American Hospital Association™

Advancing Health in America

Part 1–Screen: Building an Integrated SDOH Screening Process

October 12, 2022

Organized by:

ACHI

AHA Community Health Improvement

Sponsored by:

Metro Health

Welcome & Housekeeping

1. Attendees have been **muted**. Please make comments or ask questions in the Chat.

2. Send a chat message **AHA Host** with any technical issues.

3. If desired, you can **indicate your organization or city, state** by hovering your pointer over your video & clicking on the … and selecting “Rename”.

American Hospital Association™

Advancing Health in America

MetroHealth | Institute for H.O.P.E.™

ACHI
AHA Community Health Improvement

Building a Comprehensive SDOH Screening and Response Model Within a Health System

Part 1 – Screen: Building an Integrated SDOH Screening Process

Nabil Chehade, MD, EVP, Population Health and Corporate Services

Kevin Chagin, Manager, Advanced Analytics & Data Operations

Mark Kalina Jr., Senior Analyst

Andrea Orosz, Systems Analyst II, Information Services

Jordan Adkins, Clinical Informatics Analyst II, Clinical Informatics

MetroHealth

Devoted to Hope, Health, and Humanity

- Serving Greater Cleveland since 1837
- The essential safety-net health system for the most at-risk members of our community
- Open and accessible to all (95% of Cuyahoga County residents live within 10 minutes of MetroHealth care)
- The region's essential public-health leader during times of crisis
- 300,000+ patients making 1.5 million visits annually
- Provide care at four hospitals, four emergency departments, more than 20 health centers and 40 additional sites in Northeast Ohio
- Operate Ohio's top rehabilitation center, the region's most experienced Level I Trauma Center, and Ohio's only adult and pediatric trauma and burn center
- Total Community Benefit: $238.6 million

MetroHealth | Institute for H.O.P.E.™

Identifying and acting on the social drivers of health as an integral component of care, through programs and partnerships for:

- Fresh, healthy food
- Stable, safe housing
- Legal assistance
- Education
- Job training
- Transportation
- Language and literacy
- Digital connectivity
- Connection with others
- Safer neighborhoods
- … And much more

Health, Opportunity, Partnership, Empowerment

Outline

Why is this Important?

- The Impact of Social Drivers of Health on a Community
- Why is Screening for SDOH Important

What Questions to Ask?

- Overview of Example Questions and Risk

Implementing SDOH Screens

- Evolution of Administering our Surveys
- Best Method for Administering Surveys
- Screening in Ambulatory Clinics

Lessons Learned

The Impact of Social Drivers of Health

Social Drivers of Health are factors within a person's environment that can impact their health and quality of life that can include:

- Access to Healthy Food
- Education and Training
- Safe, Stable Housing
- Job Opportunities
- Reliable Transportation

Medical care is estimated to account for

10-20%

of health-related outcomes, leaving the remaining

80-90%

to be accounted for by SDOH[1]

Social Drivers of Health Lead to Adverse Health Outcomes

This is no difference in Cleveland, OH and The MetroHealth System with Higher Rates of:

- Cardiovascular Disease 200 per 100,000 (US Overall 166)

- Infant mortality 8.7 per 100,000 (US overall 4.5)
  City of Cleveland 12

- Kids 6 years of age or under - 8.2% have dangerous blood lead levels (US Overall 3%)
  City of Cleveland 12.4%

- City of Cleveland residents lack sufficient physical activity at a rate of 58% (US Overall 33%)

2018 Cuyahoga County Community Health Assessment

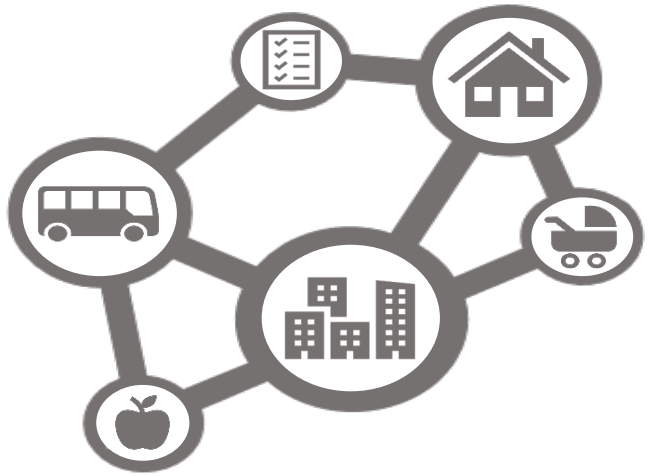
Why is Screening for SDOH Important

In a Clinical Setting

Ambulatory Clinics

Important for the healthcare team to recognize how social needs impact clinical outcomes

- Social barriers that prevent adhering to treatment plans
- Unable to travel to and from appointments, delaying care



Inpatient, Outpatient and ED

Knowing and addressing social needs prior to discharge can help patients live a healthier life

Prevent unnecessary hospitalizations and ED visits

- Patients who are seeking a warm place to sleep or a meal

Why is Screening for SDOH Important

in non-clinical settings

Within a Community

- Help allocate resources
- Fund projects / build programs
- Promote community referrals
- Reduces disparities

Within an Organization

Screening employees to identify and address social needs can help

- Decrease sick days
- Decrease missed workdays
- Increase productivity
- Increase employee satisfaction

