Bridging Communities and Primary Care: Addressing Unmet Social Health Needs via Process Improvement

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Background / Introduction

- Research has shown that up to 80 percent of an individual’s health is determined by social and environmental factors (Bibbins-Domingo, 2019), prompting healthcare systems to identify ways to systematically screen for, identify, and universally document unmet social health needs in diverse clinical settings.

- Identifying and addressing social health needs which can be referred to as social determinants of health, nonmedical drives and drives of health; can improve long term populations health outcomes and reduce health costs.

- Coordination and communication between and with healthcare systems and human service organizations remains siloed and disjointed.
The team reviewed pre-existing clinical data that showed only 11.5% of total emergency department (ED) follow-up patients seen on one medical module for a one-month period were screened for a social health need.

After additional review, there appeared to be a trend among the clinic’s entire patient population, not just ED follow-up patients.

After speaking with medical staff, we found a lack of consistency in screening tool utilization, with many providers utilizing no standardized screening tools to address social health needs.

Minimal system-wide screening and no standardized screening measures
- 15-20% of total patients screened for social health needs within ECU FM Clinic
- 2-4% screened on selected pilot module
Collaborative Team Members

Social Health Needs Advisory Team (Macro- and Micro-Level Team Members):

- **NCCARE360 Senior Engagement Manager, Unite Us** – Megan Carlson, MPH; Abby Butright
- **ECU Family Medicine Clinic Administration**, Jason Foltz, MD and Jennifer Blizzard, RN
- **NCCARE360 Coordinator & Quality Nurse Specialist/Health Coach**, Megan Thomas, BSN, RN
- **Gold Module Nurse Manager**, Judith Wade, BSN, RN
- **Community Health Liaison**, Megan Freeze, MD (C)
- **3rd Year Resident**, Luke Gergoudis, MD
- **Quality Improvement Faculty**, Lisa Hager, MBA
- **Behavioral Medicine Faculty**, Erika Taylor, MS, LMFT, BC-TMH
- **Research Assistant**, Hannah Barnett, MPH
- **Nutrition Faculty**, Kay Craven, MPH, RDN, LDN, CDCES
- **Interdisciplinary Student Learners**, Kathryn Clary, MD (C); Caroline Porter-Miller, PhD (C); Kayla Neal, BSN; Kaitlyn Vinson, MD (C)
AIM Statements

- **Global Aim:** To increase systematic identification of social health needs in ED and hospital follow-up (HFU) patients at ECU Family Medicine Center’s Gold Module.

- **Specific Aim:** Increase screening, identification and referral measures for unidentified social health needs in ED and HFU patients of ECU Family Medicine Center’s Gold Module by 3% over six months (May 2020).
Process Improvement Practice-Based Objectives

- Identify potentially unmet social health needs (i.e., transportation, housing, and food access) in ED and hospital follow-up (HFU) patients to optimize health outcomes and impact recidivism.
- Institute a standardized screening process and community referral workflow.
- Utilize internal staff to meet patient’s emergent social health needs.
- Provide patients with a more comprehensive set of wrap-around services and patient-centered intercollaborative care.
- Minimize the pre-existing gap among health and community systems of care.
- Increase prioritization of health risks related to non-medical drivers of health.
- Improve documentation of social health needs in the electronic health and records (EHR) system.
Implementation Timeline

Early October 2019
- QI project permissions
- NCCare360 Training
- Team compilation

Mid-October 2019
- Screener creation

Late October 2019
- Creation of:
  - Fishbones
  - PDSA Cycles
  - Flow Chart

November 2019
- Pilot of Screener Implementation
- Launch of NCCARE360 Network Integration

November 2019 - May 2020
- Screening continues
Flow Chart - Social Health Needs Screener for ED and Hospital Follow-up Patients at ECU Family Medicine Center’s Gold Module

An illustration of the patient-centered social health screening and referral workflow.

- **ED/H follow-up patient checks in at Gold Module**
- Patient is called to the back and roomed by Nurse Manager
- Nurse Manager (or identified back-up) explains Social Health Needs Screener
- Pt amenable to completing screener?
  - Yes
  - **Did Patient answer “Yes” to any questions?**
    - Yes
    - Referral sent to Health Coach and/or Social Worker (based on needs endorsed by pt)
    - Health Coach or Social Worker meets with patient or provides f/u via phone. Referral to NCCARE360.*
    - No
    - **Is Health Coach or Social Worker available?**
      - Yes
      - Health Coach or Social Worker will follow-up by phone when available. Referral to NCCARE 360.*
      - No
      - Place screener in Health Coach’s box for EHR entry
  - No
  - **Record MRN, Date, DOB, and PCP at Visit. Write “DECLINED” on screener**

- **Nurse Manager (or identified back-up) provides NCCARE360 consent form to and explains the referral system.**
- Referral to NCCARE360.*

