AGENDA

MEDICAL AND PROFESSIONAL AFFAIRS/ INFORMATION TECHNOLOGY COMMITTEE

Meeting Date: December 12, 2013
Time: 9:30 AM
Location: 125 Worth Street, Room 532

BOARD OF DIRECTORS

CALL TO ORDER **DR. STOCKER**

ADOPTION OF MINUTES
- ***November 7, 2013***

CHIEF MEDICAL OFFICER REPORT **DR. WILSON**

CHIEF INFORMATION OFFICE REPORT **MR. ROBLES**

ACTION ITEMS:

1. Authorizing the President of the New York City Health and Hospitals Corporation (the"Corporation") to enter into a contract to purchase software, hardware, services and corresponding maintenance for a biomedical middleware software solution with iSirona, LLC (the "Contractor"). through a Federal General Services Administration ("GSA") contract in an amount not to exceed $6,454,161, which includes a 10% contingency of $586,742 for a one year term with four one-year options to renew at the Corporation's exclusive option. **MR. CONTINO**

2. Authorizing the President of the New York City Health and Hospitals Corporation (the "Corporation") to negotiate and execute contracts with various authorized resellers on an on-going basis over a one year period for the purchase of Cisco networking equipment and software through NYS Office of General Services ("OGS") contracts in an amount not to exceed $4,188,853, which includes a 20% contingency. **MR. GUIDO**

3. Authorizing the President of the New York City Health and Hospitals Corporation ("the Corporation") to purchase from Dyntek Services, Inc. (the "Vendor") through a NYS Office of General Services ("OGS") contract F5 Load Balancers hardware, software and services in an amount not to exceed $4,448,182, which includes a 15% contingency of $580,198. **MR. GUIDO**

4. Authorizing the President to negotiate and execute a contract between the New York City Health and Hospitals Corporation (HHC or Corporation) and CareFusion Solutions, LLC ("CareFusion"), to provide automated dispensing systems used in the supply chain process for medication and supplies. The proposed contract, an enhanced Premier contract PPPH14CFS, will be for a term of five (5) years and standardize pricing for equipment, products, services and support across all the facilities at HHC. The contract shall be an amount of $24,447,347,347 and a 20% contingency of $4,889,470 for an amount not to exceed $29,336,817 **MR. MARTIN**

INFORMATION ITEMS:

1. **METROPLUS ANNUAL REVIEW** — **DR. SAPERSTEIN**
2. **UPDATE ON HHC ACCESS IMPROVEMENT INITIATIVE** — **DR. JENKINS**

OLD BUSINESS

NEW BUSINESS

ADJOURNMENT

MINUTES

MEDICAL AND PROFESSIONAL AFFAIRS/ INFORMATION TECHNOLOGY COMMITTEE BOARD OF DIRECTORS

Meeting Date: November 7, 2013

ATTENDEES

COMMITTEE MEMBERS

Michael A. Stocker, MD, Chairman
Alan D. Aviles
Josephine Bolus, RN
Amanda Parsons, MD (representing Health Commissioner, Thomas Farley, MD, in a voting capacity)

HHC CENTRAL OFFICE STAFF:

Sharon Abbott, Assistant Director, Corporate Planning and HIV Services
Janette Baxter, Senior Director, Risk Management
Suzanne Blundi, Deputy Counsel, Office of Legal Affairs
Louis Capponi, MD, Chief Medical Informatics Officer
Deborah Cates, Chief of Staff, Board Affairs
Paul Contino, Chief Technology Officer
Barbara DeIorio, Senior Director, Internal Communications
Christine Desrosiers, Office of Legal
Joel Font, Consultant, EITS
Terry Hamilton, Assistant Vice President, Corporate Planning Services
Lauren Haynes, Assistant System Analysis, President Office
Marisa Salamone-Greason, Assistant Vice President, EITS
Sal Guido, Assistant Vice President, Infrastructure Services
Caroline Jacobs, Senior Vice President, Safety and Human Development
Lauren Johnston, Senior Assistant Vice President/Chief Nursing Officer, Patient Centered Care
Irene Kaufman, Senior Assistant Vice President, Ambulatory Care Transformation
Mei Kong, Assistant Vice President, Patient Safety
Patricia Lockhart, Secretary to the Corporation
Katarina Madej, Director, Marketing
Tamiru Mammo, Chief of Staff, Office of the President
Ana Marengo, Senior Vice President, Communications & Marketing
Antonio D. Martin, Executive Vice President/Corporate Chief Operating Officer
Kathleen McGrath, Senior Director, Communications & Marketing
Andreea Mera, Director, Office of Healthcare Improvement
Charlotte Neuhaus, Senior management Consultant, Corporate Planning Services
Deirdre Newton, Office of Legal Affairs

Bert Robles, Senior Vice President, Chief Information Officer
Salvatore Russo, Senior Vice President & General Counsel, Legal Affairs
David Stevens, MD, Senior Director, Office of Healthcare Improvement
Diane Toppin, Director, Acting M&PA Divisional Administrator
Steven Van Schultz, Director, IT Audits
Joyce Wale, Senior Assistant Vice President, Office of Behavioral Health
Jaye Weisman, Ph.D., Assistant Vice President/COO, Accountable Care Organization
Ross Wilson, MD, Senior Vice President/Corporate Chief Medical Officer
Marlene Zurack, Chief Financial Officer

FACILITY STAFF:

Ernest Baptiste, Executive Director, King County Hospital Center
Lynda D. Curtis, Senior Vice President, South Manhattan Network
Elizabeth Gerdts, Chief Nurse Executive, North Central Bronx Hospital
Terry Mancher, Chief Nurse Executive, Coney Island Hospital
Ellen O'Connor, Chief Nurse Executive, Jacobi Medical Center
Arnold Saperstein, MD, Executive Director, MetroPlus Health Plan
Joseph Skarzynski MD, Medical Director, Jacobi Medical Center
Denise Soares, Senior Vice President, Generations+/No. Manhattan Network, Harlem Hospital Center
Maurice Wright, MD, Medical Director, Harlem Hospital Center

OTHERS PRESENT
Moira Dolan, Senior Assistant Director, DC37, Research & Negotiations Department
Scot Hill, Account Executive, QuadraMed

MEDICAL AND PROFESSIONAL AFFAIRS/
INFORMATION TECHNOLOGY COMMITTEE
Thursday, November 7, 2013

Michael A. Stocker, MD, Chairman of the Board called the meeting to order at 12:03 PM. The minutes of the October 17, 2013 Medical & Professional Affairs/IT Committee meeting were adopted.

CHIEF MEDICAL OFFICER REPORT

Ross Wilson, MD, Senior Vice President/Corporate Chief Medical Officer reported on the following initiatives:

1. NYS Hospital Medical Home Demonstration Award

This was a very important body of work that facilitated the movement of Medical Home and PCMH using federal dollars through the State to achieve Patient Centered Medical Home status, as well as several other projects. This year, a team of people led by Irene Kaufman and Mary-Ann Etiebet, have been helping facilities reapply, under the new standards; every site that responded has been designated as a NCQA Level 3 with very high scores.

All 11 hospitals received notification on October 2, 2013 that they had completed initial milestones including submission of an acceptable work plan, baseline PCMH assessment, and first quarterly report and thus were eligible to receive the remainder of year one payments. To date, this award has provided HHC with approximately $38M in total year one funding. The goal of this award is to support teaching hospitals as they improve coordination, continuity, and quality of care for Medicaid beneficiaries by transforming their outpatient primary care training sires into high quality Patient-Centered Medical Homes, enhancing training of primary care physicians, and making other quality and safety improvements. Continued full funding of each of the award payments is contingent upon obtaining NCQA PCMH Level 2 or 3 recognition (2011 standards) by July 1, 2014 and meeting NYS Department of Health quarterly reporting requirements.

Eight facilities have received Level 3 PCMH recognition under the 2011 NCQA standards (Gouverneur, Elmhurst Hospital, Belvis D&TC, Morrisania D&TC, Lincoln Hospital, Harlem Hospital, Coney Island Hospital, and Metropolitan Hospital). Through New York State Medicaid's PCMH Incentive Program, PCMH Level 3 practices received an additional $ 6 PMPM for Medicaid Managed care patients and an additional $16.75 per primary care service for FFS patients. Five facilities have submitted their applications to NCQA and are awaiting determination: Jacobi Hospital, NCB Hospital, Bellevue Hospital, Woodhull Hospital, and Cumberland D&TC). Four facilities have their PCMH application in development and intend to submit by the end of calendar year 2013: Queens Hospital, Kings County Hospital, East New York D&TC, and Renaissance D&TC.

2. Flu

Considerable activity continues to promote flu vaccination across HHC, and to implement the New York State regulations that require the wearing of a mask for health care workers who are not vaccinated. Wearing a mask will be mandatory once the Health Commissioner declares the beginning of the flu season. Nearly 100,00 doses of flu vaccine have been administered at HHC so far this season, and nearly 65% of our employees have been vaccinated. Our target is to achieve "herd immunity" and to exceed 92% of employees being vaccinated. Belvis, Seaview, and Gouverneur have already exceeded 75% vaccination rates.

The importance of the EVR is not to be underestimated. The registry is the source of truth and in combination with PeopleSoft, allows us to get lists of vaccinated and non-vaccinated employees.

Dr. Stocker asked about the correctional line. Dr. Wilson indicated that is related to the correctional staff at Bellevue and they are not our employees and they are technically not supposed to be on the list.

3. Hepatitis C Screening Law

On October 23, 2013, Governor Cuomo signed into law the requirement that all patients born between 1945 and 1965 ("baby boomers") be screened for Hepatitis C. As of January 1st, 2014, anyone who enters, either through a clinic or an inpatient stay, will have to be tested for Hepatitis C. Anyone testing positive will require a follow-up blood test and if that is positive, they may require liver investigations. The Council of the Chiefs of Internal Medicine is working on a standards HHC protocol to manage the screening and subsequent testing/management of screen positive patients. Given the "silent" nature of the disease, it is expected that many more patients will be diagnosed and be able to receive treatment to reduce the morbidity and mortality due to liver disease.