Redesigning how healthcare and community organizations work together to help communities thrive

Screen for SDOH

- Self > MyChart
- Provider > care setting
- CHW > community
- Team > COVID vaccination clinics

CONNECT

Connect to Meet Needs

- Electronic > Unite Ohio platform
- Curate relationships for people needing more assistance
- Design interventions based on identified community needs

RESPOND

Close the Loop in Real Time

- Inform clinical team & CBOs
- Verify patient needs met
- Reduce duplication
- Identify strength & gaps within social service delivery system

EVALUATE

Evaluate Impact

- Track outcomes at individual & community level
- Prove impact, outcomes, & cost-effectiveness
- Supply data & narratives to drive policy change

IMPROVE

Utilize process and outcome data to drive program evaluation, research and continuous program improvement

How to Choose the Right Questions

Choosing questions that pertain to you

Select questions that are relevant for your organization based on your end goals

1. Provide help to the individual
2. Reduce financial burden to the hospital system/organization
3. Research – identify risk to help obtain grants and fund pilots

Define Goals…

Screen all primary care established patients for SDOH

Understanding how SDOH impact MH patients and their health

Provide social needs services to patients that are at risk and request help

Choosing questions that pertain to you

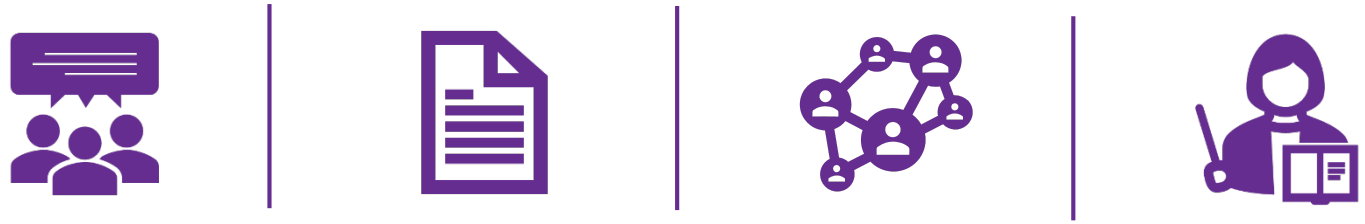
If available, look within your electronic health system for foundational questions

It was important for us to select questions that were:

1. Standardized across other organizations
2. Meaningfully asked questions

If we could not find a question that fit our needs, we convened groups to discuss creating our own questions

E.g. internet connectivity – We recognized in 2019 that it was critical for us to screen patients for digital connectivity and Internet access. Internet questions were not apart of the foundational questions and needed to develop new questions. We had programs to link individuals to internet and wanted to focus our questions on access to internet from their home or any other devices.



Overview of Example Questions

Food Insecurity[2]

If a patient answers "sometimes true" or "often true" to either question they are defined as "at risk" for food insecurity.

1. Have you worried your food would run out before you had money to buy more?

   □ Never True □ Sometimes True □ Often True

2. Did the food you bought just not last, and you didn't have money to buy more?

   □ Never True □ Sometimes True □ Often True

Stress[3]

If a patient answers "Very much" , or "Rather much" then they are defined as "at risk". If a patient answers "To some extent" or "Only a little" then they are defined as "some risk".

1. How often do you feel stress these days (tense, restless, nervous, anxious, or trouble sleeping)? □ Very much □ Rather much □ To some extent □ Only a little □ Not at all

Overview of Example Questions

Transportation[4]

If a patient answers "Yes" for either question they are defined as "at risk" for unmet transportation needs.

1. In the last 12 months, has the lack of transportation kept you from medical appointments or from getting medications? □ Yes □ No
2. In the last 12 months, has the lack of transportation kept you from meetings, work, or getting things needed for daily living? □ Yes □ No

Internet Access

If a patient answers "Yes" to having internet access at home, then they are "not at risk". If the patient answers "No" for both questions, then they are "at risk".

1. Do you currently have internet access at home? □ Yes □ No
2. Do you have internet access on a device or in another location?
    1. If Yes, Where?
        □ On a cell phone □ Work □ Other (such as library) □ Multiple Access Options

Overview of Example Questions

Financial Resource Strain[5,6]

If a patient answers "Very hard", "Hard" or "Somewhat hard" then they are defined as "at risk" for financial resource strain.

1. How hard is it for you to pay for the very basics like food, housing, medical care, and heating? □ Very hard □ Hard □ Somewhat hard □ Not very hard □ Not hard at all

Housing Stability[7]

If a patient answers yes to questions #1 or #3 or enters a value for question #2 that is higher than 2 then they are defined as "at risk" for housing stability.

1. In the last 12 months, were you unable to pay the rent or mortgage on time?

   □ Yes □ No

2. In the last 12 month, how many places have you lived?
3. In the last 12 months, did you ever sleep in a shelter or not have a steady place to sleep? □ Yes □ No

Overview of Example Questions

Housing Problems

If a patient checks any box other than "None" they are at risk for housing problems.

1. Do you have any problems at home with:

□ Pests □ Mold □ Lead paint or pipes □ Water leaks □ Smoke detectors missing/not working

□ Oven/Stove not working □ Lack of heat □ None

Utilities

If a patient answers "Currently shut off" then they are defined as "at risk". If they answer "Yes" then they are defined as "some risk".

