Duke Hot-Spotting Initiative (DHSI)

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Background

As costs of health care grow at an alarming pace with minimal benefit, health systems have been incentivized to create new care models to address this concern. DHSI was started in 2015 at the Duke University School of Medicine (SOM) and is structured as a relationship-based care management model for high risk patients. DHSI strives to increase patient trust in the healthcare system for Durham's most vulnerable residents while also offering first year students a clinically focused experience to learn the reality of the socioeconomic barriers and begin building their skill sets in addressing behavior change for underserved populations.

Intervention & Goals

Who: 24 students from SOM & 12 patients with poorly-controlled medical conditions and complex socioeconomic challenges at the Duke Outpatient Clinic (DOC).
What: 6-months, November 2017 – May 2018
Where: Patient homes, clinic appointments, phone calls

Student Expectations *(as applicable)*

- Use motivational interviewing to identify specific, measurable, attainable, realistic, and timely (SMART) health goals
- Connect patients to community resources
- Check & record patient progress in electronic medical records
- Coordinate with nurse care managers and physicians at the DOC
- Attend 13 didactic and debrief sessions designed to increase skills and knowledge of social determinants of health and resources

Patient goals (as *applicable)*
A: Reduce 6-month overall no-show rates & ED visits by 25%
B: (Increase the number of patients with controlled diabetes mellitus (HbA1c <6.5) and hypertension (<140/90)

Expansion goals:
A: Create interdisciplinary partnerships with nursing, social work, and pharmacy
B: Recruit 2-4 patients from Lincoln Community Health Center (LCHC)

Photo 1. Pair of students with their patient at the final dinner

Outcomes

Largest cohort of students (n=24), patients (n=12), and care managers/mentors (n=4)

Patients:

- Average 23% decrease in patient ED utilization rates during intervention vs 6 months prior to enrollment (n=12)
- Average 13% increase in no-show rates during intervention vs 6 months prior to enrollment (n=12)
- 4/8 patients with hypertension were controlled (140/90) after 6 months vs 2/8 prior to enrollment
- 4/7 patients with diabetes had HbA1c under 6.5% vs 3/7 prior to enrollment

Students:
A: Increase in overall student comfort in AAMCs core competencies, SMART goals, case presentations, EMRs, and community resources (n= 24)

Successes and Looking Ahead

- Launched new curriculum for 5 Nursing students in the Fall, revising for Summer 2018
- Increased professional diversity with mentors who from nursing, social work, and pharmacy, as well as a Masters in Social Work (MSW) student from North Carolina Central University
- Established partnership with Fresh Food Program at DOC to help patients access fresh produce every month
- Presented at the Consortium for Longitudinal Integrated Curricula (CLIC) Conference in Singapore in October 2017
- New continuing leadership with three MS3s from this year continuing and mentoring three incoming MS2s with Dr. Alison Clay as the SOM advocate
- Continuing as a curricular program with an eye towards expansion within the school and the greater community
- Working with physicians to identify patients and start pilot at LCHC

Photo 2: DHSI Cohort 2016-2017

About the Program

Albert Schweitzer Fellow 2017-2018
www.schweitzerfellowship.org
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