



# HOW INNOVATION AND A NEW CARE DELIVERY MODEL ARE ADDRESSING HEALTH EQUITY AND TRANSFORMING THE WAY PUBLIC HOSPITALS DELIVER CARE

**Joseph Webb**

*D.Sc., MSHA, FACHE, CEO*

WHITE PAPER: September 15, 2021

---

# WHEM

(Webb Health Equity Model)

The pandemic has highlighted our nation's continuing struggle with health equity. According to the CDC, the number of individuals who have died from COVID-19 in the U.S. are disproportionately "Hispanic or Latino, non-Hispanic Black, and non-Hispanic American Indian or Alaska Native."<sup>1</sup> These underserved minority groups are victims of ineffective policies and a failed healthcare delivery system, the impact from which includes reduced access to affordable care, increased chronic disease, and poorer outcomes.<sup>2</sup>

The good news is that progress is being made—just not where some might suspect. Instead of large health systems with well-funded foundations, the most innovative transformations have come from public safety net hospitals—so called "last resort" hospitals. At a time when others talk about using innovation to reduce health inequity, address disparities, improve the health of populations, and reduce costs; community hospitals have succeeded in building a highly effective model. What they're doing is quite remarkable and completely repeatable in communities across the country.

## The Webb Health Equity Model (WHEM)\*

In 2015, Joseph Webb, DSc, FACHE, CEO at Nashville General Hospital (NGH), developed the Webb Health Equity Model (WHEM), a healthcare delivery process founded on the principles of evidence-based management. EBM is the "systematic application of the best available evidence to management decision-making, aimed at improving the performance of healthcare organizations."<sup>3</sup> As part of this approach, WHEM leverages the Patient Centered Medical Home (PCMH/PCSP) and Chronic Care Model to bring wholistic, proactive healthcare and prevention to the individual where they live—in the community.

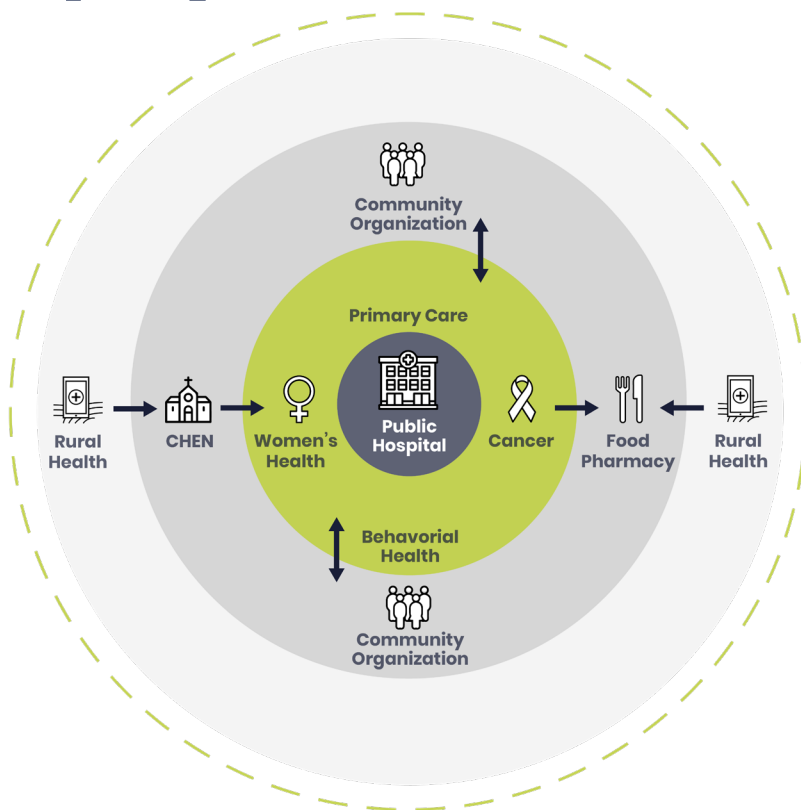


Image 1: WHEM Model

*\*WHEM is a model that addresses health disparities in both urban and rural communities through an evidence-based healthcare delivery approach.*



## Removing SDOH Barriers

Social determinants of health (SDOH) are considered the primary cause of health disparities across the country; they tend to correlate with health outcomes and mortality. For example, research shows that SDOH are closely correlated with an individual's risk of getting type 2 diabetes, their chance of being diagnosed, and their likelihood of dying from disease-related issues.<sup>4</sup> Fully integrated into WHEM, hospitals adopt clinical best practices for the treatment of chronic diseases like diabetes, hypertension, and respiratory illnesses. As part of this effort, they should collaborate with community initiatives such as Target: BP®, a program developed by the American Heart Association and the American Medical Association that focuses on reducing the “high prevalence of uncontrolled blood pressure.”<sup>5</sup>



*While it is a federal mandate that hospitals treat patients presenting in an Emergency Department (ED) regardless of their ability to pay, NGH voluntarily expands this option to patients no matter where they are in the care continuum. Cost should never be an obstacle to receiving appropriate healthcare.*



## Food Pharmacies: Food as medicine

One of the foundational tenants of WHEM is preventing and managing chronic disease. This requires continuous care coordination from the emergency room to ambulatory care to home. Food Pharmacy, which NGH has implemented as part of WHEM, is a prime example. The Food Pharmacy concept is like traditional food pantries in that they provide access to food for individuals living with food insecurity. But the Nashville General Food Pharmacy goes a step further by not only providing the individual with a food supply but educating individuals about which foods best fit within the care plan based on their chronic conditions. For example, a person living with diabetes would be educated about which foods increase or lower glucose levels. As part of this education, they receive

instructions on how to prepare these foods in a healthy way and with the tools they have available. Cancer patients can benefit from the Food Pharmacy as well since maintaining a healthy weight is critical to the body's ability to tolerate treatment. This has had a major impact on keeping cancer patients compliant to treatment protocols that require them to maintain weight during a difficult treatment regime. Evidence based on outcomes indicate that the Food Pharmacy has made a major impact on improving the survival rate of cancer patients at NGH.