1. In the last 12 months, has the electric, gas, oil, or water company threatened to shut off your services? □ Yes □ No □ Currently shut off

Overview of Example Questions

Social Isolation[8]

The patient receives a point for each favorable answer. 4 points = "not at risk", 2-3 points = "some risk", 0-1 points = "at risk".

1. In a typical week, how often do you talk on the phone with family, friends, or neighbors?
   □ Never □ Once a week □ Twice a week □ Three times a week □ More than 3x a week
2. How often do you get together with friends or relatives?
   □ Never □ Once a week □ Twice a week □ Three times a week □ More than 3x a week
3. How often do you attend church or religious services?
   □ Never □ 1 to 4 times per year □ More than 4 times per year
4. Do you belong to any clubs or organizations (such as church groups, unions, fraternal, athletic, or school)? □ Yes □ No
5. How often do you attend meetings of the clubs or organizations you belong to?
   □ Never □ 1 to 4 times per year □ More than 4 times per year
6. Are you currently:
   ☐ Married ☐ Widowed ☐ Divorced ☐ Separated ☐ Never married/Single ☐ Living with partner

Overview of Example Questions

Physical Activity[9]

The answers from both questions are used to calculate the number of minutes of physical activity per week. If the patient reports 0 minutes they are "at risk". If they have 10 – 140 minutes per week they are at "some risk". 150 minutes or greater they are "not at risk"

1. On average, how many days per week do you engage in moderate to strenuous exercise (like walking fast, jogging, dancing, swimming, biking, or other activities that cause a light or heavy sweat)?

   □ 0 days □ 1 day □ 2 days □ 3 days □ 4 days □ 5 days □ 6 days □ 7 days

2. On average, how many minutes per day do you engage in exercise at this level?

   □ 0 min □ 10 min □ 20 min □ 30 min □ 40 min □ 50 min □ 60 min □ 70 min □ 80 min

   □ 90 min □ 100 min □ 110 min □ 120 min □ 130 min □ 140 min □ 150+ min

Overview of Example Questions

Intimate Partner Violence[10]

If a patient answers "Yes" to any of the following questions they are defined as being "at risk" for Intimate Partner Violence (IPV).

1. In the last 12 months, have you been afraid of your partner or ex-partner?
   □ Yes □ No
2. In the last 12 months, have you been humiliated or emotionally abused by your partner or ex-partner?
   □ Yes □ No
3. In the last 12 months, have you been kicked, hit, slapped, or otherwise physically hurt by your partner or ex-partner?
   □ Yes □ No
4. In the last 12 months, have you been forced to have any kind of sexual activity by your partner or ex-partner?
   □ Yes □ No

Overview of Example Questions

Employment

There is no defined risk for this question.

1. What is your current employment status:

□ Employed Full Time □ Employed Part Time □ Student – Full Time □ Student - Part Time

□ Not Employed □ Retired □Self Employed □ On Active Military Duty

Education

There is no defined risk for this question.

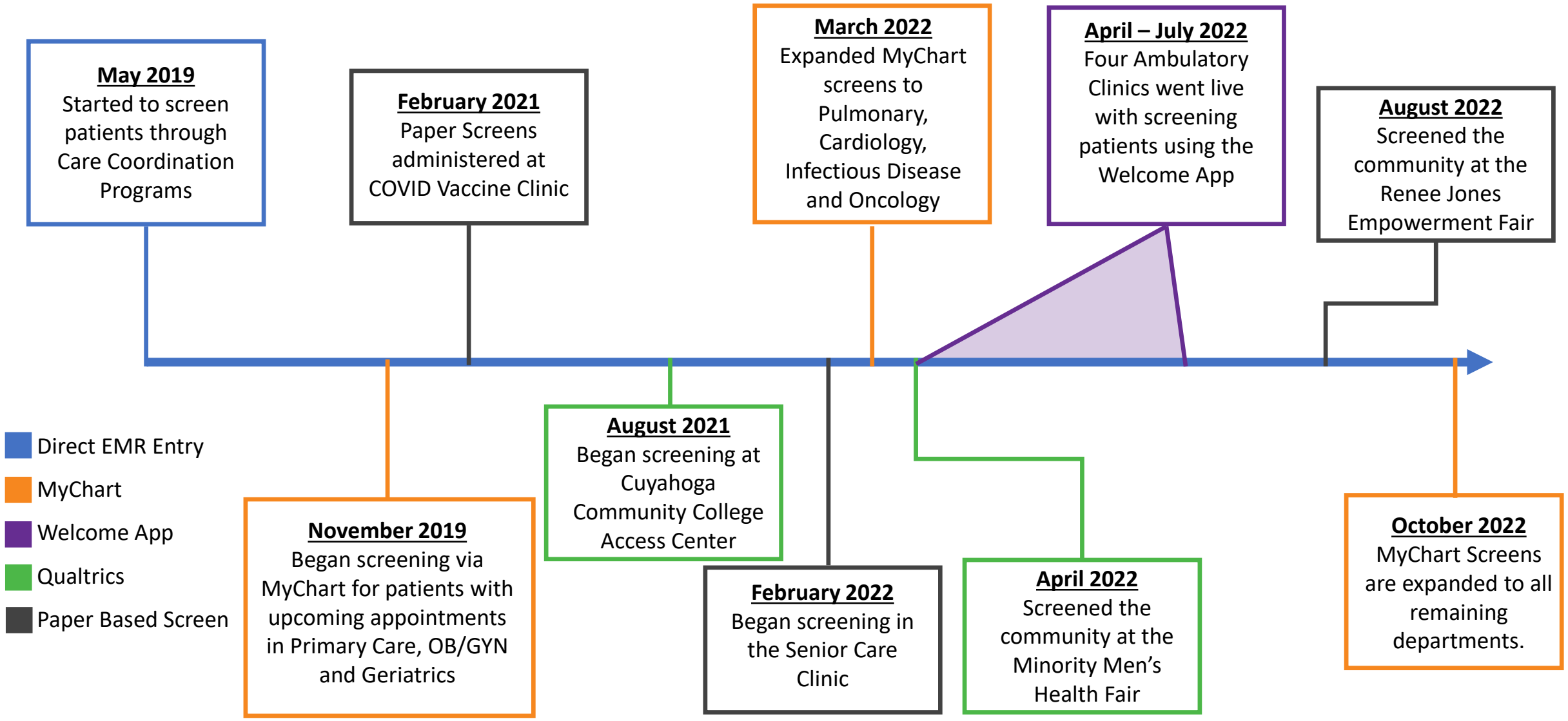
1. What is the highest level of school you completed, or highest degree you have received?

