# Case Study:

# **Addressing Health Outcomes Challenges at Northwell Health**

Northwell Health, the largest employer in the state of New York, is committed to improving health outcomes and reducing disparities within its diverse patient population. While its mission prioritizes advancing health equity, the organization faces challenges related to standardized metrics, technological integration, and infrastructure for addressing social drivers of health. These barriers reflect broader systemic issues, underscoring the complexities of achieving health equity in high-value care models.

# **Background**

Northwell Health serves patients from a highly diverse geography from varied socioeconomic and cultural backgrounds. The health system has recognized the critical role of addressing social drivers of health, which can account for up to 80% of health outcomes. However, without comprehensive standardized metrics, robust data systems, and seamless technology integration, efforts to implement equity-driven interventions face limitations.

# Challenges

## 1. Lack of Standardized Metrics for Equity

Northwell Health has struggled with the absence of consistent health equity metrics, a common issue among healthcare systems transitioning to high-value care. Without standardized health equity metrics, it becomes difficult to measure disparities, assess progress, and compare outcomes across populations. For example, each high-value care contract or arrangement has slightly different attribution models or focuses within the health equity space. It makes it difficult to apply universal approaches to addressing gaps in care through a population health lens. Instead, health systems have to focus on the overlap, as addressing all metrics

in every contract becomes too burdensome from a resource perspective.

# 2. Fragmented Technology Infrastructure

As Northwell Health moved toward digital transformation, gaps in technology integration emerged as a significant barrier. Legacy systems, coupled with disparate electronic health record (EHR) platforms, hindered the seamless flow of patient data across care settings. The fragmentation makes it difficult to view data across an entire system. For example, information is typically shared through spreadsheets or added to a data warehouse, which requires significant resources and technical expertise. This process leads to fragmentation, limiting the organization's ability to effectively coordinate care and address nonmedical needs, such as housing, transportation, and food security.

# 3. Challenges in Data Collection and Utilization

Robust data collection is essential for identifying health disparities and developing targeted interventions. However, Northwell Health encountered difficulties in capturing comprehensive social drivers data within its EHR systems. Each EHR system typically has its own workflows and screening tools. To ensure consistency, significant effort is needed to standardize the work. Ramsey Abdallah, assistant vice president of quality at Northwell Health, added, "We are undergoing a significant review of our systems to standardize where possible. This will enable us to obtain the granular data needed to analyze trends and better address the unique needs of vulnerable populations." He went on to add, "The bigger challenge will come with the training and implementation of the new workflows. Given our geographic region and its diversity, we have to tailor our approach to the local community."

## 4. Limited Interoperability

Northwell Health's efforts to collaborate with external partners, such as community organizations and public health agencies, were constrained by interoperability issues. For example, when a social driver such as food insecurity is identified, a referral can be made to a community-based organization. They can easily track the number of referrals, but the current system makes it difficult to detect if the referral loop was closed and if the issue was addressed. In the current state, most of this information is exchanged through spreadsheets, emails, or other non-digital, non-automated methods. These challenges prevented the effective exchange of critical patient data, further complicating efforts to address health inequities holistically.

# **Strategies and interventions**

Despite these challenges, Northwell Health has made concerted efforts to overcome systemic barriers and embed health equity into its care delivery models. Key strategies include:

## 1. Investing in Health IT Systems

Recognizing the limitations of its existing technology infrastructure, Northwell Health prioritized investments in interoperable health IT systems. The health system has elected to migrate to Epic as the enterprise solution. By adopting a single EHR, they are able to capitalize on Epic's enhanced capabilities and more easily build integrations of social driver data. This is driven by the fact that there would be fewer external integrations needed and that Epic has established integrations already available. Northwell Health hopes this will accelerate their ability to gain actionable insights into patient needs and disparities.

## 2. Collaborating with Community Partners

To address gaps in care, Northwell Health expanded partnerships with community organizations focused on housing, nutrition, and transportation. For example, they have partnered with Island Harvest,

Long Island Cares Inc., The Harry Chapin Food Bank, God's Love We Deliver, US Foods, and Baldor to start Food as Health, which helps communities deemed as "food deserts" by delivering healthy foods to homes where residents are hampered by chronic illness due to poor nutrition. Northwell Health is also collaborating with Chicago-based startup NowPow to utilize a platform that connects patients to community-based organizations, as well as with Harlem Grown, a network of urban farms providing underserved children with the skills and knowledge to produce sustainable and healthy food for their families and community. More recently, Northwell Health has continued its efforts to expand access to nutritious food by partnering with InstaCart Health. The leading grocery technology company in North America provides tools and resources to Northwell Health staff, patients, and communities that address social drivers of health, including access to healthy food and transportation. These collaborations enabled the health system to connect patients with essential resources and mitigate nonmedical barriers to health.

# 3. Embedding Equity Metrics in High-Value Care Models

Northwell Health has advocated for the inclusion of health equity metrics in high-value care reimbursement structures. By tying financial incentives to equitable outcomes, the organization seeks to ensure that underserved populations receive the targeted care they need. Additionally, Northwell Health has embedded health equity into its internal dashboards and applies a health equity lens to system priorities. A key example is the Accountable Care Organization (ACO) metrics, through which they track and trend performance by race, ethnicity, and preferred language. By trending data through an equity lens, the organization is better able to identify potential gaps, even in metrics that appear to be performing well in aggregate.

# 4. Training and Capacity Building

To support these initiatives, Northwell Health implemented staff training programs focused on culturally competent care and the collection of equity-related data. The organization is committed to building a workforce ready to address the challenges of tomorrow. These efforts align with the organization's broader goal of fostering an inclusive and responsive care environment.

#### **Outcomes and lessons learned**

While challenges persist, Northwell Health's efforts to integrate equity into its operations have yielded promising outcomes. Improved data collection processes have enabled the organization to identify disparities more effectively and develop targeted interventions. For example, through the integration of health equity data, Northwell Health has been able to identify practices in select ZIP codes where hypertension control rates are lower, enabling the team to design targeted interventions to that community. Additionally, partnerships with community organizations have strengthened Northwell Health's ability to address social drivers of health at scale.

Key lessons from Northwell's experience include the importance of:

- Standardizing equity metrics to ensure consistent measurement and accountability
- Investing in interoperable technology systems that facilitate seamless data sharing
- Engaging community partners to address social drivers of health comprehensively
- Advocating for policy reforms that align financial incentives with equitable outcomes

# **Conclusion**

Northwell Health's journey highlights the complexities of advancing health equity in a fragmented healthcare landscape. While systemic barriers related to measurement, technology, and integration remain significant, the organization's commitment to high-value care provides a strong foundation for driving equitable outcomes. By addressing these challenges through targeted investments, collaborations, and advocacy, Northwell Health continues to serve as a model for other healthcare systems navigating similar obstacles.