## **Organization Name:**

Generations+/Northern Manhattan Health Network

## **Organization Address:**

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## **Organization Contact:**

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# Schema Archetype

Regional/National Health Systems/Networks

#### **Schema Factors**

Inpatient, Outpatient, Community/non-academic, Critical Access/Uninsured, Hospital Setting

## **Organization Summary**

The Generations+/Northern Manhattan Health Network (Generations+) is comprised of three acute care hospitals in New York City representing medically needy and underserved communities in Harlem and the Bronx. There are three Neighborhood Family Health Centers: Morrisania, in the South Bronx; Segundo Ruiz Belvis, in the South Bronx; and Renaissance Health Care Network, in Central Harlem and Northern Manhattan. Each center offers comprehensive community-based medical care. Additionally, thirty-eight family health centers, child health centers and school-based clinics are strategically located to serve the diverse populations throughout Northern Manhattan, Central Harlem, East Harlem, and the South Bronx. Though these medically and financially distressed communities present daunting challenges to healthcare delivery, New York State Department of Health ranked the Generations+ Network among the highest in New York City for quality of care to patients based on data tracked by the DOH since 2003.

#### IT Environment

Generations+ facilities are equipped with an EHR system with computerized provider order entry (CPOE); laboratory results reporting system; a picture archiving communications system (PACS) for radiological images and reports; and online EKGs.

#### **CDS Achievement**

One of Generations+'s primary goals was to improve patient safety through the use of CPOE. In an early study, conducted at Metropolitan Hospital, there was a 40 percent reduction in medication errors in the first 12 months after CPOE implementation was reported. Errors due to illegible orders were virtually eliminated. Errors due to incomplete orders were reduced by 70 percent.

The importance of workflow analysis became clear during the implementation of drug-allergy alerts. At first, allergy documentation was not linked to the medication prescribing workflow. This meant that providers did not have to document allergies before being able to access the prescribing screens. As a result, medication errors related to drug-allergy interactions were still occurring at near pre-CPOE rates. The solution to this was to integrate the two functions. Generations+ wrote a prompt for this in 2001 and since then physicians cannot place a medication order unless allergies are first documented. This new workflow requirement led to the desired reduction in drug-allergy medication errors.

Physicians, the pharmacy and nursing staff have closely monitored the effectiveness of an electronic system for the integrated management of medications. All have reported that the system improves medication safety and reduces the likelihood of human error. After implementation of the CPOE and the Integrated Pharmacy, dispensing errors in Pharmacy were reduced.

#### Lessons Learned

It is helpful to evaluate or monitor the impact of the new technology on a variety of outcomes, including clinical outcomes, staff workflow, and staff satisfaction. Evaluation results can help identify where additional efforts may be needed to attain the desired result of your CDS implementation.

# Awards, Recognitions, and Citations

2006 HIMSS Davies Organization Award Recipient. Award Application available at: <a href="http://www.himss.org/content/files/davies/2006/HHCGenerations-Davies2006en-hanced.pdf">http://www.himss.org/content/files/davies/2006/HHCGenerations-Davies2006en-hanced.pdf</a>