□ Never Attended School □ (____) grade □ High school graduate or GED □ Some College, no degree □ Associate's Degree (2 year) □ Bachelor's Degree (4 year)

□ Master's Degree (MA, MS, MSW, MBA) □ Professional school (MD, DDS, JD, PhD)

Implementing Screens within a Healthcare System

Evolution of Administering Our Survey



Screening in Ambulatory Clinics

Understand the Clinic Workflow

Listen to the Clinical Staff

What is the Patient Preference?

Training Staff

Check-ins and Revisiting the Workflow

Being Active in Problem Solving

Best Methods for Administering SDOH Surveys within an EMR

Initial Challenges of Collecting SDOH Responses in Epic

Information Services and Clinical Informatics were informed of the following challenges as it relates to collecting SDOH information using Epic:

- Low patient response rate. There was only one area responsible for outreaching to our patients to screen them for.

- Patient follow up was difficult because it relied on providers manually checking patient's charts.
  - Unless a provider configured their own report or went into each of their patient's charts to view SDOH responses from the SDOH Wheel, there was not anything configured to automatically notify providers when a patient was marked as high-risk based on their response to one or more of the questions.

- The Epic-released SDOH questions didn't capture a few additional details we wanted to know about our patients, including whether or not they wanted assistance if they had a high-risk response.

Challenge #1: Low SDOH Response Rate

Challenge: Initially, patients were screened for SDOH only during telephone encounters with their Care Manager or Social Worker. There were many questions to get through for SDOH and it was increasing the length of the calls. This resulted in a low patient response rate since the staff were running out of time due to time constraints.

Resolution: We took a multi-faceted approach to resolve this issue, which consisted of making 3 (soon to be 4) Epic applications available for use

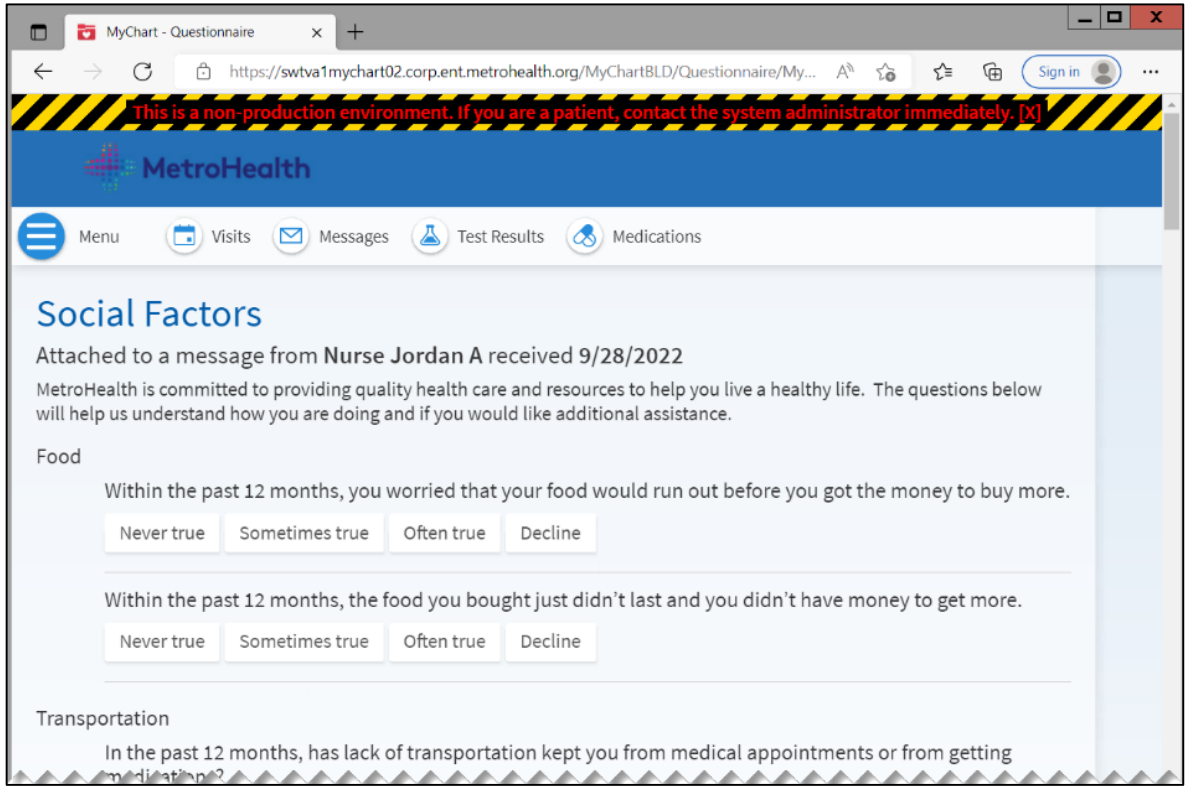
- MyChart Questionnaires
- Welcome
- Captive Mode
- *Coming Soon - Bedside

