

Grant Outcome Report

Data Analysis on Brooklyn's Health Care System

The Problem

In 2011, the health care crisis in Brooklyn, a borough of 2.5 million people, came into sharp relief. Recognizing the imminent financial vulnerability of the health care safety net in Brooklyn, including hospitals at immediate risk of closure, New York State's Medicaid Redesign Team convened the Brooklyn Work Group in July 2011 to evaluate the hospital system in Brooklyn and make recommendations to ensure its viability. The workgroup was charged with making critical decisions about whether to close, merge, or restructure various entities

by November 2011. The workgroup needed to provide recommendations that would enhance primary care delivery; minimize unnecessary health care utilization; reduce provider waste and inefficiency; and help Brooklyn hospitals seize opportunities and manage the risks they face. Subsequent State funding would provide the operational and restructuring assistance needed to implement those recommendations.

To conduct its task, the workgroup held a number of public hearings and site visits in its first few months; developed a set of research and policy questions to assess Brooklyn hospitals and frame actionable recommendations; and collected a broad array of hospital performance data from the New York State Department of Health (NYSDOH). However, it needed additional data on neighborhood- and service-level health care utilization; geographic mapping of needs and resources; and an independent perspective to inform this study.

To address this need, the New York State Health Foundation (NYSHealth) awarded a grant to Welsh Analytics in August 2011 to consult for the Brooklyn Work Group and provide expertise and data analysis on the Brooklyn health care system.

Grant Activities and Outcomes

Using de-identified patient records from New York State's Statewide Planning and Research Cooperative System and other data sources, Welsh Analytics developed a data system to provide rapid, interactive tabular and graphic analysis of millions of patient records. These data tools provided a flexible view into the data, enabling users to move between both aggregated results and close-up views of specific hospitals, service lines, patient geographies, payer groups, referral sources, and other relevant data findings. The

KEY INFORMATION:

GRANTEE

Welsh Analytics LLC

GRANT TITLE

Data Analysis on Brooklyn's Health Care System

DATES

August 2011–January 2012

GRANT AMOUNT

\$65,000

FUNDING

Special Projects Fund

tools offered an opportunity to interactively explore empirical questions as they arose in the workgroup's deliberations, and the data products grounded the workgroup's understanding of neighborhood and service area differences. Furthermore, the mapping tools enhanced the workgroup's insights into Brooklyn neighborhoods' needs and resources, as well as residents' health care utilization and outcomes.

The project met its aims to **(1)** provide critical technical assistance to the workgroup through consultation on research questions, data development, data analysis, and collaboration in a report on findings and **(2)** make the data products and mapping resources developed in the course of the project accessible for public use. By doing so, the project provided readily transferrable tools and an approach that can facilitate similar analyses elsewhere.

The project's data results were incorporated into the workgroup's final report, "[At the Brink of Transformation: Restructuring the Healthcare Delivery System in Brooklyn](#)," in December 2011.¹ The report endorsed integrated systems of care tailored to community needs; value-based and performance-based payment mechanisms; and a focus on improved prevention, quality, and outcomes. Among the key findings identified by this project:

- Community health needs and resources vary significantly by neighborhood.
- Brooklyn hospitals compete for market share—Brooklyn patients with commercial insurance or in need of surgical services are increasingly seeking such care in Manhattan.
- Brooklyn patients are not using less costly primary care when most appropriate. High rates of preventable hospital admissions or avoidable emergency department visits indicate that more widely accessible and effective primary care would be a better source of care.
- In a number of Brooklyn neighborhoods, nearly one-third of residents reported having no primary care provider. However, many Brooklyn residents who seek care in the hospital emergency department for nonemergency conditions said it was not because of a lack of a primary care provider but for reasons of convenience.
- Almost 30% of Brooklyn's hospital beds are vacant on an average day.
- Six Brooklyn hospitals did not have the business plan or financial margins to remain viable sources of high-quality care in their communities.



¹ New York State Department of Health, Medicaid Redesign Team: Health Systems Redesign: Brooklyn Work Group, http://www.health.ny.gov/health_care/medicaid/redesign/brooklyn.htm, accessed October 2015.

The Future

After the Brooklyn Work Group recommendations were submitted, NSYDOH issued a round of \$301 million in HEAL funding (Healthcare Efficiency and Affordability Law, Phase 21) in 2012 for restructuring of health care entities across the State, with significant funding allocated to support initiatives in Brooklyn.

NYSDOH continues to analyze these issues across New York State, and Welsh Analytics continued to address health policy issues through independent efforts for other organizations.

BACKGROUND INFORMATION:

ABOUT THE GRANTEE

Welsh Analytics is led by James B. Welsh, Ph.D. Over the past three decades, he has created tools to enhance the analytic capabilities of public and private organizations, including early efforts to apply geographic information technologies to health and human services. His public sector experience includes a decade as Bureau Chief for Policy Analysis at the New York State Department of Social Services and a 15-year engagement with Health Research Inc., directing program and policy analysis for the New York State Department of Health's Office of Health Insurance Programs and Office of Health Systems Management. He currently serves as the Director of Data Systems for the Community Health Care Association of New York State.

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