Outside Our Walls: the Case for City-Wide Collaboration to Reduce Disparities

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Boston, Massachusetts (MA), is known for its world-class health care institutions and groundbreaking therapies, including cancer. Yet the unfortunate reality is that these resources do not effectively reach all city residents. In a national study examining race-specific breast cancer mortality rates in the 50 largest US cities, Boston had the fifth highest Black-White disparity in breast cancer mortality.¹ The most recent data from the Boston Public Health Commission (BPHC) found that the premature breast cancer mortality rate was 78% higher for Black than for White women (14.1 vs. 7.9 per 100,000).²

What accounts for these disparities in a city with ample access to breast cancer screening, high rates of insurance, and

the most novel treatments?² We believe that efforts to reduce disparities in metropolitan areas must include planned coordination. MA Cancer Registry data demonstrate that Black and lower socioeconomic status women with breast cancer are 2–3 times more likely to delay treatment initiation and experience treatment interruptions related to the transfer of care between institutions, both of which contribute to poorer survival.³ While transfers of care occur for many reasons including patient choice or insurance requirements, the deleterious effects of transfers on treatment interruption could be alleviated by better coordination of care between facilities. Because of the large number of health systems, women in Boston may be more likely to transfer their care between institutions around the time of a cancer diagnosis. Like other highly competitive health care markets, coordination of breast cancer care between health systems has historically not been a priority in Boston.

In response to the documented disparities in breast cancer mortality,¹ the Boston Breast Cancer Equity Coalition (the Coalition) was established with the explicit goal of including diverse stakeholder perspectives, including patients, clinicians, patient navigators, non-profit agencies, and public health and public policy stakeholders, to develop *city-wide*

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solutions for these inequities in breast cancer outcomes. The Coalition identified three evidence-based strategies to reduce delays and interruptions in care in Boston: (1) systematic patient navigation; (2) establishing a regional patient registry to track women as they receive care in health systems across the city; and (3) systematic screening for social needs with a personalized referral plan for any barriers identified, including housing instability, food insecurity, security of basic utilities, financial barriers to care, transportation barriers, employment security, educational opportunities, caretaking responsibilities, and legal concerns. Building from the Coalition's vision, the four Massachusetts Clinical and Translational Award (CTSA) sites received a grant from the National Institutes of Health (NIH) National Center for Advancing Translational Sciences (NCATS) to fund an implementation trial, Translating Research Into Practice (TRIP; 1U01TR002070), to implement these three components to address city-wide health disparities. Detailed data collection, in addition to measuring our primary outcome of time to the initiation of treatment, is underway to understand how patients and providers perceive the intervention. Data will include elements from the electronic health record, information from systematic screening for social needs and specific community referrals, qualitative implementation data to measure fidelity and acceptability of our implementation, and surveys to measure the costs of implementation.

TRIP is implementing the three evidence-based tools noted above at academic medical centers in Boston that evaluate and treat the majority of women with breast cancer care: Beth Israel Deaconess Medical Center, Boston Medical Center, Dana Farber Cancer Institute, Massachusetts General Hospital, and Tufts Medical Center. While patient navigation is broadly endorsed nationally, there is limited consensus on the activities that patient navigators perform in practice, as well as their training, roles and responsibilities, patient load, supervision, and professional backgrounds. While all of the participating hospitals have breast cancer navigation services, breast cancer disparities have increased rather than declined.¹ To address variation in practice, TRIP developed standardized patient navigation activities and is working with the participating sites to implement a minimum standard of patient engagement.⁴ While the Massachusetts Health Information Highway (Mass HIway) has begun to establish a secure health information exchange that is accessible to all health care systems statewide, regardless of electronic health record vendor, the HIway infrastructure currently does not allow for "real-time" care coordination across institutions. TRIP therefore implemented a patient registry to track women as they receive care in sites across the city to be used by patient navigators embedded in the care delivery at each of the participating sites. This HIPAA-compliant secure RedCAP platform allows navigators to evaluate whether their patient has transferred

care or communicate a patient's plans to transfer care to another institution so that a coordinated hand-off can be facilitated or allow the recognition that a woman has not been received by a new institution in a timely way. While there is growing evidence that systematic screening for social needs and providing resource referrals to low-cost resources within the community to mitigate these needs is associated with improvements in health, the success of this type of intervention is complex and requires collaboration between a health care organization and community resources in a way that have not historically been a priority for health care organizations. Several Boston-area hospitals are also recently participating in a city-wide collaboration to support screening and referral for social needs to care across organizations with an initial focus on patients participating in Medicaid Accountable Care Organizations (ACOs). TRIP partnered with a commercially available web-platform (Aunt Bertha, a Public Benefit Corporation) to implement screening and referral across health systems to address social needs. Use of a shared platform by the navigators at participating sites promotes communication as well as sharing of timely information about the responsiveness of community organizations given the vicissitudes of resources. Dissemination plans include working with stakeholders in Chicago to explore how components of this intervention may be disseminated to another metropolitan area with racial disparities in breast cancer outcomes.

While TRIP integrates 3 evidence-based strategies, implementation in diverse settings is complex as the participating institutions have different workflows around the time of cancer diagnoses including different data systems and electronic health record systems and patient navigators have a variety of experience and training. Initiatives like TRIP are only a small part of the broader changes that are needed to reduce disparities in care and outcomes. By partnering with a community-led Coalition, TRIP is focused on a problem identified as important to the community. The willingness of these cancer treatment centers to collaborate, rather than compete with each other, is in and of itself innovative and provides a central foundation for TRIP's potential for success. By integrating systematic screening and referral to community resources to address social needs to care, we are examining a generalizable model using a platform integrated with the provision of care. TRIP will generate evidence to further our understanding of how to address disparities using a regional lens.

Elimination of health disparities requires a paradigm shift from individual or institutional responsibility to regional responsibility; this revised focus is critical to address delivery gaps that promote disparities, and presses institutions to work collaboratively to take

responsibility for events that occur outside of their walls. Cities like Boston, with substantial medical resources yet persistent disparities, have the opportunity to promote initiatives that move from competition to collaboration, with the goal of ensuring that all residents receive the same high standard of care.

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