4. Designation of Trauma Centers

As a result of the New York State DOH no longer managing trauma center designation and verification directly, this function will now be undertaken by the American College of Surgeons and the result will then be recognized by DOH. There has been considerable preparation to meet standards that in some cases may be more stringent, and the first of the preliminary site visits will occur later this month. All our trauma centers have consultative visits scheduled over the next several months.

A resolution will be presented to the full HHC Board Meeting later this month in support of this direction, as requested by the American College of Surgeons.

5. HHC Accountable Care Organization

The annual general meeting of the Board of the HHC ACO was conducted yesterday and was briefed on the general progress in establishing the ACO as a participant in the CMS Medicare Shared Saving Program. The presentation gives a brief overview of the Beneficiaries that have been allocated so far to the ACO. It is these patients which whom we will need to demonstrate to CMS that we can meet the 33 quality reporting requirements and also reduce the cost to Medicare (year on year), in order for us to share 50% of that cost reduction to Medicare. This general principle of shared savings is becoming a theme in both commercial arrangements and other arrangements in different states. The ACO is part of an important agenda to move from volume to quality.

Amanda Parsons asked if a causal conclusion between the higher inpatient spending and the lower outpatient spending was drawn. Dr. Wilson indicated that coordination cannot be done without current limited data.

METROPLUS HEALTH PLAN

Arnold Saperstein, MD, Executive Director, MetroPlus Health Plan Inc. presented to the Committee. Dr. Saperstein informed the Committee that the Total plan enrollment as of October 2nd, 2013 was 422,472. Breakdown of plan enrollment by line of business is as follows:

Medicaid	360,019
Child Health Plus	12,217
Family Health Plus	33,813
MetroPlus Gold	3,289
Partnership in Care (HIV/SNP)	5,410
Medicare	7,305
MLTC	419

Attached are reports of members disenrolled from MetroPlus due to transfer to other health plans, as well as a report of new members transferred to MetroPlus from other plans.

This month, we lost approximately 3,700 members. We continue our efforts to address our membership losses and have recently completed a closer look at the application submission and acceptance process to HRA and are seeking to improve this process.

In October, the NY State of Health, the Official Health Plan Marketplace went live, offering health insurance options for consumers. As of October 24th, nearly 174,000 New Yorkers completed the full application process and were determined eligible for health insurance plans. New York State's completed applications make up more than 30 percent of the total

applications completed nationwide. Additionally, as of October 24th, 37,030 New Yorkers have fully enrolled for health insurance through the NY State of Health marketplace. By media reports this number includes 23,717 in Medicaid and 13,313 in a Qualified Health Plan. The Medicaid enrollments are being held by the state and will be shared with the plans in December. NYS has started transmitting enrollments to the plan via a '834 Transaction File'. As of the writing of this report, MetroPlus has received 1,200 members that have selected MetroPlus as their plan. The plan has been informed that the processing of the enrollment transactions has been delayed, so we do not know the actual number of individuals that have chosen our plan. Additionally, NYS held a series of train-the-trainer sessions this month to allow state managed care plans and others to train Certified Application Counselors (CACs). The State mandated that training sessions could only commence upon receipt of a state-approved training curriculum. MetroPlus has received its training curriculum from NYS and will immediately begin training our Facilitated Enrollers (FEs) to serve as Certified Application Counselors (CACs).

This month, MetroPlus has entered into an agreement with eleven HHC facilities to offer a grant for MetroPlus Care Managers. This grant funds 17 positions as part of an expansion of the current HHC Emergency Department (ED) Care Case Management Project. The new MetroPlus Care Managers will be on site at each facility and will be a fully integrated and engaged member of the Inpatient Project RED and ED Care Management Interdisciplinary Teams. These care managers will facilitate MetroPlus' patient's progress during their stay in the inpatient or ED setting. The current program is showing encouraging results and we expect that this expansion will continue to positively impact our members as they are admitted and discharged at our HHC facilities.

MetroPlus is preparing for the carve-in of the nursing home population. Beginning in January 2014, Medicaid recipients in New York City newly requiring long term nursing home placement will enroll in, or remain in, a managed care plan. Plans will be required to pay, at minimum, the current nursing home fee-for-service rate, which will include the nursing home capital component and the nursing home quality add-on, for two years. Based on workgroup recommendations, DOH is developing guidance on eligibility determination periods, network adequacy requirements, authorizations, and credentialing. The department recommended close coordination among plans and nursing homes with hospital providers, Health Homes, New York City Human Resources Administration (HRA) and Local Districts of Social Services (LDSS) around discharge planning and care management. MetroPlus' internal preparation to service this population is well underway and we anticipate no issues with this implementation.

INFORMATION ITEM

1. ICIS Electronic Health Record (HER) Program Update:
   Bert Robles, Senior Vice President, Information Technology Services

   a. Epic Foundation Database has been loaded on HHC servers and is operational and accessible for HHC EITS staff members
   b. More than 95 EITS Staff have been Epic Certified in their respective modules
   c. Four Rounds of Workflow Preview Sessions have been completed to review the Epic Foundation functionality: Over 220 sessions, 2,000 workflows reviewed, 70% consensus, and 1,100 Parking Lot Actions

   d. Accomplishments to Date:

      i. Established weekly SOARIAN/ICIS leadership meetings
      ii. Shared Soarian EMPI file
      iii. Shared Soarian Facility Structure
      iv. Constructed workshop on Medical Record clean-up and sustainment
      v. Identified charging data elements by service
      vi. Scoped out interface issues
      vii. Reorganized Soarian timeline to coordinate with EPIC (Elmhurst and Queens scheduled for April 2014).

   e. ICIS Workgroup Focus Areas are:

      i. Nursing Orders
      ii. Policy and Procedures for Patient Portals
      iii. Transfers and Handoffs
      iv. Formulary Standardization
      v. EMPI Management
      vi. Ambulatory Specialty Templates (Pain Management, WTC, Nutrition, HIV)
      vii. Organ Procurement
      viii. Charging
      ix. Materials Management Linkages
      x. Medication Administration
      xi. Interoperative Orders and Blood Administration

   f. Soarian Next Steps are:
      i. Final scheduling install week of November 16, 2013
      ii. Long Term Care Facilities installed for financials starting December 2013, concluding February 2014
      iii. Acute Care Facilities installed for financials starting April 2014, concluding March 2015

Due to delays caused solely by Soarian, it has been decided that Soarian Leadership will be invited to attend all upcoming M&PA IT Committee meetings until issues are resolved.

Information Technology Services

Paul Contino, Chief Technology Officer

HHC's Care Plan Management System Deploying the Patient Portal

The Care Plan Management System is a web-based platform providing access to care plan and care coordination transactions to the care team and to patients via respective portals. The provider portal tracks patient engagement and self-management progress toward self-defined health goals. The patient portal offers patients access to their care plan, discharge information, tailored preventive health recommendations, and personal health information. The data is either manually entered or pulled from Quadramed, UNITY, and shared with the RHIO. The Care Plan Management System is not a full medical record. HHC's goal is for every patient to be engaged in their care and to have easy access to their health information.

Portal governance will be provided by an Oversight Committee responsible for decisions regarding the strategy for engaging patients and incorporating patient preferences in portal development, recommending standard work for portal implementation and provider engagement strategies, establishing unified messaging and communications about the patient portal and establishing metrics for monitoring patient engagement and ensuring HHC goals and objectives are met. The Oversight Committee will have representation from Communications, Marketing, Information Technology, Consumers, Nursing and Clinical staff from inpatient and ambulatory care.

Some key findings of the Patient Portal Survey are that 70.8% of patients say it is moderately important to very important for them to be able to request an appointment through the portal; 69.1% of patients say it is moderately important to very important for them to be able to request medication refills through the portal; 66.1% of patients say it is moderately to very important for them to be able to discuss a health concern through the portal. The survey also conveyed that 71.7% of patients would use the website to do the following if it could be done more quickly rather than doing so in person: refill requests, referral requests, or communicate with their provider. 77.3% of patients say they would attend a free training on how to use the website to improve their health. 72.5% of patients want someone they trust, like a family member or close friend, to access the patient portal on their behalf.

There being no further business, the meeting was adjourned at 1:10pm.

Bert Robles
Senior Vice President, Information Technology Services
Report to the M&PA/IT Committee to the Board
Thursday, December 12, 2013 – 9:30 am

Thank you and good morning. I would like to provide the Committee with the following updates:

1. **ICIS Electronic Health Record (EHR) Program Update:**

   I wanted to update the committee on EITS' activities regarding the Epic implementation. Since my last report at the October meeting, the following activities have been achieved:

a. The HHC Interface team began field-by-field testing, which will ensure that each piece of information sent into Electronic Medical Record is appropriately received. This will ensure that everything sent is correctly received from one system to another.

b. The Data Conversion team is looking at what is currently in QuadraMed and will need to be carried over to the new Electronic Medical Record.

c. Preparations are underway by the ICIS team for upgrading our current EPIC version to the new 2014 code. The upgrade is scheduled for Monday, December 9th.

d. EITS staff with EPIC certifications have begun their re-certification process for the new 2014 version. Re-certifications should be completed by January 2014.

e. Identification of Chairpersons for each Work Group has been completed. Workgroups consist of Subject Matter Experts (SMEs) and EITS team members. Meetings with some Workgroups are already underway.

f. The ICIS team has begun facility readiness discussions with the Queens Health Network leadership. Representative topics include review of timelines, milestones, logistics, communications and training. Preliminary meetings are already underway.

g. The ICIS End-User Training Strategy Kick-Off took place on Tuesday, December 3rd at Harlem Hospital. Over 175 HHC staff from our facilities involved in HHC training attended the session to hear firsthand how staff will be trained in the Epic application.

h. We continue to track the key dependencies which can impact HHC's anticipated scheduled November 2014 go-live. They are:
    a. Soarian (Scheduling, EMPI, registration, interfaces & billing deployment must be stable at these sites for at least six (6) months after live activation .
    b. North Shore-Long Island Jewish lab for rapid response and routine labs must be deployed with Epic.
    c. ICD-10 implementation date is October 1, 2014. HHC's overall migration from ICD-9 to the new system must be reasonably stable.