Collecting Patient Responses for SDOH Using Epic: MyChart Questionnaires

Method #1: MyChart

There are 3 Ways a Patient Receives the Questionnaire via MyChart?

- An assigned staff member can manually send a patient the MyChart questionnaire at any time via a secure MyChart message
- The Epic system will automatically send the questionnaire to the patient 30 days prior to appointment.
- After one year from their previous response, the system will automatically send the patient the questionnaire to collect updated responses.



How Can Patients Access the Questionnaire in MyChart?

- Any time in the "Questionnaires" tab in MyChart.

OR

- During E-Check In.

Collecting Patient Responses for SDOH Using Epic: MyChart Questionnaires

Method #1: MyChart

How Was The MyChart Questionnaire Programmed?

- Duplicated the Epic-released patient-entered SDOH MyChart Questionnaire.
- Created an extension record to have the responses entered by the patient to automatically file into their Epic chart.
- Configured the questionnaire to be valid for 364 via an item in the record so if a patient hasn't answered the questionnaire in 364 days, the system will automatically send the patient the questionnaire to fill out again.

Collecting Patient Responses for SDOH Using Epic: Welcome Kiosk or iPad

Method #2: Welcome Kiosk or iPad

How Does a Patient Access the Questionnaire via Epic's Welcome Application?

- A patient can use the Welcome Kiosk or clinic's iPad to fill out the SDOH questionnaire upon arriving for their visit.

How Can Patients Access the Questionnaire Using Welcome?

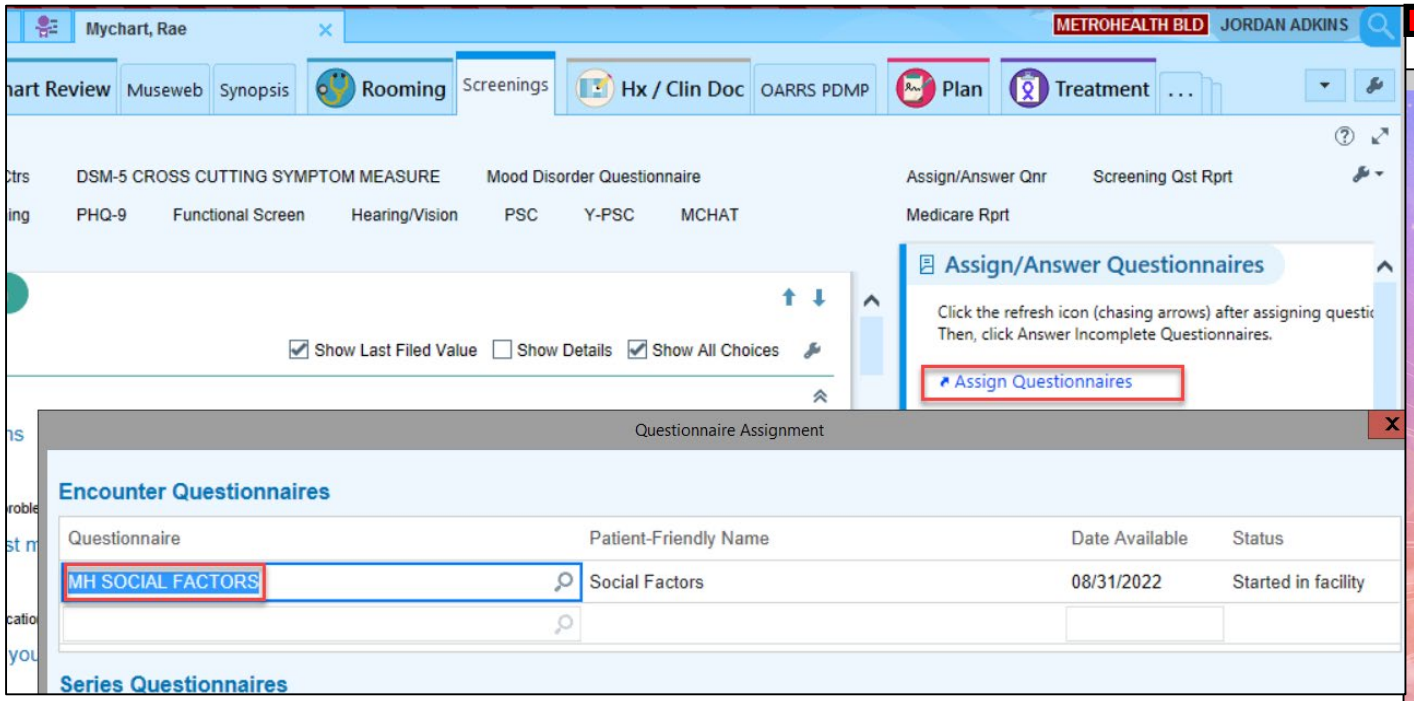
- During Check-In in their clinic's waiting room.