## ***Addressing Health Literacy: CHEN***

According to the Center for Health Care Strategies, those with low health literacy experience “greater health care use and costs compared to those with proficient health literacy.”<sup>6</sup> Addressing health literacy is essential to creating healthier populations. Collaborating with community organizations like churches helps bring education to individuals where

they live. For example, NGH developed the Congregational Health and Education Network (CHEN) as a 501c3 with local churches and educational institutions. CHEN's mission is to increase health education to lower health disparities. The CHEN framework is built upon four pillars: education starting in kindergarten, health literacy, access to care, and member support. CHEN currently includes 100 faith-based organizations of all denominations throughout the Nashville area, working together to elevate health education for children and adults. These relationships create a “community” referral process as well where individuals can be connected in a personal manner to healthcare and other public resources of which they otherwise may not be aware.

## ***Delivering Healthcare and Well-care Through Community Collaboration***

A critical part of reducing the impact of SDOH and improving the health of communities is through preventative care and health screenings. WHEM addresses this need by establishing outpatient and specialty clinics. Service offerings should include comprehensive OB/GYN care, with an emphasis on prenatal care. Expectant mothers with unaddressed chronic conditions such as diabetes are at greater risk of complications throughout pregnancy and delivery. Having access to care early in the pregnancy can help providers proactively intervene to reduce complications and improve outcomes.



## 2020 Nashville General Hospital Outcomes

NGH experienced many challenges in 2020 due primarily to the COVID-19 pandemic. Yet, throughout it all, clinical outcomes improved.

**20%** 

*20% increase in number of patients in control of their diabetes compared to 2019.*

**78%** 

*78% of female patients between ages 50 and 74 seen in Internal Medicine Clinic received a mammogram in the previous 27 months.*

**79%** 

*79% of Internal Medicine Clinic patients were screened for depression.*

**1.2%** 

*ESI5 (Emergency Severity Index) decreased to 1.2%, well under NGH's 3% goal.*

*85.71% of NGH patients would recommend the hospital to patients and friends, according to the most recent Press Ganey patient satisfaction surveys.*

## QUALITY SUMMARY:

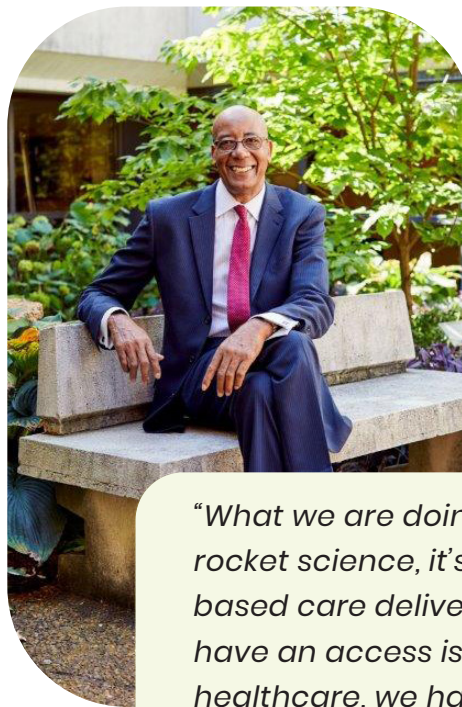
- *Joint Commission's Gold Seal of Approval accreditation*
- *NCQA Patient-Centered Medical Home accreditation*
- *NCQA Diabetes Recognition Program*
- *Silver-Level recognition by the Commission on Cancer for Nashville General's Dr. Robert E. Hardy Cancer Center*





## The Future of Community Health

The Reverend Dr. Martin Luther King Jr. said, “Of all forms of inequality, an injustice in health care is the most shocking and inhumane.”<sup>7</sup> Safety net hospitals understand this all too well, which is why they are in the best position to create meaningful change. Rather than being viewed as a resource of last resort, Nashville General and other urban hospitals are innovating more rapidly to address the root causes of Health Inequity offering substance over sound bites. Through innovation, collaboration, and evidence-based management tools like WHEM, community hospitals like NGH are achieving significant advances in the healthcare delivery process—one neighborhood at a time.



*“What we are doing here isn’t rocket science, it’s evidenced-based care delivery. We don’t have an access issue with healthcare, we have a health literacy and care coordination problem that traditional healthcare is not incentivized to solve. We’ve solved it in Nashville through our hub and spoke model, including a community-based strategy; with the right leadership, this can be done in any metropolitan city in America.”*

– Dr. Joseph Webb

## SOURCES

- 1 <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/racial-ethnic-disparities/disparities-deaths.html>
- 2 <https://smhs.gwu.edu/rodhaminstitute/sites/rodhaminstitute/files/HCReform%20-%20Disparities%20Report.pdf>
- 3 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6016354/>
- 4 <https://care.diabetesjournals.org/content/diacare/early/2020/10/31/dci20-0053.full.pdf>
- 5 <https://targetbp.org>
- 6 <https://www.chcs.org/resource/health-literacy-fact-sheets/>
- 7 [https://www.rwjf.org/en/blog/2013/01/\\_of\\_all\\_the\\_formsof.html](https://www.rwjf.org/en/blog/2013/01/_of_all_the_formsof.html)