2. **Fire Department of New York and Wireless Access at HHC Facilities Update :**

Back in October, I updated the Committee on a plan to install wireless access points at all HHC hospital facility emergency rooms in order for them to communicate directly with EMS. Wireless access is being deployed throughout HHC facilities to allow for document transmissions for registration and vital information directly from the ambulance to the hospital facility, emergency room and eventually to HHC electronic medical record system to eliminate paper and increase patient care. To date, eight (8) of twenty-two (22) HHC facilities (Kings, Dr. Susan Smith McKinney, Lincoln, Queens, Coney Island, Bellevue, Coler, and Henry J. Carter) have been completed. The remaining facilities are expected to be completed by first quarter calendar year 2014.

3. **Meaningful Use (MU) Update:**

This past September concluded the second year that HHC has participated in the Federal Program for Meaningful Use of electronic medical records. We are pleased to report that again, all eleven of HHC"s Acute Care facilities met or exceeded the minimum thresholds to qualify for Federal Fiscal Year 13 Meaningful Use Incentive Program payments. This achievement reflects continued hard work by the facility clinical staffs to use the electronic medical records in a meaningful way. All attestations for this program were entered into the Center for Medicare and Medicaid Services website by our

colleagues in Finance by the November 30th deadline. HHC's anticipated incentive for this year of the program is $47.6 million for the combined Medicare and Medicaid program components.

Notwithstanding this achievement, HHC continues to focus on meaningful use. As you may know, the Federal Government has begun to audit this national program and some providers have had to refund their MU incentive dollars. Three (3) HHC facilities (Metropolitan, Kings County and Woodhull Hospitals) have been selected for audits. HHC had planned for potential audits and each facility was able to efficiently respond to the first round of audit questions. A second round of questions has begun.

In addition to audits, HHC is getting ready for MU Stage II. As was the case with Stage I, MU will require significant software updates supplied by our vendor, QuadraMed. HHC is currently involved in a Beta test of the new QuadraMed software at Jacobi Medical Center and the code has had some significant issues, requiring two delays of software go live. HHC has worked closely with the facility and the vendor to resolve as many issues as possible. This activity is important insofar as the MU time-frame is very tight, requiring all facilities to attest by the quarter ending September 30, 2014. The total additional incentive money at risk for Stage II is $17 million.

This completes my report today. Thank you.

RESOLUTION

Authorizing the President of the New York City Health and Hospitals Corporation (the "Corporation") to enter into a contract to purchase software, hardware, services and corresponding maintenance for a biomedical middleware software solution with iSirona, LLC (the "Contractor"). through a Federal General Services Administration ("GSA") contract in an amount not to exceed $6,454,161, which includes a 10% contingency of $586,742 for a one year term with four one-year options to renew at the Corporation's exclusive option.

WHEREAS, the Corporation has over 45,000 biomedical devices in place today that are being monitored manually by clinical staff; and

WHEREAS, the data from these devices is being entered manually into the Electronic Medical Record ("EMR") allowing for the possibility of transcription errors, patient ID errors, delayed documentation and data omission; and

WHEREAS, the proposed contract will allow the Corporation to implement a solution that will automatically take the critical patient data from these devices and send the results to the EMR; and

WHEREAS, this solution will greatly improve the efficiency of the Corporation's clinicians and improve patient safety by enabling automatic updates rather than manual updates to a patient's EMR; and

WHEREAS, the Corporation issued a biomedical middleware software and services RFP to which the Contractor responded; and

WHEREAS, the Contractor is able to provide middleware software and hardware, which will be used to integrate the Corporation's biomedical devices with the EMR system utilizing the InterSystems Ensemble integration engine; and

WHEREAS, the overall responsibility for managing and monitoring the agreement shall be under the Senior Vice President/Corporation Chief Information Officer.

NOW, THEREFORE, be it:

RESOLVED THAT the President of the New York City Health and Hospitals Corporation ("the Corporation") be and hereby is authorized to enter into a contract to purchase software, hardware, services and corresponding maintenance for a biomedical middleware software solution with iSirona, LLC. through a Federal General Services Administration contract in an amount not to exceed $6,454,161, which includes a 10% contingency of $586,742 for a one year term with four one-year options to renew at the Corporation's exclusive option.

Executive Summary
Biomedical Middleware Software Implementation

This is a request for approval to enter into a contract to purchase software, hardware, services and corresponding maintenance for a Biomedical Middleware software solution with iSirona, LLC. through the Electronic Medical Record (EMR) budget previously presented to the Board of Directors. On September 27, 2012 E nterprise IT Services (EITS) presented the Epic contract to the Board of Directors for approval. In the presentation to the Board, EITS advised that multiple future contracts needed to complete the transition to the new EMR would be presented to the Board of Directors. As listed on slide 14 of that presentation to the Board, the total projected cost for the EMR program over a 15 year period is approximately $1.4 billion.

The total fifteen year cost that was presented to the Board in September 2012 to move from the current state to Epic is outlined below. This includes the cost of the new system as well as the cost to transition off the old systems.

Component	Description	15 Year Cost (in millions)
1. EPIC Contract	Epic Resolution Term 2012-2027	$303
2. QMED	Continuation of current contract through the transition	$80
3. Third Party & other Software*	To be installed over the next 5 years and to be funded through 2027. Includes transition of other existing applications.	$144
4. Hardware*	To be purchased over the next 3 years and replacement to be funded through 2027	$191
5. Interfaces*	To be purchased over the next 3 years and replacement to be funded through 2027	$157
6. Implementation Support*	Vendors to be identified through RFP, Includes cost of non IT Staff participation, training & clinical staff coverage.	$203
7. Application Support Team	New and existing HHC Staff to be used through the implementation and maintenance period	$357
***Future contracts to be presented to the Board of Directors.**		Total: $1,435

(*Source: September 2012 "The ICIS Project – Epic Contract" Presentation, slide 14.*)

The accompanying resolution requests approval to enter into a contract to purchase software, hardware, services and corresponding maintenance for a Biomedical Middleware software solution with iSirona, LLC. through a Federal General Services Administration (GSA) contract in an amount not to exceed $6,454,161, which includes a 10% contingency of $586,742 for a one year term with four (4) one year options to renew.

Presently, there are over 45,000 biomedical devices in place within the Corporation. These biomedical devices track critical patient information that is currently reviewed by clinicians and manually entered into the Electronic Medical Record (EMR). This project will connect biomedical devices electronically to the EMR and pass this data automatically. Enabling the devices to be connected will allow critical patient information, such as vital signs and clinical measures, to be sent from monitors, infusion systems, ventilators, anesthesia carts and point of care instruments.

Ongoing maintenance would require specialized skills, knowledge base and interaction with multiple vendors for the wide variety of biomedical devices the Corporation currently has. Manual entry of the results from these devices runs the risk of transcription errors, lost results and patient ID errors. The potential for delayed documentation in the EMR and variations in the actual data documented greatly increases those risks.

The suggested middleware solution provides an enterprise platform to interface these devices, greatly reducing the effort required to "connect" them to the EMR and supporting future device integration. The software improves data access by providing immediate enterprise-wide access to results data, it captures elements not previously available, and improves documentation filing and reporting for regulatory and compliance. The clinicians will see improved workflow as the software solution will eliminate manual and paper recording of clinical results and streamline efficiency and workflow.

The addition of a biomedical middleware solution takes data from multiple and varying monitoring devices, formatting the data into a standard format (HL7) which will be interfaced and loaded into the EMR automatically. This will eliminate the duplication of data in multiple databases and provide a consolidated view of the patient record in real time.

A Request for Proposals (RFP) was issued for the required software, hardware, services and corresponding maintenance. The selection committee, which included representation from HHC networks, recommended iSirona, LLC for contract award.

CONTRACT FACT SHEET

New York City Health and Hospitals Corporation

Contract Title: Bio Medical Middleware Software Implementation

Project Title & Number: Bio Medical Middleware Software Implementation DCN #: 2108

Project Location: Central Office – 160 Water Street

Requesting Dept.: EITS

Successful Respondent:
iSirona, LLC.

Contract Amount:
$ 5,867,419 plus a 10% contingency of $586,742

Total Not To Exceed Amount: $6,454,161

Contract Term:
1 Year with 4 (one) 1 year options to renew

Number of Respondents: 2
(If Sole Source, explain in Background section)

Range of Proposals:* $ 6,623,606 to $ 12,362,849
*Best and Final Offer amounts were subsequently requested.

Minority Business Enterprise Invited: Yes X No If no, please explain:
No MWBE vendors were found to provide services required or who were able to meet the minimum requirements as outlined in the RFP. A waiver was granted by the EEO Office.

Funding Source: X General Care X Capital
Grant: explain
Other: explain

Method of Payment: Lump Sum Per Diem Time and Rate
Other: explain

EEO Analysis: Submitted, pending approval

Compliance with HHC's McBride Principles? X Yes No

Vendex Clearance Yes No X N/A

CONTRACT FACT SHEET (**continued**)

Background *(include description and history of problem; previous attempts, if any, to solve it; and how this contract will solve it):*

Currently there are over 45,000 biomedical devices in place within The Corporation. They track critical patient information that is reviewed by the clinician and manually entered in the Electronic Medical Record. Interfacing these devices individually would be a costly and complicated process. Manual entry of the data from these devices runs the risk of transcription errors, lost results, patient ID mismatches and delayed and incomplete documentation in the EMR. It takes the clinician away from direct patient care.

