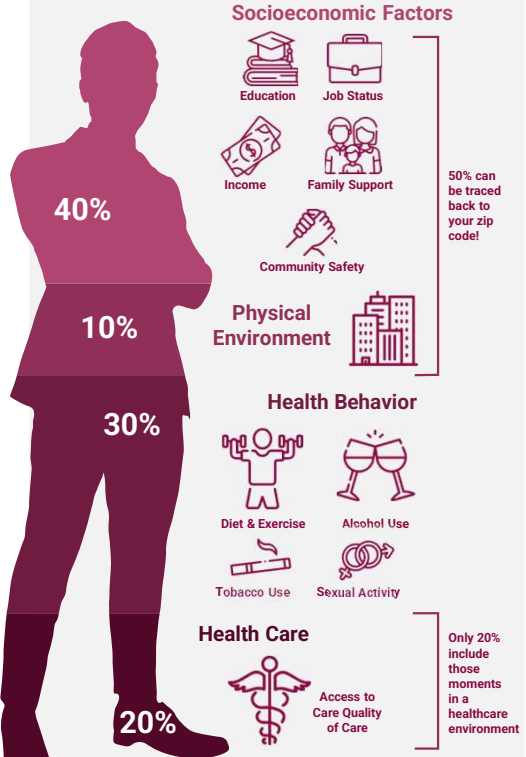
Dr. Timothy Nyakango Onserio, DNP, PCPM, MSN-CTN, BSN, RN

Introduction

Social determinants of health (SDOH) 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 (WHO, 2017).

- People of color disproportionately suffer from economic disadvantage and worse health outcomes that are preventable (RWJF, 2014).
- According to Andermann (2018), 80% of patients' social needs were not met by providers.

"Did you know...that 80% of what makes up someone's health is determined by what happens outside of the hospital and health clinic? Of the 80%, the largest segment is made up of the "Social Determinants of Health" or "Socioeconomic Factors".



Problem Statement and Study Objectives

- Because clinicians feel helpless in assisting patients with social challenges, many refrain from asking about social issues and focus instead on medical treatment and lifestyle counseling.
- The clinic did not have a standard for evaluating SDOH prior to the implementation of this quality improvement project. Providers were solely accountable for referring patients to community services.
- A key goal of the DNP project was to SDOH data to aid in the formulation of holistic patient care and referrals to appropriate community resources.

Short Term Goals:

- Screen 100% of patients for SDOH during in-office clinic visits
- Compile a list of resources available in the community for referrals

Long-term Goals:

- 100% of patients at the practice will receive appropriate referrals for social needs.

Methods

Pre-intervention:

- Patient self-reporting of SDOH concerns

Intervention:

- DNP student and clinic staff administered SDOH screening tool.
- Adapted PRAPARE Screening tool (NACHC, 2019) was integrated into the daily schedule with other intake forms
- Setting/Duration: Semi rural specialty primary care clinic in Southern Maryland; data collection X 14 weeks

Population:

- Mixed population: Medicaid, Medicare, Private pay for service (> 18 years of age); and self referral

Tactics:

- Staff training on importance of collecting data on the social determinants of health and how it aligns with activities that your organization is already doing
- Flyers about SDOH screening to increase patients

Implementation Plan/Instruments

- The PRAPARE standardized SDOH screening tool was used to increase healthcare provider awareness of social issues affecting patients who seek care at the clinic.
- The screening tool is one of the only validated comprehensive SDOH screening tool. The complete PRAPARE tool includes 21 questions.

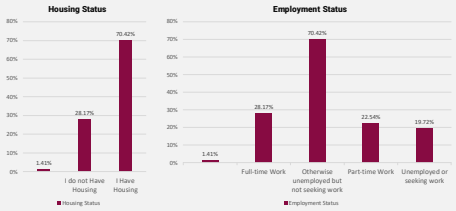
Data Analysis

- Once the PRAPARE screening tool responses was entered into Excel spreadsheets at which time the data was double checked for accuracy, and missing data identified and managed.
- Data was analyzed using mathematical, statistical, or computational algorithms

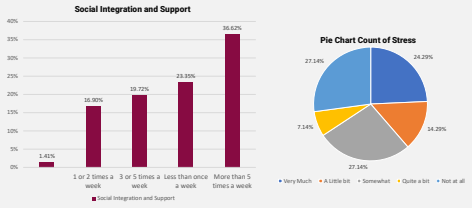
PRAPARE
Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences

Results

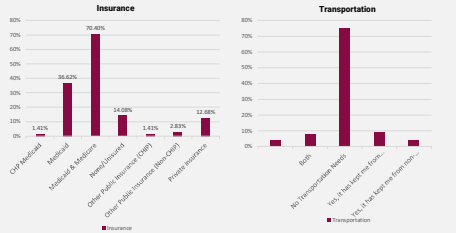
Housing Status & Employment Status



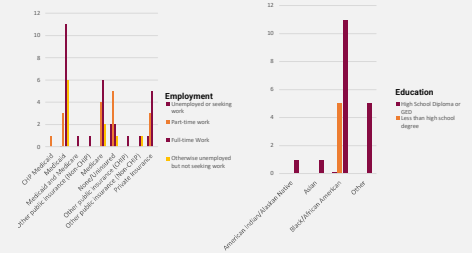
Social integration & Stress levels



Health Insurance & Transportation



Relationship Between Employment & Insurance: Race and Education



- **Among the total number of 71 valid respondents, the Whites (43%) are higher than most of other categories followed closely by Black or African American (42%)**
- **Among 71 patient respondents, more than 77% of patients were comfortable speaking English whereas 22% of patients preferred other languages than English.**

Discussion

Key Points:

- The project purpose was accomplished according to the original project timeline.
- The standardized SDOH PRAPARE screening tool (NACHC, 2019) was used successfully for this project
- There is more evidence-based research to support SDOH screening in clinical care to positively affect population health and reduce health inequalities (Andermann, 2018)
- SDOH screening is an emerging area of clinical practice; still requires a great deal more research and ongoing continuing education for implementation in practice (Andermann,2018)

Barriers:

- Staff were challenged at times to fit the screening into their workflow on busy days.
- Self-reported data and the use of a convenience sample recruited from a single clinic in a suburban area

Limitations:

- This study has limitations due to self-reported data and the use of a convenience sample recruited from a single clinic in a small urban area. Women were more likely to participate. A nationally representative sample would be helpful in future studies.

- Social determinants have a major impact on health outcomes- especially for the most vulnerable populations. Factors such as a patient's education, income level, and environment must be considered when providing treatment and care.
- Recent estimates attribute 10 to 20 percent of health outcomes to medical care, 30 percent to genetics, 40 to 50 percent to behavior, and 20 percent to the social and physical environment(ICSI, 2014)

Education Access and Quality | Health Care and Quality | Neighborhood and Built Environment | Social and Community Context | Economic Stability

Conclusion

Implications

The findings from this study support the notion that primary care clinics are an appropriate setting for assessing social and behavioral determinants of health. Providers can identify the under lying needs and factors affecting the health of their patients through social determinants of health screenings. Through routine screening for social determinants of health precision medicine will develop treatment plans that consider not only a person s genetic make up but also their social environment.

It will be necessary to conduct further studies to examine the impact of administering questionnaires on the clinic workflow and integration into the electronic health record.

Future Implications:

Recommendation to measure long term goals and impacts of SDOH on health outcomes on specific chronic illness such as diabetes

This project should be adopted and adapted to other primary care clinics to further decrease health disparities and increase population health across the U.S. and beyond

Acknowledgements

This project could not be possible without the following people for their contributions and guidance on this project:

- Dr. Karen Kalmakis (DNP Program Chair) / Dr. Pamela Aselton (Faculty)
- Dr. Isaac Donkoh (Study site preceptor and mentor) / Mr. Ishmael Onserio
- Ms. Angela Summerville(Site Manager) and Ms. Marissa Gilligen (Site Coordinator)

References: Andermann, A. (2018). Screening for social determinants of health in clinical care: Moving from the margins to the mainstream. Public Health Reviews, 39. https://doi.org/10.1186/s40985-018-0094-7 | Berkowitz, S. A., Hulberg, A. C., Hong, C., Stowell, B. J., Tirozzi, K. J., Traore, C. Y., & Atlas, S. J. (2016). Addressing basic resource needs to improve primary care quality: A community collaboration programmed. BMJ Quality & Safety, 25(3), 164–172. https://doi.org/10.1136/bmjqs-2015-004521 | Gottlieb, L. M., Wing, H., & Adler, N. E. (2017). A systematic review of interventions on patients' social and economic needs. American Journal of Preventive Medicine, 53(5), 719–729. https://doi.org/10.1016/j.amepre.2017.05.011 | Institute for Clinical Systems Improvement (2014). Going Beyond Clinical Walls: Solving Complex Problems | National Association of Community Health Centers. (2019b, January) Community Health Center Chartbook. Retrieved from http://www.nachc.org/wp-content/ uploads/2019/01/Community-Health-Center-Chartbook-FINAL-1.28.19.pdf | https://www.cdc.gov/socialdeterminants/index.htm