Collecting Patient Responses for SDOH Using Epic: Captive Mode

Method #3: Captive Mode

How Does a Patient Use Captive Mode?

- When a patient has been roomed, their provider can give them secure access to fill out the questionnaire.

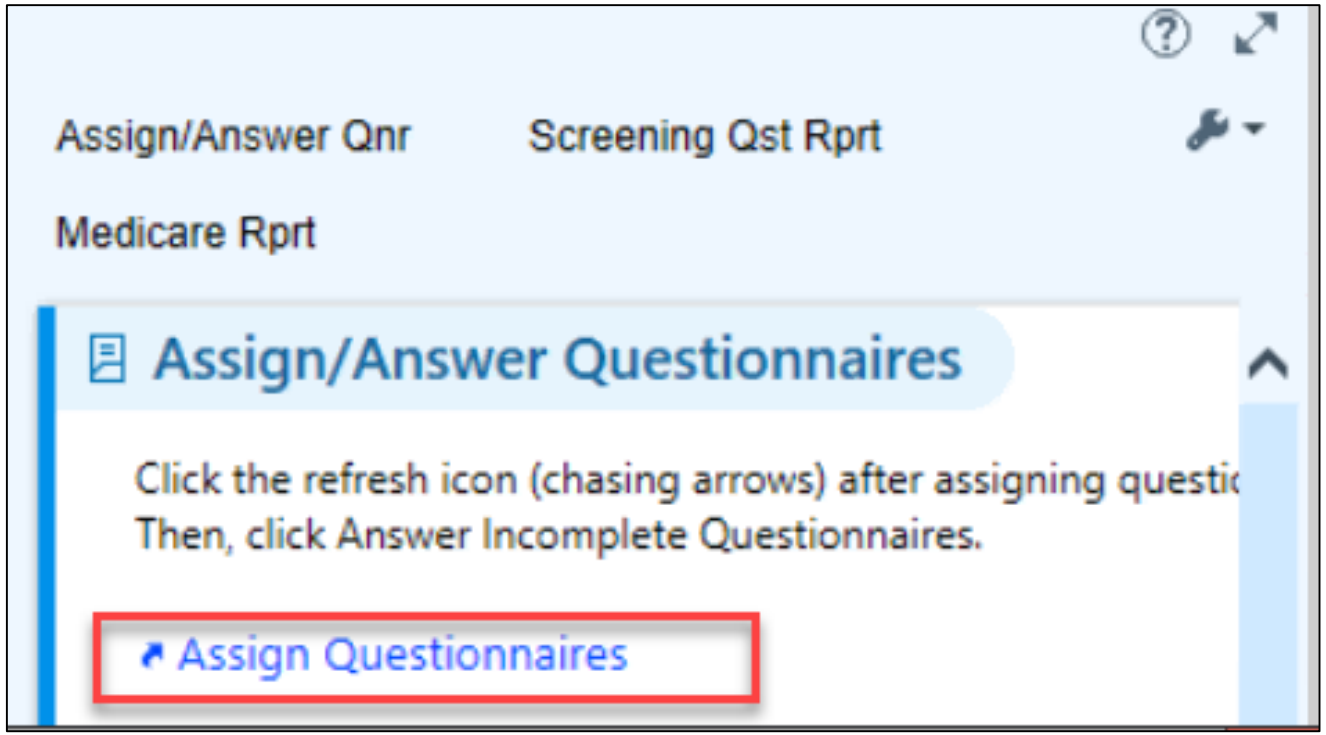


Collecting Patient Responses for SDOH Using Epic: Captive Mode

Method #3: Captive Mode

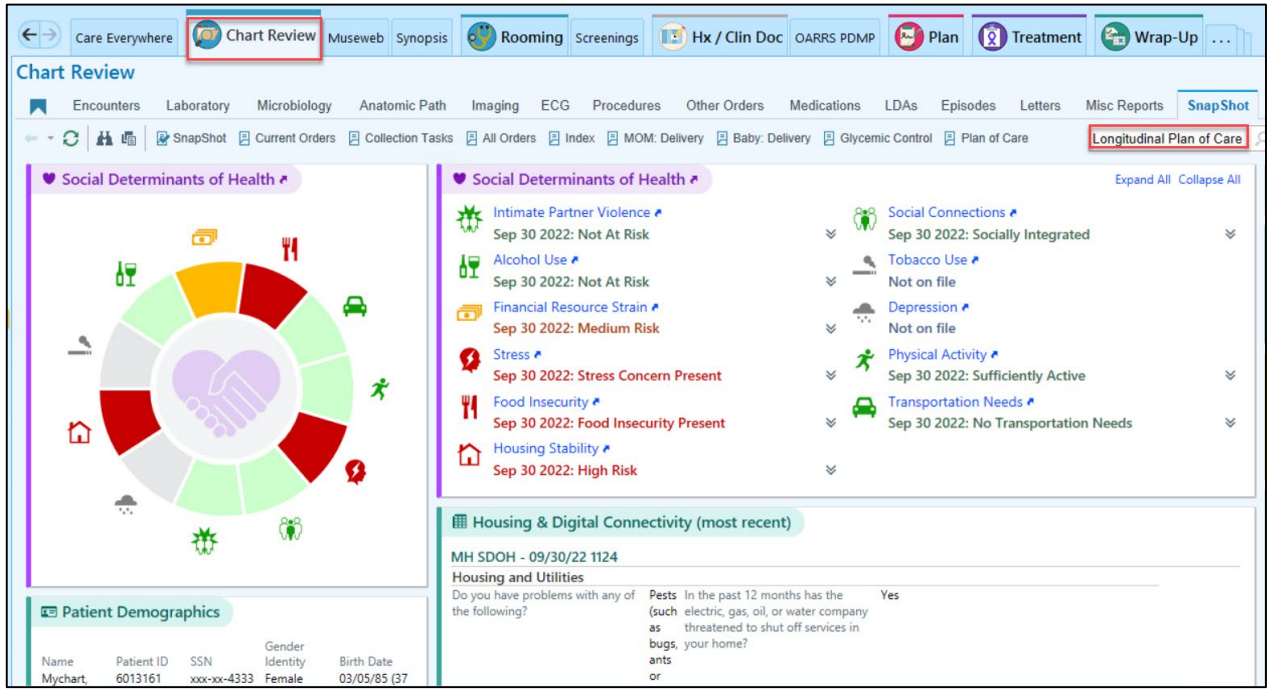
How Was Captive Mode Programmed?

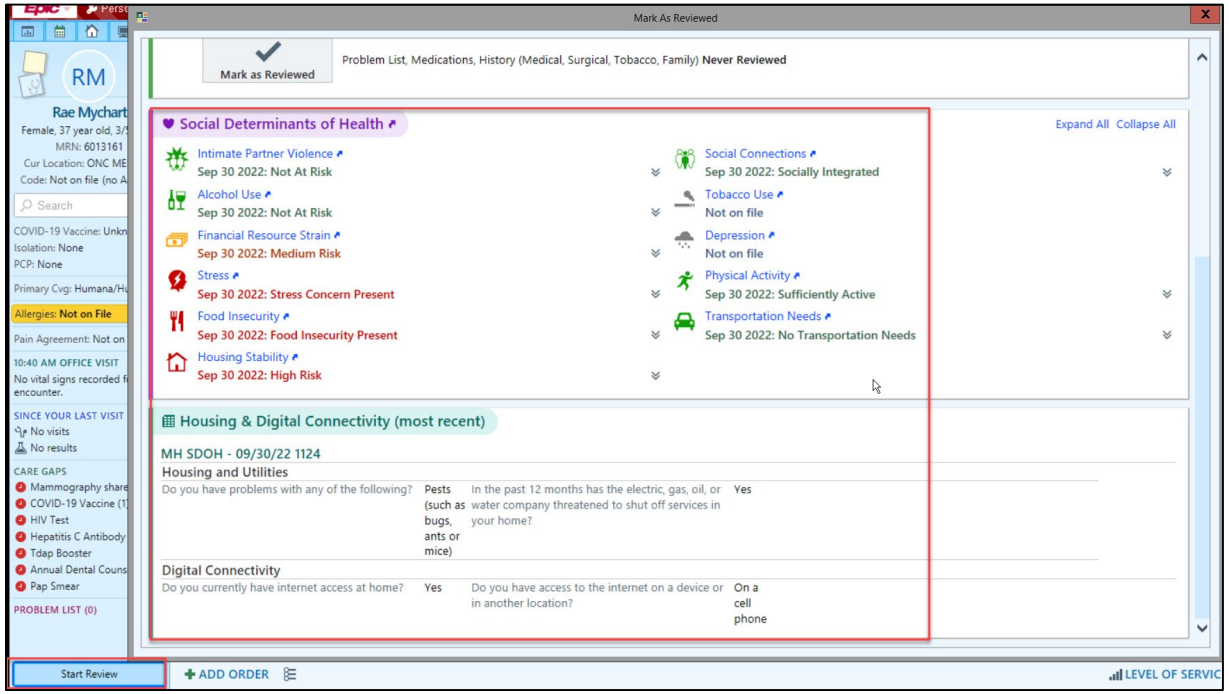
- Make the "Assign/Answer Questionnaires" section available in the clinical workspace to the provider can access the SDOH questionnaire.



Challenge #2: Automated Notifications for Timely Outreach To At Risk Patients

- **Challenge:** Slow turn around time on following up with patients who had high-risk responses due to lack of automation in Epic.
- **Resolution:** Epic Analysts customized and designed an automated workflow alongside The Institute for H.O.P.E.™





Automated Notifications for Timely Outreach for At Risk Patients

How Did We Program Automatic Notifications?

- We utilized silent Best Practice Advisories (BPAs) in Epic to automatically route In Basket notifications to The Institute for H.O.P.E.™ pools for patient follow up.

- When a patient selects a response for a question that is coded in Epic as “at risk” the response is routed immediately.

- If a patient did not answer a question or the patient’s response is defined as “some risk” in our system, automated routing does not occur. This is to eliminate burn out.

Challenge #3: Avoiding Outreach to At Risk Patients Who Do Not Want Assistance

- **Challenge:** Patients who did not want to be followed up with were being outreached due to their "at risk" response(s).
- **Resolution:** We customized and designed additional questions that were added to the end of the SDOH Questionnaire that inquired with the patient if they would like assistance.

