Improving Screening for Social Determinants of Health and Subsequent Resource Referral in the Midwestern University Glendale Campus Multispecialty Clinic

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INTRODUCTION

- According to the World Health Organization, the Social Determinants of Health (SDoH) are "the nonmedical factors that influence health outcomes," categorized into five domains: economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context.[1,2]
- On October 18, 2023, the Midwestern University Glendale Multispecialty Clinic (MSC) officially switched EMR platforms from Allscripts to Epic.
- 1 year following the EMR transition, the patient response rate to SDoH screening questions has remained lower than expected despite the new opportunity to track and address this data.
- As Osteopathic physicians, failure to address the SDoH, which falls under the Behavioral-Biopsychosocial Model of Osteopathic Care, leads to suboptimal care for our patients from the lens of our profession.[3]

OBJECTIVES

- A targeted intervention geared towards the Family Medicine (FM) patient population will be implemented, aiming to increase the patient response rate to SDoH screening questions through a patient educational handout describing what the SDoH are and why this data is valuable in treating them effectively.
- A provider workstation document will be created that will list relevant ICD-10 codes for documentation of SDoH impacting patients, as well as instructions to bill for addressing these concerns.
- A resource referral handout will be created that can be provided to the FM patients stratified as "at-risk" to help them address the most common SDoH factors impacting their health.[4]

METHODS

- A literature review was conducted using PubMed to determine what challenges providers faced in obtaining SDoH data, as well as challenges faced in implementation of methods to address them.
- Data on SDoH question response rate was collected from the Epic EMR for the FM patient population using the SDoH Operational Dashboard and Slicer Dicer Dashboard functions under supervision of the project P.I. All data was de-identified.
- All three documents (patient educational handout, provider workstation document, and resource referral handout) were created and approved by the MSC Best Practices Committee before implementation.
- Response rate was analyzed and compared using descriptive statistical methods.
- Visualization methods were utilized to portray change in response rate over time, pre-and-post implementation of the patient educational handout.

PATIENT EDUCATIONAL HANDOUT

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The Social Determinants of Health

Before your visit, please answer the questions in MyChart. Here's why this information is important to us.

What are the Social Determinants?

Social Determinants of Health (SDOH) are five areas that have an impact on health, well-being, and quality of life. Answering these questions about life conditions helps us partner with you to improve your health.[1]

The Social Determinants:

1. **Education Access and Quality**
   Having access to education often means better health and a longer life.[2]
2. **Economic Stability**
   Programs to help people find jobs, get advice on careers, find good daycare for kids, and policies that help with food, housing, healthcare, and schooling can make people healthier and happier.[2]
3. **Neighborhood and Built Environment**
   Where you live can affect how healthy you are. Some neighborhoods have a lot of violence, bad air or water, and other things that can make you sick or unsafe.[2]
4. **Health Care Access and Quality**
   In America, around 1 out of every 10 people don't have health insurance. Understanding why people can't access care can help more people get the medical care they need.[2]
5. **Social and Community Context**
   Connecting with family, friends, and our community can affect how we feel and our health. It's important to have ways to help people get the support they need so they can be healthier and happier.[2]

What is the impact on health?
Social determinants can be more important than health care or lifestyle choices in influencing health. Studies suggest that SDOH account for up to 55% of health outcomes. That's a huge impact on health.[3]

Why do we want you to answer these questions?
At Midwestern University, we really care about your health and believe everyone should have access to quality care.

Answering these questions before your appointment will help your doctor understand what might be affecting your health. We look forward to helping you with any challenges you are facing, and making sure everyone in your family gets the care they need.

Questions?
Send us a message in MyChart, or call us at (623) 537-6000.

References:

1. Social Determinants of Health at CDC: Centers for Disease Control and Prevention. Updated December 8, 2022. Accessed March 11, 2024. https://www.cdc.gov/about/sdoh/index.html
2. Social Determinants of Health. U.S. Department of Health and Human Services. August 18, 2020. Accessed March 11, 2024. https://health.gov/healthypeople/priority-areas/social-determinants-health
3. Social Determinants of Health. World Health Organization. Accessed March 11, 2024. https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1

PROVIDER WORKSTATION DOCUMENT

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Social Determinants of Health Documentation Codes for Providers

Diagnosis Record	Associated ICD-10 Diagnosis Code
205393-EDG Social Isolation	Z60.4
313305-EDG Alcohol Use	Z78.9
365736-EDG Financial Difficulty	Z59.9
706169-EDG Tobacco Use	Z72.0
726393-EDG Lack of Physical Activity	Z72.3
1501937-EDG Assistance Needed with Transportation	Z74.8
1508156-EDG Mental Distress Evident on Examination	Z73.3
1548471-EDG At Risk for Depression	Z91.89
1572168-EDG Problems in Relationship with Spouse or Partner	Z63.0
1763086-EDG Food Insecurity	Z59.41
1873080-EDG At Risk for Postpartum Depression	Z91.89
1994846-EDG Housing Instability	Z59.819
2011669-EDG Inadequate Housing Utilities	Z59.12
1993615-EDG Difficulty Demonstrating Health Literacy	Z55.6