The new contract with iSirona will provide an enterprise platform for medical device integration for the New York City Health and Hospitals Corporation. This solution provides middleware software and recommended hardware for connectivity. It will be used to integrate the bio-medical devices at each facility with the EMR system.

Integration of our bio-medical devices with the EMR will allow HHC to immediately stream patient information into the electronic health record at the point of care. This middleware product will enhance the depth of comprehensive data sets available within a patient's health record with data collected from all patient care settings. It will greatly reduce the risks associated with manual entry of data into an EMR.

Contract Review Committee
Was the proposed contract presented at the Contract Review Committee (CRC)? (include date):

The RFP for the Bio-Medical Middleware Software Implementation was presented before the CRC on May 22, 2013.

The Contract Award Application was presented before the CRC on November 20, 2013.

Has the proposed contract's scope of work, timetable, budget, contract deliverables or accountable person changed since presentation to the CRC? If so, please indicate how the proposed contract differs since presentation to the CRC:

Yes, the contract budget has decreased from a projected amount of approximately $13.4 million to $6.4 million. HHC Enterprise IT Services requested best and final offers from the proposers.

Selection Process *(attach list of selection committee members, list of firms responding to RFP or NA, list of firms considered, describe here the process used to select the proposed contractor, the selection criteria, and the justification for the selection):*

Selection Committee Chair:
Yolanda Thompson – Sr. Management Consultant NYCHHC

- *Paul Contino – Chief Technology Officer, Office of the CIO*
- *Richard Elrose – Sr. Mgmt Consultant, Biomedical Engineering (Coler)*
- *Michael Kim - Sr Consultant MIS A, Corporate IS*
- *Andy Lin – Senior Director, Network Services*
- *Marvin Picon – Integration Analyst*
- *Mark Priyev - Asst Director Biomedical Eng*
- *Robert Rossdale – Deputy Exec. Director, Operations*
- *Alexander Shakhnavarov - Director, Clinical Engineering*
- *Jeannie Wasserman – Biomedical Integration Analyst*

Clinical Advisory members -

- *Dinah Bampoe, RN, Nursing Informatics, NBHN*
- *Anthony Jarzembowski, Director of Biomedical Engineering, QHN*
- *Lauren Johnston - Sr. Assistant Vice President, Medical and Professional Affairs*

An RFP was issued and posted on the City Record and HHC websites. HHC received two proposal responses from Capsule Tech, Inc. and iSirona LLC and each presented a presentation on the functionality of their product.

A formal selection process was implemented for this procurement and was governed by a Section Committee comprised of thirteen HHC officials and facility representatives.

The selection criteria consisted of:

a. Understanding of Work and Soundness of Approach
b. Organizational Capacity and Qualifications
c. Technical Qualifications
d. Cost of the Proposal
e. Software Functional Qualifications

As of October 2013, numerous meetings have taken place to inform and update the group on progress and key outcomes from due diligence activities such as requesting clarification on product functionality and best and final cost proposal. The Selection Committee provided feedback to help guide the selection process and analytical efforts, ultimately voted to determine the winning vendor.

From June 2013 to October 2013, five meetings were held, which consisted of detailed reviews of specific application functionalities and features for various clinical areas and monitoring devices. The purpose of these reviews was to better understand how the solution operates in each clinical area and to determine whether it would meet the needs of HHC staff. These detailed reviews resulted in scores for the vendors that were subsequently reviewed by the Selection Committee. The Selection Committee identified deficiencies, gaps within each product and solicited questions to each of the vendors, which led to further demonstrations and additional reviews.

After the initial demonstrations were done by iSirona and Capsule, the Selection Committee determined it would be advantageous for each provider to deliver a typical HHC workflow to obtain a better understanding of how each vendor's solution would work in an HHC environment. The Selection Committee was expanded to include additional clinical representation (clinical advisory members) and each of these workflows were evaluated and scored for each vendor accordingly. In addition, HHC requested site visits where each of the products would be installed in an environment similar to HHC. The site visits were arranged at Cooper University Hospital for iSirona and Yale New Haven Hospital for CapsuleTech, Inc.. A small group of HHC clinical and biomedical staff was assembled to attend the site visits and provide feedback and scoring evaluations back to the Selection Committee. This group included the following individuals from across different departments and from various facilities.

- Steven Schwalbe, Associate Director of Anesthesia, Elmhurst Hospital
- Anthony Jarzembowski, Director of Biomedical Engineering, QHN
- Dinah Bampoe, RN, Nursing Informatics, NBHN
- Wilfred Harris, Respiratory Therapist Lincoln
- Richard Elrose, Director of Biomedical Engineering, HJ Carter Hospital
- Joyce Nolasco, Assistant Director of Nursing Informatics, HJ Carter Hospital
- Richard Besa, PCA KCH

Prior to each vendor's demonstration, HHC requested that vendors submit references. Each reference listed was sent a letter with a list of questions which allowed the Selection Committee to further evaluate the two competing vendors based on the responses from their provided references.

Best and Final Offers were requested from both vendors, after site visits and reference checks, in which both vendors reduced their price proposals. Finally, the Selection Committee including the Clinical advisory members

met to review and discuss their choice. iSirona was determined to be the more innovative and industry leading vendor of Biomedical Middleware. The higher percentage of their clients that have implemented an EPIC EMR system demonstrates their commitment to developing Epic integration products. Their software only solution makes them the clear choice for NYCHHC's bio-medical device integration with our future EMR system, EPIC.

Scope of work and timetable:

iSirona will work under the supervision of the Corporation's project management team throughout the implementation process, from initiation to live. It is anticipated that, in such capacity, the company will be called upon to ensure that the implementation of the software is successfully integrated into the electronic health record. The patient care devices that will be interfaced will be determined in conjunction with the selected vendor utilizing the vendor validated inventory. The bio-medical devices will be connected to our enterprise systems utilizing Intersystems Ensemble integration engine.

The following is the scope of services required:

a) A final validated inventory of devices will be provided
b) Based on this inventory identify what devices can be integrated using the middleware product;
c) Based on this inventory identify new devices that drivers will have to be built for;
d) Installation and configuration of the software
e) Specifications of any additional hardware (if required)
f) Setup, implementation and testing of the software and devices;
g) Building, in conjunction with the corporate project team, an assessment of devices vs. HHC inventory with development of unique device drivers;
h) Communication must be verified at the protocol level to/from remote systems
i) Receive and capture data from devices and create translation definitions
j) Data must be defined for all transactions
k) Perform simulation testing
l) Training a subset of the corporate project team, or their designees, on how to the use the middleware product;
m) Project Management with project plan and detailed status reports
n) Change and resolution management
o) Customer Support SLA

The iSirona biomedical middleware software implementation timeline will be defined by the EPIC EMR rollout schedule and sequencing

CONTRACT FACT SHEET (**continued**)

Provide a brief costs/benefits analysis of the services to be purchased.

Currently the HHC environment has over 45,000 bio-medical devices in place within the corporation. There is a mix of stand-alone (non-interfaced) wired and wireless devices. There

are point-to-point interfaces with QuadraMed and a variety of proprietary device hubs and controllers. This all leads to a costly and involved process to add/upgrade the device interfaces. The iSirona middleware solution provides an enterprise platform to support future devices and equipment. iSirona software will reduce documentation errors such as lost results, transcription errors and patient ID errors. The new software will improve data access by providing immediate enterprise-wide access to results data, it will capture elements not previously available, and improve documentation filing and reporting for regulatory and compliance. The clinicians will also see improved workflow as the software solution will eliminate manual and paper recording of clinical results and streamline efficiency and workflow.

We expect expenditures of $6,454,161 under this contract. iSirona's initial price proposal was reduced after requesting a best and final offer.. The contract will be funded through both capital and operating funds, which are within the initial EMR program budget.

Provide a brief summary of historical expenditure(s) for this service, if applicable.

Not applicable, as this solution has never been purchased.

Provide a brief summary as to why the work or services cannot be performed by the Corporation's staff.

iSirona middleware is a software application, which takes data from multiple and varying monitoring devices formatting the message into an HL7 format which will be interfaced and loaded into the EHR system. Currently, the Corporation does not have the ability to develop and implement a middleware software application. Therefore, through this contract, iSirona will provide HHC resources the required training material and training session to become experts at maintaining the system and adding new devices. In addition clinicians will be trained on use of the software, workflow and the connection of devices to specific patients.

Will the contract produce artistic/creative/intellectual property? Who will own It? Will a copyright be obtained? Will it be marketable? Did the presence of such property and ownership thereof enter into contract price negotiations?

No.

CONTRACT FACT SHEET **(continued)**

Contract monitoring (include which Senior Vice President is responsible):

Accountable person:

Paul Contino, CTO
Information Technology
160 Water St, 13th Floor

Senior Vice President:

Bert Robles
SVP/Chief Information Officer
160 Water Street, 13th Floor
New York, NY 10038

Equal Employment Opportunity Analysis *(include outreach efforts to MBE/WBE's, selection process, comparison of vendor/contractor EEO profile to EEO criteria. Indicate areas of under-representation and plan/timetable to address problem areas):*

Received By E.E.O. 11/6/13
Date

*Analysis Completed By E.E.O.*_____
Date

_____
Name

Bio-Medical Middleware Software and Services Contract

Medical & Professional Affairs/ IT Committee Meeting

December 12, 2013

NEW YORK CITY HEALTH AND HOSPITALS CORPORATION

nyc.gov/hhc

Purpose

*The purpose of this **Bio-Medical Middleware Software and Services Contract** is to provide a medical device integration solution for the New York City Health and Hospitals Corporation.*

The selected vendor, iSirona, LLC., will provide middleware software and recommended hardware to integrate our bio-medical devices with the EPIC EMR system. This will provide an enterprise solution that will enable current and future equipment to be seamlessly integrated with our EMR.

