

## PATIENT PERCEPTIONS OF CARE: THE EFFECTS OF SOCIAL DETERMINANTS OF HEALTH

### Objective:

The primary objective is to connect patients with community resources to improve social determinants of health. Secondary objectives are improving patient satisfaction within the trauma and general surgery service, enhancement of physician-patient communication, betterment of surgery department HCAHPS scores, and increased understanding of correlations between patient satisfaction and social determinants of health.

We hypothesize that (1) directed screening and intervention can have a positive effect for patients and hospitals, (2) directed patient advocacy will have an effect on patients' perception of care, (2) social determinants of health will have an effect on patients' perception of care, and (4) traumatic injury and acute surgery will have an effect on patients' perception of care.

### Background and Significance of Research:

As more information is uncovered regarding the relation between social determinants of health and health outcomes, it is imperative that health professionals consider these factors when treating patients. Recently, ProMedica CEO, Randy Oostra, has made statements pointing to food insecurity as one of the factors most affecting patients in the Toledo area. To address this problem in the community, ProMedica has created a social determinants screening process and the Ebeid Institute, which provides healthy food in a former food desert. This Social Determinants of Health Screening Tool was modeled after ProMedica's own version and their efforts in addressing the social determinants of health within our community.

HCAHPS, previously known as Press-Ganey scores, are the single major measure of patient perception of care and satisfaction in the acute care setting. Nationwide, billions of centers for Medicare and Medicaid services funding is at stake for hospitals to gain and lose based on these scores. It is unknown at this time (1) what hospitals can do to increase their scores, (2) how social determinants of health affect patients' perception of care, and (3) whether acute injury/illness affects a patient's perception of care.

To test our hypothesis, we will implement three interventions: a socio-economic survey with referral to services that provide assistance for social determinants of health, creation of a trauma and general surgery-specific patient advocacy program to improve communication, and data collection using HCAHPS and SF-12 to measure changes.

### Methods:

#### Study Design:

We will be conducting this study as a prospective, non-randomized QI study that will look at patients 18 years of age and older who are admitted under the trauma and general surgery specialties. Patients will be identified through admission to the trauma or general surgery service or referred to surgery services.

Methods:

1. Eligible patients are identified during morning conference or consultation.
2. These eligible patients, or their representatives, will be approached by the study team.
3. Eligibility will be determined, ICF will be completed for those eligible.
4. Patient or representative will be given the Social Determinants of Health Screening Tool.
5. Patient or representative will be given the HCAHPS Feedback Tool.
6. Feedback on HCAHPS results will be given to relevant teams (nurses, doctors, etc.) immediately.
7. Patient or representative will be given the SF-12 Questionnaire.
8. Prior to discharge, patients will also be given referrals to designated community resources, depending on the results of the Social Determinants of Health Screening Tool.
9. On day 15 ( $\pm 7$  days) after discharge, included patients will receive a follow-up phone call where they will be asked if they have utilized the Social Determinants of Health Referrals. They will also be given a second HCAHPS Feedback Tool.
10. On day 30 ( $\pm 7$  days) after discharge, included patients will receive a follow-up phone call where they will be asked once more if they have utilized the Social Determinants of Health Referrals. They will also be given a second SF-12 Questionnaire.
11. Demographic criteria will be assessed to determine location/residence of patients that will be utilizing the community service.

Inclusion Criteria:

To be eligible for this study, a patient must meet the following criteria:

1. 18 years of age or older
2. Admitted to the trauma or general surgery services
3. Patient or legally authorized representative agrees to participate and is willing to sign informed consent

Patients who decline inclusion in social determinants of health screening will be offered participation in the HCAHPS Feedback Tool and SF-12 Questionnaire alone, without referrals.

Exclusion Criteria:

1. Anyone less than 18 years old
2. Any patient or legally authorized representative unwilling to sign informed consent
3. Anyone who expresses unwillingness to use referral services

Number of subjects:

This study will enlist 300 patients.

Study Setting:

The study will take place at the University of Toledo Medical Center and by follow-up phone calls.

*Primary and Secondary Outcome Measures*

1. Improve patient satisfaction
2. Increase access to needed community services bases on social determinants of health
3. Improve communication between the patient and health care team
4. Baseline HCAP data

*Data Collected:*

The most important variables to consider are patient age, race, gender, insurance status, employment status, past medical and surgical history including diagnosis, comorbidities, and medications, and results to Social Determinants of Health, HCAHPS, and SF-36 surveys.

Patient identifiers such as name and MRN will also be collected. Data will be coded and the data will be stored for 6 years as required by local policy.

*Procedures and Interventions:*

Patients will be given three separate surveys during the course of the study: Social Determinants of Health Screening Tool, HCAHPS Feedback Tool, and SF-12 Questionnaire. (**See attached surveys**)

Depending on the results of the Social Determinants of Health Screening Tool, patients will be given referral information for various community programs with the aim of addressing the Social Determinants of Health that each individual patient faces.

Results of the HCAHPS Feedback Tool will be relayed to the appropriate teams (nurses, physicians, etc.) so that corrections and improvements can be made.

*Risks:*

There is a potential risk of loss of confidentiality. The risk will be minimized by storing data in password protected computers, located in locked offices located in Dowling Hall on UTMC campus.

*Planned Data Analysis:*

Data will be collected on a paper data collection tool, and then transferred as soon as possible to a coded electronic file using patient de-identifiers that remove all 18 HIPAA identifiers. The paper information will be locked in a file cabinet and kept for 6 years after the study has been completed. After that point, the paper data will be destroyed using secure methods. The data collected will be analyzed to determine change in HCAHPS scoring, effectiveness of Social Determinants of Health Screening, and correlation with SF-12 results. Data will be analyzed using the SPSS data analysis software or a similar form of statistical software.