Avoiding Outreach to At Risk Patients Who Do Not Want Assistance

How Did We Program Our Custom "Request for Assistance" Questions?

- Configured an additional Flowsheet/Questionnaire row and add new records to existing SDOH Flowsheet/SDOH Questionnaire.

- Configured the Flowsheet row and Questionnaire row to cascade a question that captures what the patient would like to receive assistance for upon the patient responding "yes" to the initial question.

- Configured a silent Best Practice Advisories (BPAs) in Epic was configured to automatically route In Basket notifications to The Institute for H.O.P.E.™ Request for Assistance pool for patients who responded "yes" to the Request for Assistance question.

Lessons Learned

- Adding an additional question to determine if patient would like to request help
- Adding a new question that will determine why a patient who is at risk might not want help
- There is no one size fits all approach to screening
- Do not burden the patient with screening them multiple times a year
- Develop an SDOH screening council and communicate changes within the screening process to appropriate staff
- **Always, Always, Always** monitor the screening processes to catch issues early

Sneak Peek…

Wednesday, October 22, 10:30-11:30am CT
Part 2–Connect: Building Bridges from Health Care to Social Care

Wednesday, November 16, 10:30-11:30am CT
Part 3–Assess: Building a Data Process for Reporting, Research and More

Citations

1. Hood, C. M., K. P. Gennuso, G. R. Swain, and B. B. Catlin. 2016. County health rankings: Relationships between determinant factors and health outcomes. *American Journal of Preventive Medicine* 50(2):129-135.
2. Hager, E. R., Quigg, A. M., Black, M. M., Coleman, S. M., Heeren, T., Rose-Jacobs, R., Frank, D. A. (2010). Development and validity of a 2-Item screen to identify families at risk for food insecurity. PEDIATRICS, 126(1), e26–e32. doi:10.1542/peds.2009-3146.
3. Elo, A.-L., A. Leppänen, and A. Jahkola. 2003. Validity of a single-item measure of stress symptoms. Scandinavian Journal of Work, Environment & Health 29(6):444–451.
4. National Association of Community Health Centers, Association of Asian Pacific Community Health Organizations, Oregon Primary Care Association, and Institute for Alternative Futures. The Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE). 2016. www.nachc.org/prapare.
5. Puterman, E., J. Haritatos, N. E. Adler, S. Sidney, J. E. Schwartz, and E. S. Epel. 2013. Indirect effect of financial strain on daily cortisol output through daily negative to positive affect index in the coronary artery risk development in young adults study. Psychoneuroendocrinology 38(12):2883–2889.
6. Hall, M. H., K. A. Matthews, H. M. Kravitz, E. B. Gold, D. J. Buysse, J. T. Bromberg, J. F. Owens, and M.-F. Sowens. 2009. Race and financial strain are independent correlates of sleep in midlife women: The SWAN Sleep Study. Sleep 32(1):73–82.
7. Children's HealthWatch, Housing Stability Vital Sign. www.childrenshealthwatch.org
8. Pantell, M., D. Rehkopf, D. Jutte, S. L. Syme, J. Balmes, and N. Adler. 2013. Social isolation: A predictor of mortality comparable to traditional clinical risk factors. American Journal of Public Health 103(11):2056–2062.
9. Coleman. 2012. Initial validation of an exercise "vital sign" in electronic medical records. Medicine Science in Sports Exercise 44(11):2071–2076.
10. Sohal, H., S. Eldridge, and G. Feder. 2007. The sensitivity and specificity of four questions (HARK) to identify intimate partner violence: A diagnostic accuracy study in general practice. BMC Family Practice 8(1):49–58.

Thank you!

Upcoming Webinars

- Wednesday, October 26, 10:30-11:30am CT
  Part 2–Connect: Building Bridges from Health Care to Social Care

- Wednesday, November 16, 10:30-11:30am CT
  Part 3–Assess: Building a Data Process for Reporting, Research and More

Metro Health

ACHI
AHA Community Health Improvement

American Hospital Association™
Advancing Health in America

Exploring Multi-Sector Collaboration: A Playbook for New Rural Healthcare Models of Investment

American Hospital Association™
Advancing Health in America

Build Healthy Places Network

Wednesday, November 9, 2022 | 12:00 p.m. - 1:00 p.m. CST

Samantha Borow
Program Manager, Population Health
American Hospital Association

Colleen Flynn
Senior Director of National Programs
Build Healthy Places Network

Ashley Hernandez
Research and Product Manager
Build Healthy Places Network

Rebecca Lemmons
Regional Director of Community Health & Well-Being
Saint Alphonsus Health Syste

ACCELERATING HEALTH EQUITY
CONFERENCE

TOGETHER ON THE QUEST FOR HEALTHY ECOSYSTEMS

MAY 16-18, 2023 | MINNEAPOLIS

ORGANIZED BY American Hospital Association™ *Advancing Health in America* · ACHI AHA Community Health Improvement · IFDHE AHA Institute for Diversity and Health Equity

DETAILS AT EQUITYCONFERENCE.AHA.ORG

Follow us on Social Media

ACHI
AHA Community Health Improvement

@communityhlth

AHA Community Health Improvement (ACHI)

American Hospital Association™
Advancing Health in America