Funding for this purchase will be provided from the EMR budget previously presented to the Board of Directors

Note:

This solution is a required component of our Electronic Medical Record system and budgeted as part of the overall EMR plan

HHC Environment

- Over 45,000 bio-medical devices in place within the Corporation
- Mix of stand-alone (non-interfaced), wired and wireless devices
- Point-to-Point interfaces with QuadraMed
- Proprietary device hubs and controllers
- Costly and involved process to add/upgrade device interfaces

Proposed Contract - Medical Device Integration

Requirements

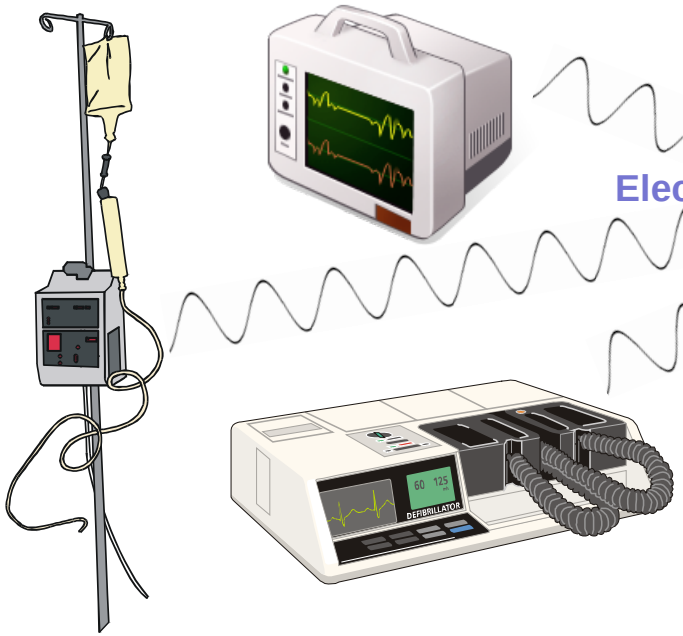
- Improve patient safety by integrating select bio-medical devices directly to the EMR eliminating paper and/or manual transcription into the patient record.
- Providing immediate access of this data to our clinicians

In Scope

- Validation of HHC Device inventory (per facility)
- Identification of all interface capable bio-medical devices
- Connection all priority bio-medical devices to middleware and test interface to EMR
- Training of our staff on setup and maintenance of software
- Enterprise platform to support future devices and equipment

How Middleware Works

Biomedical Devices



Electrical signals

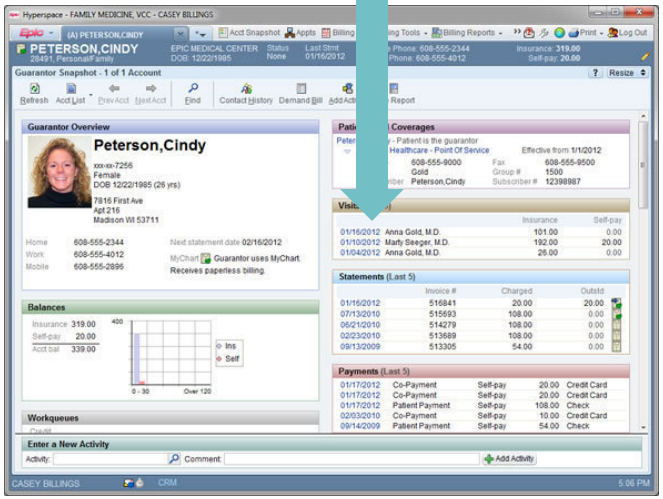
Middleware

HL7

01010101010101

Interface Engine

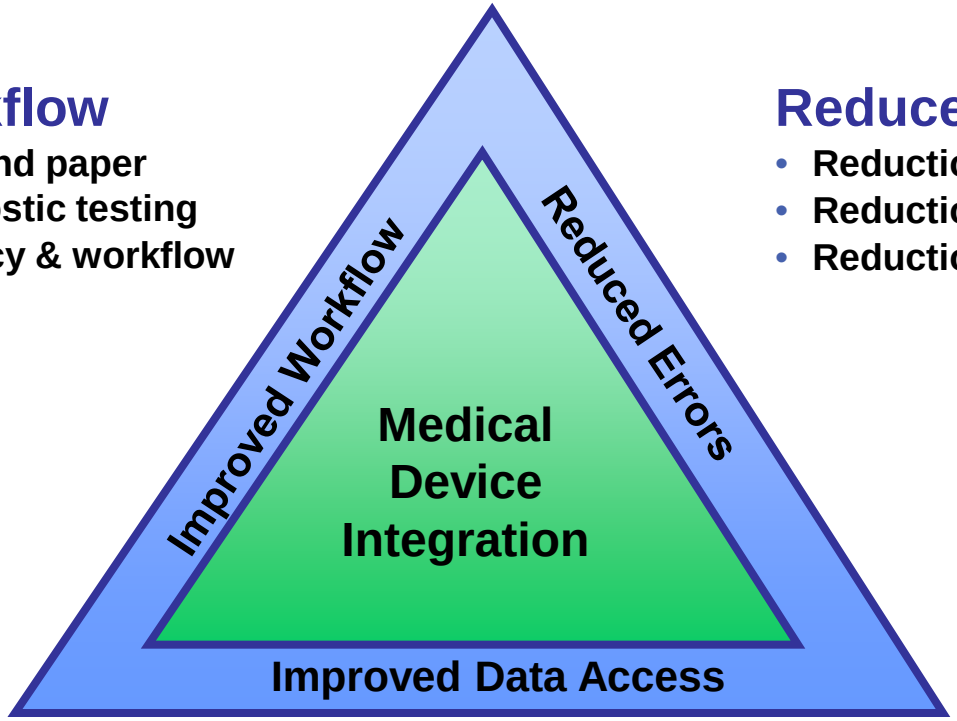
Epic EMR



Benefits of Medical Device Integration with EMR

Improved Workflow

- Eliminate manual and paper recording of diagnostic testing
- Streamline efficiency & workflow



Reduced Errors

- Reduction in lost results
- Reduction in transcription errors
- Reduction in patient ID errors

Improved Data Access

- Immediate enterprise-wide access to results data
- Capture of elements not previously available
- Improve documentation filing and reporting for regulatory/compliance

Selection Committee

Committee Members:

- Yolanda Thompson – Sr. Management Consultant, Chairperson
- Paul Contino – Chief Technology Officer, Office of the CIO
- Richard Elrose – Sr. Mgmt Consultant, Biomedical Engineering (Coler)
- Michael Kim - Sr Consultant MIS A, Corporate IS
- Andy Lin – Senior Director, Network Services
- Marvin Picon
- Mark Priyev - Asst Director Biomedical Eng
- Robert Rossdale – Deputy ED, Queens
- Alexander Shakhnavarov - Director, Clinical Engineering
- Jeannie Wasserman – Biomedical Integration Analyst

Clinical Advisory members -

- Dinah Bampoe, RN, Nursing Informatics, NBHN
- Anthony Jarzembowski, Director of Biomedical Engineering, QHN
- Lauren Johnston - Sr. Assistant Vice President, Medical and Professional Affairs

Site Visits:

- Steven Schwalbe, Associate Director of Anesthesia, Elmhurst Hospital
- Anthony Jarzembowski, Director of Biomedical Engineering, QHN
- Dinah Bampoe, RN, Nursing Informatics, NBHN
- Wilfred Harris, Respiratory Therapist Lincoln
- Richard Elrose, Director of Biomedical Engineering, HJ Carter Hospital
- Joyce Nolasco, Assistant Director of Nursing Informatics, HJ Carter Hospital
- Richard Besa, PCA KCH

Selection Process

- RFP for Bio-medical Middleware Software Implementation presented before the CRC on May 22, 2013
- RFP was posted on the City Record and HHC Website on June 19, 2013
- HHC received two proposal responses
- Functional demonstrations presented by two vendors & scored on July 17, 2013
- Workflow demonstrations requested, presented & scored on August 5, 2013
- Site visits conducted & scored on August 15 & 29, 2013
- References checked on September 20, 2013
- BAFO requested and received for remaining two vendors
- Final meeting and vote held on October 25, 2013

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Projected Contract Cost

Hardware	$45,600	$91,200	$91,200	$91,200	$91,200	$45,600	$456,000
Software	$2,566,010						$2,566,010
Implement Services	$50,000	$100,000	$100,000	$100,000	$100,000	$50,000	$500,000
Training	$3,600	$7,200	$7,200	$7,200	$7,200	$3,600	$36,000
Soft Maintenance	$230,941	$461,882	$461,882	$461,882	$461,882	$230,940	$2,309,409
TOTALS	$2,896,151	$660,282	$660,282	$660,282	$660,282	$330,140	$5,867,419

Notes: All costs are accounted for in EMR budget

EMR Budget Presented to Board of Directors in September 2012

The total fifteen-year cost to move from the current state to Epic is outlined below. This includes the cost of the new system as well as the cost to transition off the old systems.

Component	Description	15-year Cost (in millions)
1. EPIC Contract	Epic Resolution Term 2012-2027	$303
2. QMED	Continuation of current contract through the transition	$80
3. Third Party & other Software *	To be installed over the next 5 years and to be funded through 2027. Includes transition of other existing applications.	$144
4. Hardware*	To be purchased over the next 3 years and replacements to be funded through 2027	$191
5. Interfaces*	To be purchased over the next 3 years and replacements to be funded through 2027	$157
6. Implementation Support*	Vendors to be identified through RFP, Includes cost of non IT Staff participation, training & clinical staff coverage.	$203
7. Application Support Team	New and Existing HHC Staff to be used through the implementation and maintenance period	$ 357
		Total: $1,435

Funding source for Interfaces

- $6.5M funding from EMR budget

* Future contracts to be presented to the Board of Directors.

Questions

Questions?

