

Queens Health Network

Organization Name:

Queens Health Network

Organization Address:

New City Health and Hospitals Corporation

HHC Central Office

346 Broadway, Suite 711

New York, NY 10013

<http://www.nyc.gov/html/hhc/qhn/home.html>

Organization Contact:

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Schema Archetype

Regional/National Health Systems/Networks

Schema Factors

Urban, Inpatient, Hospital Setting, >200 Beds, Academic

Organization Summary

A member of the New York City Health and Hospitals Corporation (HHC) and an affiliate of the Mount Sinai School of Medicine, the Queens Health Network is the major healthcare provider in the borough of Queens, New York City, employing approximately 5200 people. Serving a population of 2 million people, Queens Health Network comprises Elmhurst Hospital Center, Queens Hospital Center, 10 Community Health Centers and 6 school-based health centers. Elmhurst and Queens are teaching hospitals, with a combined total of 824 inpatient beds and 47,160 annual hospital admissions. Rotating residents are supervised by attending physicians with faculty appointments. With approximately 1,100 Physicians on staff, QHN supports more than 1 million ambulatory care visits and close to 200,000 Emergency Department visits each year.

IT Environment

Queens Health Networks implemented the Ulticare/Patient 1 EHR software by Per Se Technologies (formerly Health Data Sciences) in the beginning of 1997 primarily because of the scalability of the product, its patient-centered architectural focus, fail-soft technology, the integrated nature of the application module set and the robustness of the toolkit.

We are still using the same core product, CPR, which is now known as Quadramed CPR (formally Misys CPR). Most recently we have upgraded the back-end

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architecture to the InterSystems Cache, an advanced object database that provides in-memory speed with persistence, and the ability to handle huge volumes of transactional data. This was the first prerequisite in a series of steps to upgrade to CPR Version 5.2 which has been certified by CCHIT for ARRA Meaningful Use. Adopting the model of an “Accountable Care Organization” we have a strong focus on patient safety and “patient centered medical home” as we strive to build system functionality that keeps the patient and their care as the center of focus.

The EHR includes the following functionality; CPOE, RIS, LIS, Medication Management (BCMA), Inpatient Physician and Nursing Documentation, Ambulatory Care. It supports a multi-facility care delivery model that characterizes the Queens Health Network’s environment, one of the largest municipal hospital systems in the United States. The computerized patient record deployed in the Queens Health Network supports a clinical work flow that includes more than 7500 active users, including nearly 3000 provider staff, who access the EHR on a regular basis. All electronic clinical information, going back to 1997, that resides in this EHR is accessible from many of the 5500 network computers installed across QHN. The EHR is supported by an enterprise network consisting of a robust 20-GIG LAN Backbone, a standards based 802.11i Wireless Network solution that supports B/G and a highly available 1-gig fiber ring WAN. The EHR system, in addition to implementing a highly available design is also designed to be protected from a data center disaster. With a fully functioning and compatible alternate center, through disaster recovery processes the system can recover at the alternate data center in less than 30 minutes.

CDS Achievement

A number of CDS achievements were realized with the implementation of the Quadramed CPR EHR. For example, when the physician orders a specialty consultation online, the CDS simultaneously provides decision support, communication between services, and support for administrative processes. The CDS integrates the processes of alerting caregivers that they are placing orders for a managed care patient, displays appropriate plan specific rules regarding care, issues a plan authorization number and generates the caregiver’s plan identification numbers or name of the primary care provider. The system then prints notification to the Managed Care office.

An integral component of the CDS is the ability to check during medication orders for drug-drug interactions, drug-allergy interactions, and correct dosing. Additionally, alerts for duplicate orders are built into the order entry process for departmental tests, medications and specialty referrals. These are knowledge-based and defined in the database on a test-by-test basis. For example, if a caregiver orders a second urine culture test within an hour they are alerted to the fact that one is already ordered, but multiple orders for MI panels within an hour do not trigger alerts.

Lessons Learned

The implementation of CDS at Queens Health Network has realized the following lessons. First, the CDS system and the EHR it is associated with should be seen as strategic choices for a competitive healthcare market place, especially in the areas of improving patient safety and reducing costs. Second, there is a need for a strong project manager and a high visibility project team during the implementation of CDS. Third, a partnership needs to be created between the medical staff and the project team, and physician participation in the development to ensure success. Finally, it is important to keep CDS simple and quick, especially for physician order entry functions and received alerts.

Awards, Recognitions, and Citations

2002 Davies Award Winner