

Background

Temple University Hospital (TUH), located in North Philadelphia, operates as the safety-net healthcare system for the catchment area. TUH serves the greatest volume and highest percentage of patients covered by Medicaid in Pennsylvania. Within our primary service area, over 30% of area residents live below the federal poverty line. For example, median household income of the surrounding zip code (19140) is \$20,077.00, approximately half of the national average. Only 53.1% of this population has achieved a high school graduate educational level. Black and Hispanic/Latino patient represent 68% of the service area. [1] Disparities in chronic disease burden and outcomes are known to highly correlate with poverty, race, and education levels. Incidence and survival rates disproportionately disadvantage black patients.[2, 3] The target population for our community intervention is the medically underserved area encompassing the TUH footprint.



Figure 1: Patient Characteristics, 2022 TUH Community Health Needs Assessment

Philadelphia has higher tobacco and alcohol exposure rates (two major head and neck cancer risk factors) than Pennsylvania at-large. Cancer mortality rates were also highest in Philadelphia County, according to Southeastern Pennsylvania’s 2022 Community Health Needs Assessment (CHNA).[4] The analysis identifies a lack of knowledge about cancer screening and a fear of screening as two major barriers. Potential solutions recommended in the CHNA included the promoting cancer screenings and health education events, especially at community spaces.

Intervention

Two head and neck cancer screen events are planned: April 6, 2023 TUH hospital-based screening event and May 18, 2023 community-based partnership with the Frazier Family Coalition Health Fair. Both events are open to the public, specifically targeting the TUH service area. The goal of the events is to address health disparities in the target population through education, free health screenings, and health resources. Both events are being promoted through community organizations and TUH marketing.

We will offer free head and neck cancer (HNC) screenings, free oral hygiene kits, and provide education materials. A quiz-style game with prizes is planned to increase interest and interaction with the participants, testing knowledge on HNC risks and educating them in the process. We aim to decrease access to care barriers through resources for individuals identified through screening who merit additional head and neck surgical consultation. Informational packets will be provided with explanation on how to schedule appointments, instructions for patients who are uninsured, and on transportation support for outpatient follow up. Risk factor mitigation will be emphasized through smoking cessation programs.

Outcomes

The two events are expected to provide education materials for at least 100 individuals and free HNC screening for at least 75. We anticipate that knowledge of HNC risk will increase among all participants based on direct interactions and from the dissemination of education materials. Screened individuals with suspicious findings on exam will be provided with head and neck surgical follow up and additional information on addressing barriers to care. There will likely be a concomitant increase of HNC knowledge and understanding of risk factors in the TUH service area, through a waterfall effect in the community from participants at the two events. Past experience from prior community screening events suggests that early detection of undiagnosed HNC is probable, which may impact oncologic outcomes including survival. Furthermore, smoking cessation and other behavioral modification interventions are likely to improve community health broadly, beyond the reduction in HNC risk.

Budget

Grant funds will be used to develop and produce educational materials, obtain free oral hygiene kits (toothbrushes, toothpaste, mouthwash, floss, etc.), purchase prizes for the HNC knowledge quiz, and support community marketing for the screening events (radio, flyers, online). Screening materials including processing costs are expected to run around \$400. The oral care kits are projected to cost around \$250. [5] Educational resources will require approximately \$150 for production. We will limit the cost of prizes for participants to \$150. The remainder of the budget will be used on community promotion of the two health events.

There are no additional sources of funding support anticipated.

References

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