RESOLUTION

Authorizing the President of the New York City Health and Hospitals Corporation (the "Corporation") to negotiate and execute contracts with various authorized resellers on a n on-going basis over a one year period for the purchase of Cisco networking equipment and software through NYS Office of General Services ("OGS") contracts in an amount not to exceed $4,188,853, w hich includes a 20% contingency.

WHEREAS, the Corporation has several hundred servers to support the Corporation's new electronic medical record ("EMR") system, which are utilized to manage clinical, financial and administrative data throughout the Corporation to support business and clinical applications pertaining to patient care; and

WHEREAS, the Cisco networking equipment and software are required to connect the various servers holding EMR data into the Corporation's network; and

WHEREAS, failure to obtain this equipment and software for the Corporation's network will result in the inability to deploy the EMR system with adverse impacts on patient care; and

WHEREAS, the Corporation will solicit proposals from Cisco Inc.'s authorized resellers who offer Cisco equipment and software for sale through OGS contracts; and

WHEREAS, OGS contract prices for such equipment and software are discounted from market price; and

WHEREAS, contracts will be issued to the OGS vendors offering the lowest price for the requested equipment and software; and

WHEREAS, the overall responsibility for managing and monitoring these contracts shall be under the Senior Vice President/Corporate Chief Information Officer.

NOW THEREFORE, be it:

RESOLVED, that the President of the New York City Health and Hospitals Corporation be and hereby is authorized to negotiate and execute contracts with various authorized resellers on an on-going basis over a one year period for the purchase of Cisco networking equipment and software through NYS Office of General Services ("OGS") contracts in an amount not to exceed $4,188,853, which includes a 20% contingency.

EXECUTIVE SUMMARY

This is a request for authorization to purchase Cisco networking equipment and software through the Electronic Medical Record (EMR) budget previously presented to the Board of Directors. On September 27, 2012 Enterprise IT Services (EITS) presented the Epic contract to the Board of Directors for approval. In the presentation to the Board, EITS advised that multiple future contracts needed to complete the transition to the new EMR would be presented to the Board of Directors. As listed on slide 14 of that presentation to the Board, the total projected cost for the EMR program over a 15 year period is approximately $1.4 billion.

The total fifteen year cost that was presented to the Board in September 2012 to move from the current state to Epic is outlined below. This includes the cost of the new system as well as the cost to transition off the old systems.

Component	Description	15 Year Cost (in millions)
1. EPIC Contract	Epic Resolution Term 2012-2027	$303
2. QMED	Continuation of current contract through the transition	$80
3. Third Party & other Software*	To be installed over the next 5 years and to be funded through 2027. Includes transition of other existing applications.	$144
4. Hardware*	To be purchased over the next 3 years and replacement to be funded through 2027	$191
5. Interfaces*	To be purchased over the next 3 years and replacement to be funded through 2027	$157
6. Implementation Support*	Vendors to be identified through RFP, Includes cost of non IT Staff participation, training & clinical staff coverage.	$203
7. Application Support Team	New and existing HHC Staff to be used through the implementation and maintenance period	$357
***Future contracts to be presented to the Board of Directors.**		Total: $1,435

(*Source: September 2012 "The ICIS Project – Epic Contract" Presentation, slide 14.*)

The accompanying resolution requests approval to purchase Cisco equipment and software through New York State Office of General Services (OGS) contract(s) from authorized resellers on an on-going basis over a one year period in an amount not to exceed $4,188,853, which includes a 20% contingency. The contingency will be used for additional capacity required on the network infrastructure for new applications.

In a telecommunications network, a switch is a device that channels incoming data from any of multiple input ports, such as servers, to the specific output ports, such as workstations, that will take the data towards its intended destination. In a local area network (LAN), a switch determines the networking path from the workstation device to a server device. In a wide area network such as the Internet, a switch determines the networking path from the workstation to the intended destination on the Internet.

The networking equipment represents an integral component of the Electronic Medical Record (EMR) production infrastructure which will enable EITS to install and maintain the EPIC environment. Networking switches are required to communicate data between the hundreds of EPIC EMR servers. The current networking (routing and switching) infrastructure is not sufficient with respect to the impending requirement in two areas, quantity and speed.

The EPIC EMR system requires several hundred servers to receive, process, store, present and report electronic patient records. These servers require a network infrastructure system to transport the associated data. The current networking (routing and switching) infrastructure does not have sufficient capacity and redundancy required to process the projected traffic that will be generated from the EPIC environment. Significant infrastructure redundancy and Business Continuity requirements must be met to guarantee 99.99% uptime and availability to HHC hospital and clinic facilities. These infrastructure networking components will provide that capability.

Under this EPIC installation project, multiple solicitations will be conducted via NYS OGS contract to procure Cisco equipment and software on an on-going basis for the Corporation's EPIC Production environment deployment. EITS will solicit authorized resellers via NYS OGS contract. A minimum of three resellers will be solicited for each purchase. A purchase order will be issued to the lowest responsive bidder for each purchase.

CONTRACT FACT SHEET

New York City Health and Hospitals Corporation

Contract Title: EMR Networking Equipment/ Software (Network Switches)

Project Title & Number: EMR Networking Equipment/ Software (Network Switches)

Project Location: Enterprisewide

Requesting Dept.: EITS – Enterprise Information Technology Services

Successful Respondent:
Multiple Vendors – On-Going Procurements via NYS OGS Contract

Contract/Project Amount: **$3,490,711** plus a 20% contingency of $698,142

Total Not To Exceed Amount: $4,188,853.00

Contract Term: Anticipated 12 month Period

Number of Respondents: Multiple Vendors (NYS OGS Authorized Resellers)
(If Sole Source, explain in Background section)

Range of Proposals: N/A **to** N/A

Minority Business Enterprise Invited: Yes If no, please explain:

Funding Source: General Care X Capital
Grant: explain
Other: explain

Method of Payment: Lump Sum Per Diem Time and Rate
XOther: explain Upon Acceptance

EEO Analysis:

Compliance with HHC's McBride Principles? Yes No

Vendex Clearance Yes No N/A

(Required for contracts in the amount of $100,000 or more awarded pursuant to an RFP, NA or as a Sole Source, or $100,000 or more if awarded pursuant to an RFB.)

Background *(include description and history of problem; previous attempts, if any, to solve it; and how this contract will solve it):*

The EPIC EMR system requires several hundred servers to receive, process, store, present and report electronic patient records. These servers require a network infrastructure system to transport the associated data. The current networking (routing and switching) infrastructure is does not have sufficient capacity and redundancy required to process the projected traffic that wil be generated from the EPIC environment. The several hundred EMR servers will require corresponding network infrastructure connection ports. Since this environment will incorporate all eight Quadramed Electronic Medical Records application instances into one EPIC application instance, significant infrastructure redundancy and Business Continuity requirements must be met to guarantee 99.99% uptime and availability to HHC hospital and clinic facilities. These infrastructure networking components will provide that capability.

Contract Review Committee

Was the proposed contract presented at the Contract Review Committee (CRC)? (include date):

Presented to the CRC on November 20, 2013.

This is a request for authorization to purchase Cisco equipment through the EMR budget previously presented to the Board of Directors.

Has the proposed contract's scope of work, timetable, budget, contract deliverables or accountable person changed since presentation to the CRC? If so, please indicate how the proposed contract differs since presentation to the CRC:

N/A.

Selection Process *(attach list of selection committee members, list of firms responding to RFP or NA, list of firms considered, describe here the process used to select the proposed contractor, the selection criteria, and the justification for the selection):*

Multiple solicitations will be conducted via NYS OGS contract to procure networking equipment and software for the EPIC production environment installations.
EITS will solicit authorized resellers via NYS OGS contract. A minimum of three resellers will be solicited for each purchase. A purchase order will be issued to the lowest responsive and responsible bidder for each purchase.

Scope of work and timetable:

Vendors will provide Cisco hardware and software including, but not limited to, networking hardware (routers, switches, wireless access points). The anticipated project duration for these purchases is approximately12 months.

Provide a brief costs/benefits analysis of the services to be purchased.

By conducting solicitations via State contract, this mechanism will ensure that HHC is promoting competition by receiving the best price for the required equipment and software. The NYS OGS contract offers discounted pricing compared to the market price for such equipment and software.
In addition, this hardware is required to support technologies for the clinical Electronic Medical Record (EMR). This application requires a robust data communication system in order to operate efficiently and provide the required redundancy and business continuity required.

Provide a brief summary of historical expenditure(s) for this service, if applicable.

FY2011 – Total spend for the purchase of networking hardware and software is $4,049,922.

FY2012 – Total spend for the purchase of networking hardware and software is $7,952,347.

FY2013 – Total spend for the purchase of networking hardware and software is $4,388,342.

Provide a brief summary as to why the work or services cannot be performed by the Corporation's staff.

Not applicable. These purchases are for networking equipment and software.

Will the contract produce artistic/creative/intellectual property? Who will own It? Will a copyright be obtained? Will it be marketable? Did the presence of such property and ownership thereof enter into contract price negotiations?

No.

Contract monitoring (include which Senior Vice President is responsible):

Bert Robles, SVP, Enterprise Information Technology Services.

Equal Employment Opportunity Analysis *(include outreach efforts to MBE/WBE's, selection process, comparison of vendor/contractor EEO profile to EEO criteria. Indicate areas of under-representation and plan/timetable to address problem areas):*

N/A.

Received By E.E.O. _____
Date

Analysis Completed By E.E.O._____
Date

_____
Name

EMR Networking Equipment/ Software (Network Switches)

Medical & Professional Affairs/IT Committee Meeting

December 12, 2013

NEW YORK CITY HEALTH AND HOSPITALS CORPORATION

nyc.gov/hhc

Background Summary

HHC Requirements

- Comprehensive routing and switching infrastructure to support the ICIS roll-out

Background

- Funding for this purchase will be provided from the EMR budget previously presented to the Board of Directors.