Per the AAFP: Using HCPCS Code G0136 for Social Determinants of Health Risk Assessment

- These G0136 billing code can only be billed for in Medicare and Medicaid patients once every 6 months, and it must be meaningfully used, in that you plan to provide resources to address the at-risk social determinant(s) you are documenting through the above Z codes
- CMS Code Descriptor: G0136
- *G0136 - Administration of a standardized, evidence-based social determinants of health risk assessment tool, 5-15 minutes, not more often than every 6 months*
- The SDOH Risk Assessment must be reported in conjunction with:
  - An office/outpatient or a home or residence evaluation and management (E/M) visit, which can include hospital discharge or transitional care management services. It is not expected that the SDOH Risk Assessment would be provided with a low-level office visit E/M (i.e., 99211).
  - Behavioral health visits, such as a psychiatric diagnostic evaluation (CPT code 90791) and health behavior assessment and intervention services (CPT codes 96156, 96158, 96159, 96164, 96165, 96167, 96168).
  - As an optional element of the annual wellness visit (AWV).
- You may use these Z codes for patients not on Medicare or Medicaid to add to their diagnoses or problem list, but they cannot be billed for through the G0136 code, such as with Medicare and Medicaid patients

RESOURCE REFERRAL HANDOUT

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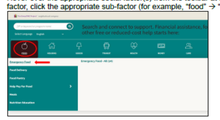
Resources to Address Barriers to Your Care

At Midwestern University, we really care about your health and believe everyone should have access to quality care and stability in other aspects of life. If you or your family are struggling, we want to help! Please visit the following website for resources to help you with your current challenges.

1. Visit the AAFP Neighborhood Navigator: https://navigator.aafp.org/
2. Type in your zip code and hit "search."

3. Hover over the appropriate social factor(s) from the toolbar at the top. From the selected social factor, click the appropriate sub-factor (for example, "food" → "emergency food").



4. In the top right corner beneath the toolbar of factors at the top of the screen, sort by closest proximity to your zip code or by relevance as needed.

Questions?
Send us a message in MyChart, or call us at (623) 537-6000.

RESULTS

	Jul '24 – Nov '24	Nov '24 – Feb '25	*p*-value
Screening Rate	83.87%	77.41%	p<0.00001
Positivity Rate	67.52%	67.01%	p=0.28434

Table 1: Population screening rate and positivity rate across all SDoH domains in the FM patient population before and after patient educational handout implementation.

- Population screening rate for the FM population across all SDoH domains was measured for the four months preceding (Jul '24 – Nov '24) and after (Nov '24 – Feb '24) the patient educational handout's implementation.
- Population positivity rate for the FM population across all SDoH domains was measured for the four months preceding (Jul '24 – Nov '24) and after (Nov '24 – Feb '24) the patient educational handout's implementation.
- Screening rate decreased following implementation of the patient educational handout ($p<0.00001$).
- Positivity rate decreased following implementation of the patient educational handout ($p=0.28434$).
- N.B.: Positivity rate reflects patients who are defined as medium or high risk in any domain per Epic's internal algorithm.

REFERENCES

Scan me!

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*Declared Not Human Subjects Research (Exempt) by MWU IRB on 16 Apr 2024

CONCLUSION

- Despite the implementation of the patient educational handout, screening rate in the FM population decreased a statistically significant amount.
- Additionally, the positivity rate in the FM population decreased following patient educational handout implementation, though the decrease was not statistically significant.
- However, Epic notes that screening only counts for a year after completion, indicating that while the screening rate and corresponding positivity rate decreased, the population size that had active screening questionnaires on file in the pre-and-post-implementation periods differed during this timeframe.
- The continually fluctuating number of actively counted screening questionnaires may account for and confound this decreased rate, and this fluctuation would, therefore, act as a limitation in determining the true accuracy of how Epic portrays this tracked data.
- Another potential limitation is that Epic has only tracked this SDoH questionnaire data since April 2024, six months following the EMR transition; as a result, we do not yet have a full year of SDoH survey data to use as a true baseline for subsequent years.
- Since it is not yet apparent if the patient educational handout has had the desired effect on improving screening rates after only one four-month data collection cycle, further monitoring will be needed to determine if the screening and positivity rates' continued fluctuation occurs in a yearly cycle depending on the number of active surveys on file, and if positivity rate decreases following implementation of the resource referral handout.
- Despite the potential decrease in screening and positivity rates across all domains, it remains clear that over two-thirds of the MSC's FM patient population is defined as being medium or high risk of at least one SDoH domain per Epic's internal algorithm. This reinforces the need for continued provider implementation of the resource referral handout to at-risk patients moving forward, in a continued and concerted effort to address these barriers to care under the Behavioral-Biopsychosocial Model.