*If patient has provided signed NCCARE360 consent form.
### Baseline Data

**Weekly Tracking**

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Total Screened</th>
<th>Negative</th>
<th>Positive</th>
<th>No-Shows</th>
<th>Missed</th>
</tr>
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<tbody>
<tr>
<td>Pilot</td>
<td>11/4-11/8</td>
<td>8</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>0</td>
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<tr>
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<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Week 2</td>
<td>11/18-11/22</td>
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<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Week 3</td>
<td>11/25/11/29</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Week 4</td>
<td>12/2-12/6</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Week 5</td>
<td>12/9-12/13</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Week 6</td>
<td>12/16-12/20</td>
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<td>0</td>
<td>2</td>
<td>5</td>
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<tr>
<td>Week 7</td>
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<td>0</td>
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<td>3</td>
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<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Week 9</td>
<td>1/6-1/10</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>19</td>
<td>12</td>
<td>7</td>
<td>8</td>
<td>16</td>
</tr>
</tbody>
</table>

**Indicated needs by type**

- Food: 41%
- Transportation: 30%
- Housing: 29%
- Other: 6%
Improvement Strategies Employed

PDSA 1: Screener Creation

- Screener developed (English and Spanish versions) using pre-existing social health questions found in the Electronic Health Record (EHR; EPIC)
  - Questions captured needs in the following domains: housing, food, and transportation
  - Provided to all Gold Module ED and hospital follow-up patients over age 18
- Included a section for patient to identify immediacy of endorsed need(s)
- Included a consent for referral to human service org to meet need(s)
- Over the course of project, screener was updated to include ARS, health insurance, PCP at time of visit, and easier-to-read font for patients
  - Data collection tool created to track all information
  - Micro QI Team created an alternate workflow for screening patients with visual impairments or those who were illiterate
PDSA 2: Pilot Phase

- Screener was tested for one week with ED follow-up patients whose primary provider is ECU Family Medicine-Gold Module and had a scheduled appointment for the pilot week.

- Received a self-administered social health needs screener while in the room for their medical visit.

- Screeners were administered by the module’s Nurse Manager the entire week.
PDSA 3: NCCARE360 Integration

- Community Health sector of QI team obtained lists of active human services organizations in ECUP catchment area and identified organizations to recruit into the system.

- Team members contacted each non-represented human service organization by telephone, utilizing a script with information on how to enroll into NCCARE360

- Bi-weekly review of active community organizations enrolled in NCCARE360, which was compared against previous lists to limit duplication of phone calls.

- Determined the large number of non-represented human services organizations may be better informed through more global efforts, like a community-wide education session. An NCCARE360 lunch and learn was scheduled and personal invites were made.
**PDSA 4: Improving Missed Screener Rates**

- Decrease number of patients meeting project inclusion criteria that are not screened.
- Implement a paper reminder system targeting Gold Module staff.
- Evaluate whether missed screening rates lowered post-reminder system.
- Continue enforcing reminder system or revise process.

**PDSA 5: Improving Screening Rates**

- Increase number of patients screened.
- Consider incorporating an additional patient population or including a provider’s full patient panel. QI team determined to include a full-time provider’s full patient panel.
- Pilot the inclusion of full patient panel for one day/week or one week. Evaluate test of change to determine efficacy in increasing days per week.
- Utilize percentage of change in screening rates post-inclusion of patient panel to determine whether to increase number of days the provider’s patient panel is screened.
Outcomes

Total Results of Screening from November 2019-May 2020 (n=88)

<table>
<thead>
<tr>
<th>Identified Social Health Needs</th>
<th>Food</th>
<th>Transportation</th>
<th>Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen Yes</td>
<td>18</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>%</td>
<td>68.0%</td>
<td>50%</td>
<td>46%</td>
</tr>
</tbody>
</table>

- Total Screens
- Positive
- No-Shows
- Missed
Lessons Learned Through QI Efforts

➢ High staff turnover and lowered staff volume led to increase in missed screenings
➢ Reduction in in-person patient visits due to COVID-19 precautions
➢ Decreased engagement of human service organizations within NCCARE360, resulting in longer wait times for resources
➢ Increased taxation of healthcare system in response to COVID-19 and re-prioritization of care needs
➢ Medicaid expansion currently on-hold in NC
➢ No virtual screening option available for virtual visits
➢ Possible underreporting of needs

Source: https://luis-goncalves.com/lessons-learned-scrum-coach/
Next Steps

➢ Continued to implement screening and resource referral protocols throughout ECU Family Medicine
  ➢ Currently working with the Geriatric Module to screen for social health needs in patient population

➢ Incorporated a virtual screening option through MyChart, using REDCap to distribute the screener before the patient’s appointment to streamline the process, with the help of a LINC Scholar

➢ Offered a starter framework for other primary care clinics seeking to model this work.

Source: https://www.positivelyaware.com/articles/next-steps