- The ICIS project -- HHC's EMR (Electronic Medical Record) system requires:
  - Several hundred servers to receive, process, store, present and report electronic patient records.
  - The several hundred ICIS/EPIC servers require hundreds of ports (connections) and transport
  - Provide a fully redundant environment to achieve 99.99% uptime and availability
  - Near real-time Disaster Recovery capability

Recommendation

- Capability to purchase routing, switching and wireless infrastructure hardware off of the State contract not to exceed $4,188,853 over a 12 month period of time

In Scope with Contract Solution

- 4 Nexus 7700 Core Switches
- 4 Nexus 6004 Boarder Leaf Switches
- 4 Nexus 6004 Core Leaf Switches
- 12 Nexus 6001 Server Leaf Switches
- 4 Nexus 2000 Series Access Switches
- 4 Nexus 6004 Server Leaf Switches
- 4 Cisco ASA 5585 Firewalls
- Various modules and Gbics to upgrade existing server farm switches.
- Maintenance for the above covered by the 3-Year Smartnet maintenance and support services contract signed in July, 2013

Procurement

- Multiple solicitations will be conducted via NYS OGS and GSA contracts to procure networking equipment and software for the EMR production environment installations.
- A minimum of three resellers will be solicited for each purchase.
- A purchase order will be issued to the lowest responsive and responsible bidder for each purchase.

EMR Budget Presented to Board of Directors in September 2012

The total fifteen-year cost to move from the current state to Epic is outlined below. This includes the cost of the new system as well as the cost to transition off the old systems.

Funding source for Networking Equipment & Related Software

- $4.2M funding from EMR budget

Component	Description	15-year Cost (in millions)
1. EPIC Contract	Epic Resolution Term 2012-2027	$303
2. QMED	Continuation of current contract through the transition	$80
3. Third Party & other Software *	To be installed over the next 5 years and to be funded through 2027. Includes transition of other existing applications.	$144
4. Hardware*	To be purchased over the next 3 years and replacements to be funded through 2027	$191
5. Interfaces*	To be purchased over the next 3 years and replacements to be funded through 2027	$157
6. Implementation Support*	Vendors to be identified through RFP, Includes cost of non IT Staff participation, training & clinical staff coverage.	$203
7. Application Support Team	New and Existing HHC Staff to be used through the implementation and maintenance period	$ 357
		Total: $1,435

*** Future contracts to be presented to the Board of Directors.**

Questions

Questions?

RESOLUTION

Authorizing the President of the New York City Health and Hospitals Corporation ("the Corporation") to purchase from Dyntek Services, Inc. (the "Vendor") through a NYS Office of General Services ("OGS") contract F5 Load Balancers hardware, software and services in an amount not to exceed $4,448,182, which includes a 15% contingency of $580,198.

WHEREAS, the Corporation has an immense inventory of routers, switches, firewalls, servers and wireless controllers, which are utilized to link various computers and data systems throughout the Corporation together to share business and clinical applications used for patient care; and

WHEREAS, the F5 Load Balancers are required to avoid outages associated with traffic congestion over the network; and

WHEREAS, failure to obtain such hardware, software and services for the Corporation's network infrastructure may result in system unavailability with an adverse impact on patient care; and

WHEREAS, the subject acquisition is needed for the network infrastructure to support the Electronic Medical Record program; and

WHEREAS, the Corporation solicited proposals from vendors who offer their equipment, software and services via the OGS and Federal General Services Administration contracts; and

WHEREAS, the Vendor, Dyntek Services, Inc. offered the lowest price for the requested equipment, software and services; and

WHEREAS, the overall responsibility for managing and monitoring the agreement shall be under the Senior Vice President/Corporate Chief Information Officer.

NOW THEREFORE, be it:

RESOLVED, that the President of the New York City Health and Hospitals Corporation be and he hereby is authorized to purchase from Dyntek Services, Inc. through a NYS Office of General Services contract F5 Load Balancers hardware, software and services in an amount not to exceed $4,448,182, which includes a 15% contingency of $580,198.

EXECUTIVE SUMMARY

This is a request for authorization to purchase an F5 Load Balancing Solution through the EMR budget previously presented to the Board of Directors. On September 27, 2012 E nterprise IT Services (EITS) presented the Epic contract to the Board of Directors for approval. In the presentation to the Board, EITS advised that multiple future contracts needed to complete the transition to the new EMR would be presented to the Board of Directors. As listed on slide 14 of that presentation to the Board, the total projected cost for the EMR program over a 15 year period is approximately $1.4 billion.

The total fifteen year cost that was presented to the Board in September 2012 to move from the current state to Epic is outlined below. This includes the cost of the new system as well as the cost to transition off the old systems.

Component	Description	15 Year Cost (in millions)
1. EPIC Contract	Epic Resolution Term 2012-2027	$303
2. QMED	Continuation of current contract through the transition	$80
3. Third Party & other Software*	To be installed over the next 5 years and to be funded through 2027. Includes transition of other existing applications.	$144
4. Hardware*	To be purchased over the next 3 years and replacement to be funded through 2027	$191
5. Interfaces*	To be purchased over the next 3 years and replacement to be funded through 2027	$157
6. Implementation Support*	Vendors to be identified through RFP, Includes cost of non IT Staff participation, training & clinical staff coverage.	$203
7. Application Support Team	New and existing HHC Staff to be used through the implementation and maintenance period	$357
***Future contracts to be presented to the Board of Directors.**		Total: $1,435

(*Source: September 2012 "The ICIS Project – Epic Contract" Presentation, slide 14.*)

The accompanying resolution requests approval to purchase a F5 Load Balancing Solution, which includes hardware, software and services from Dyntek Services, Inc., through a NYS Office of General Services (NYS OGS) contract in an amount not to exceed, $4,448,182, which includes a 15% contingency over a one year term. The contingency is for additional capacity as new applications are introduced to the EPIC environment.

The purchase is needed to support the Electronic Medical Record (EMR) program for EPIC's application servers and web servers. Load balancing is a computer networking method for distributing workloads across multiple computing resources, such a server cluster (multiple servers acting as one), network links, single servers or a farm of servers running the same applications. Load balancing aims to optimize resource use, maximize throughput, minimize response time, and avoid overload of any one of the server resources. Using multiple components with load balancing instead of a single component may increase reliability through redundancy and automatic disaster recoverability.

F5 Networks Inc. is a provider of Application Delivery Networking (ADN) technology that optimizes the delivery of network-based applications and the security, performance, and availability of servers, data storage devices, and other network resources and is normally managed by the system administrators and engineers.

The Corporation solicited proposals from vendors who hold New York State OGS contracts and Federal General Services Administration (GSA) contracts. Dyntek Services, Inc. was selected as the winner based on lowest proposed price.

CONTRACT FACT SHEET

New York City Health and Hospitals Corporation

Contract Title: EMR F5 Load Balancers

Project Title & Number: EMR F5 Load Balancers

Project Location: Corporate Data Centers

Requesting Dept.: EITS

Number of Respondents: 3 respondents

Successful Respondent: DynTek Services, Inc.

Contract Amount: $3,867,983.56 plus a 15% contingency of $580,198

Total Not To Exceed Amount: $4,448,182

Contract Term: 1 year

(If Sole Source, explain in Background section)

Range of Proposals: $ $3,867,983.56 to $6,582,676.02

Minority Business Enterprise Invited: X Yes If no, please explain:

Funding Source: X General Care X Capital
Grant: explain
Other: explain

Method of Payment: X Lump Sum Per Diem Time and Rate
Other: explain

EEO Analysis: N/A

Compliance with HHC's McBride Principles? X Yes No

Vendex Clearance Yes No X N/A

(Required for contracts in the amount of $100,000 or more awarded pursuant to an RFP, NA or as a Sole Source, or $100,000 or more if awarded pursuant to an RFB.)

Background *(include description and history of problem; previous attempts, if any, to solve it; and how this contract will solve it):*

The F5 Load Balancers represent an integral component of the ICIS EMR production infrastructure, which will enable EITS to install and maintain the EPIC environment. The Load Balancers are required to automatically distribute workload across the server farms.

Load balancing is a computer networking method for distributing workloads across multiple computing resources, such a server cluster (multiple servers acting as one), network links, single servers or a farm of servers running the same applications. Load balancing aims to optimize resource use, maximize throughput, minimize response time, and avoid overload of any one of the server resources. Using multiple components with load balancing instead of a single component may increase reliability through redundancy and automatic disaster recoverability.

One of the most commonly used applications of load balancing is to provide a single Internet service from multiple servers, sometimes known as a server farm. Commonly, load-balanced systems include popular web sites, large Internet Relay Chat networks, high-bandwidth File Transfer Protocol sites and in HHC architecture, EPIC's application servers and Web servers.

For Internet services, the load balancer is usually a software program where external clients connect to access services. The load balancer forwards requests to one of the "backend" servers, which usually replies to the load balancer. This allows the load balancer to reply to the client without the client ever knowing about the internal separation of functions. It also prevents clients from contacting backend servers directly, which have security benefits by hiding the structure of the internal network and preventing attacks on the backend processing server network.

Some load balancers provide a mechanism for doing something special in the event that all backend servers are unavailable. This might include forwarding to a backup server, or displaying a message regarding the outage. Load balancing gives EITS a chance to achieve a significantly higher fault tolerance. It can automatically provide the amount of capacity needed to respond to any increase or decrease of application traffic

The specific requirements are to acquire Application Delivery Networking (ADN), Load Balancing Technology, required to optimize the delivery of network-based applications, security, performance, server availability, data storage, and other network resources for the ICIS EPIC EMR System.

In the current environment, HHC does not have the ability to automatically distribute ICIS EPIC EHR application workload across the Corporation's network server farm. HHC cannot provide the same load balancing outcomes manually that will be achieved through this contracted solution.

Contract Review Committee

Was the proposed contract presented at the Contract Review Committee (CRC)? (include date):

Presented to the CRC on November 20, 2013.

This is a request for authorization to purchase an F5 Load Balancing Solution through the EMR budget previously presented to the Board of Directors.

