Aim Statement

Engage interdisciplinary student teams in a 6-month Grady Hospital-based intervention that decreases healthcare costs, improves outcomes for High-Utilizer patients, and provides a better service-learning platform for students.

Methods & Measures

One student team coordinates care for up to five High-Utilizers. Given the limited sample size of patients per team, most analysis will be concentrated on using descriptive statistics. With more data available over time, we will iteratively expand our data metrics.

Metrics will measure Patient Outcomes, Student Learning, and Costs to Grady. Values at 6 and 12 months will be compared to the baseline values. Ask about our rigorous measurement and evaluation plan!

High-Utilizer Inclusion Criteria:
- At least 3 inpatient admissions in the last year
- 2 or more uncompensated chronic diseases (may include mental health diagnoses)
- Age 18 or older

High-Utilizer Exclusions Criteria:
- Life expectancy < 6 months
- No reliable way to communicate with the patient (no phone, no email, etc.)
- History of abuse towards care teams

Background

• Healthcare costs are driven largely by a group of high-need, high-cost patients called High-Utilizers who constitute 5% of the population but account for 50% of health care expenditures (Fig. 1).
• Hotspotting (Fig. 2) is an intervention that addresses many needs of High-Utilizers and reduces both hospitalizations and overall mortality.
• Engaging interdisciplinary students (Fig. 3) helps High-Utilizers, students, and health systems. Interprofessional Education has been cited by the National Academy of Medicine, WHO, and National League for Nursing as pivotal to creating safe, affordable, and enjoyable healthcare systems.
• Here (Fig. 4-6) we present a robust and reproducible intervention called Healthcare Hotspotting to engage interdisciplinary graduate and professional students in delivering integrated, person-centered care for patients with complex health and social needs.

Figure 1: High-Utilizer Patients are an Urgent National Priority

Figure 2: Hotspotting Decreases High-Utilizer Mortality in RCT (n=1,736)

Figure 3: Engaging Interprofessional Students in Hotspotting Across U.S.

Figure 4: Student Hotspotting Intervention

• Partner with Grady Hospital Chronic Care Clinic (CCC)
• Hotspotting Team (HT) engages 3-5 High-Utilizers
• Make first contact with Patient in CCC
• Build trust: Patient consents to partner with HT
• Visit patient in their home or safe space
• Support patient as they navigate social service and healthcare system
• HT engages in motivational interviewing
• Continues until patient graduation or 6-months elapse

Figure 5: Student Hotspotting Curriculum

Opening & Closing Events

Mosaic Curriculum

Case Conferences

Skills Labs

Programmatic Operations

- Actions and requisite background to complete an intervention
- Leadership
- Trauma Informed Care
- Safety

Motivational Interviewing

- Method of engaging intrinsic motivation to change behavior

Addiction

- Concepts of working with patients experiencing addiction

Figure 6: Closer Look at Mosaic Curriculum Themes

Results

The 2017-2018 pilot team consisted of 5 students and 4 faculty mentors from the Schools of Medicine, Nursing, and Social Work from Emory and Georgia State Universities who accomplished the following:

- Established the administrative structure at Emory, GSU, and Grady.
- Initiated the structural framework for a hands-on program reflecting the unique needs of Grady and Atlanta.
- Developed community partnerships.
- Designed evaluation methods using the Georgia CTSA BERD Consult service.
- Recruited a team of 30 students and 9 faculty advisors for the 2018-2019 school year, with new involvement from Emory and GSU Law, Mercer University College of Pharmacy, Rollins School of Public Health (Emory), and Philadelphia College of Osteopathic Medicine.

Conclusions and Future Directions

Hotspotting teaches students skills and knowledge they could not learn better elsewhere, improves healthcare-associated costs, and most importantly, improves healthcare outcomes and quality-of-life for High-Utilizers. We plan to:

- Coordinate care for 20 High-Utilizers through regular home visits, close relationships, guidance through hospitals, state and non-profit agencies.
- Pursue incorporation of our program into Service-Learning curricula across Atlanta.

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