Has the proposed contract's scope of work, timetable, budget, contract deliverables or accountable person changed since presentation to the CRC? If so, please indicate how the proposed contract differs since presentation to the CRC:

N/A.

Selection Process *(attach list of selection committee members, list of firms responding to RFP or NA, list of firms considered, describe here the process used to select the proposed contractor, the selection criteria, and the justification for the selection):*

A Request for Quotes (RFQ) to purchase the F5 Load Balancers Solution was issued to 10 vendors, who are on either NYS OGS or GSA contracts.

Three price proposals were received.

All three proposals were reviewed by HHC IT Infrastructure Services staff to determine whether they met the solicitation requirements. The award was based on lowest proposed price. Dyntek, Services, Inc. offered the lowest price.

List of Solicited Firms

1. Dyntek Services, Inc.
2. Carahsoft Technology Corp.
3. The Ergonomic Group Inc. (WBE)
4. Dell Marketing, L.P.
5. Annese & Associates, Inc. (WBE)
6. AT&T
7. CDW-G
8. Corporate Computer Solutions (WBE)
9. Trightec (MWBE)
10. Verizon Network Business

Scope of work and timetable:

The accompanying resolution requests approval to purchase F5 load balancers, as the Corporation currently has an immense inventory of routers, switches, firewalls, UCS servers and wireless controllers, which are utilized to link various computers and data systems throughout the Corporation together to share business and clinical applications used for patient care.

The F5 Load Balancers are required in order to avoid any outages associated with traffic

congestion over the network and hardware failures.

HHC will deploy the F5 Load Balancers as soon as they are secured.

CONTRACT FACT SHEET (**continued**)

Provide a brief costs/benefits analysis of the services to be purchased.

The vendor selected offered the lowest price for requested equipment at approximately a 43% discount off of list price.

This acquisition will allow the EPIC applications to be able to be load balanced between the two Corporate Data Centers. This would also allow us to reduce the annual cost of purchasing SSL certificates. Load balancing technology is being procured to support the fast and stable access to Electronic Medical Record information maintained by the EPIC system.

Provide a brief summary of historical expenditure(s) for this service, if applicable.

There are no expenditures for this service within the past four years, as this is a new infrastructure needed to support the new environment surrounding the EPIC EMR implementation.

Provide a brief summary as to why the work or services cannot be performed by the Corporation's staff.

Largely this is hardware procurement; services make up a small portion of the contract and are unique consulting and training services, which cannot be performed by the HHC staff due to lack of training and prior knowledge of this new hardware.

The investment in training is to provide HHC staff with base skills and knowledge to support the technology going forward.

Will the contract produce artistic/creative/intellectual property? Who will own It? Will a copyright be obtained? Will it be marketable? Did the presence of such property and ownership thereof enter into contract price negotiations?

No

Contract monitoring (include which Senior Vice President is responsible):

Bert Robles, Sr. Vice President, Enterprise Information Technology Services

Equal Employment Opportunity Analysis *(include outreach efforts to MBE/WBE's, selection process, comparison of vendor/contractor EEO profile to EEO criteria. Indicate areas of under-representation and plan/timetable to address problem areas):*

N/A.

Received By E.E.O. _____
Date

Analysis Completed By E.E.O._____
Date

_____

Name

F5 Networks, Inc. Load Balancers Hardware, Software and Services

Medical & Professional Affairs/IT Committee Meeting

December 12, 2013

NEW YORK CITY HEALTH AND HOSPITALS CORPORATION

nyc.gov/hhc

Background Summary

Funding for this purchase will be provided from the EMR budget previously presented to the Board of Directors.

HHC Requirements

- Acquire Application Delivery Networking (ADN), Load Balancing Technology, required to optimize the delivery of network-based applications, security, performance, server availability, data storage, business continuity and automatic disaster recovery capabilities for the ICIS EMR System.

Current Scenario

- HHC does not have the ability to automatically distribute ICIS EMR application workload across the Corporation's network server farm.
- HHC cannot provide the same load balancing outcomes manually that will be achieved through this contracted solution.

Solution Summary

In Scope with Contract Solution

- F5 Networks, Inc. Viprion Chassis and Blade Hardware
- F5 Traffic Manager and Advanced Firewall Manager Software
- Load Balancing for all Server Farm Switches, 8 Licenses x 24 instances
- 360 Hours of Professional Services provided by F5 Networks, Inc.
- On-Site Training provided by F5 Networks, Inc., 5-day package x 2; 10 days total
- F5 Premium Maintenance 24x7x365 with 4 Hour Hardware Replacement, Advanced Firewall Manager, and Global Traffic Manager

Included Highlights

- ADN Load Balancing Solution, required to optimize the delivery of network-based applications, security, performance, server availability, data storage, and other network resources for the ICIS EPIC EHR System
- 4 Hour Replacement for all purchased hardware

Bid Response Summary

- 10 vendors were solicited via NYS OGS and GSA contracts.
- 3 bids were received.
- Recommendation: Contract with Dyntek Service Inc. based on lowest responsive bid for the F5 Load balancers Hardware, Software and Services.
- Contract in an amount not to exceed $4,448,182, which includes a 15% contingency of $580,198 for additional load within the environment.

Vendor Information	Contract	Bid Amount	No Bid	No Reply
1. Dyntek Services, Inc.	NYS OGS	$ 3,867,984		
2. Carahsoft Technology Corp.	FEDERAL GSA	$ 6,582,676		
3. The Ergonomic Group Inc. (WBE)	NYS OGS	$ 6,239,701		
4. Dell Marketing, L.P.	FEDERAL GSA		X	
5. Annese & Associates, Inc. (WBE)	NYS OGS		X	
6. AT&T	NYS OGS			X
7. CDW-G	NYS OGS			X
8. Corporate Computer Solutions (WBE)	NYS OGS			X
9. Trightec (MWBE)	NYS OGS			X
10. Verizon Network Business	NYS OGS			X

EMR Budget Presented to Board of Directors in September 2012

The total fifteen-year cost to move from the current state to Epic is outlined below. This includes the cost of the new system as well as the cost to transition off the old systems.

Funding source for Load Balancers

- $4.4M to be funded from EMR budget

Component	Description	15-year Cost (in millions)
1. EPIC Contract	Epic Resolution Term 2012-2027	$303
2. QMED	Continuation of current contract through the transition	$80
3. Third Party & other Software *	To be installed over the next 5 years and to be funded through 2027. Includes transition of other existing applications.	$144
4. Hardware*	To be purchased over the next 3 years and replacements to be funded through 2027	$191
5. Interfaces*	To be purchased over the next 3 years and replacements to be funded through 2027	$157
6. Implementation Support*	Vendors to be identified through RFP, Includes cost of non IT Staff participation, training & clinical staff coverage.	$203
7. Application Support Team	New and Existing HHC Staff to be used through the implementation and maintenance period	$ 357
* Future contracts to be presented to the Board of Directors.		Total: $1,435

Questions

Questions?

RESOLUTION

Authorizing the President to negotiate and execute a contract between the New York City Health and Hospitals Corporation (HHC or Corporation) and CareFusion Solutions, LLC ("CareFusion"), to provide automated dispensing systems used in the supply chain process for medication and supplies. The proposed contract, an enhanced Premier contract PPPH14CFS, will be for a term of five (5) years and standardize pricing for equipment, products, services and support across all the facilities at HHC. The contract shall be an amount of $24,447,347 and a 20% contingency of $4,889,470 for an amount not to exceed $29,336,817.

WHEREAS, on January 9, 2013 the Supply Chain Council approved CareFusion Pyxis as the Corporate standard for automated dispensing system; and

WHEREAS, In December 2012, t he Directors of Pharmacy approved the Pyxis MedStation as the standard: and

WHEREAS, HHC is renting CareFusion Pyxis equipment, products and services via various HHC contracts. The cost of the equipment, type of support and services varies across the facilities; and

WHEREAS, a new five year contract would standardize the cost, support, services and conterminously set an end date for all the incorporated contracts with a discount of 57% for all units with a total savings under the contract term of $5,458,240 or $1,091,648 annually; and

WHEREAS, an assessment shall be conducted to determine present and future needs during the term of the agreement by the Pyxis Advisory team comprised of Director of Pharmacy, Office of the Chief Medical Officer, Office of Procurement and EITS representatives; and

WHEREAS, the Executive Vice President/COO shall be responsible for the overall management, monitoring and enforcement of the contract.

NOW, THEREFORE be it **RESOLVED**, that the President be and hereby is authorized to negotiate and execute a co ntract between the New York City Health and Hospitals Corporation (HHC or Corporation) and CareFusion Solutions, LLC ("CareFusion"), to provide automated dispensing systems used in the supply chain process for medication and supplies. The proposed contract, an enhanced Premier contract PPPH14CFS, will be for a term of five (5) years and standardize pricing for equipment, products, services and support across all the facilities at HHC. The contract shall be an amount of $24,447,347 and a 20% contingency of $4,889,470 for an amount not to exceed $29,336,817.

EXECUTIVE SUMMARY

This is a request to enter into a new contract with CareFusion for its Pyxis MedStation and supply cabinets. The proposed contract, an enhanced Premier contract PPPH14CFS, will be for a term of five (5) years and standardize pricing for equipment, products, services and support across all the facilities at HHC. The contract shall be an amount of $24,447,347 and a 20% contingency of $4,889,470 for an amount not to exceed $29,336,817.

Today there are over 290 Pyxis MedStation units installed across 10 NYC facilities at a current cost of $4,784,300 per year. These facilities, along with the new Henry J Carter facility, need to be on the same configuration platform for both equipment and service/support at a lower cost with the ability to acquire more equipment at a lower cost.

The Pyxis MedStation system is an automated dispensing system supporting decentralized medication management to improve patient safety. Barcode scanning helps ensure accurate medication dispensing. Its features are designed to prevent loading of the wrong medication along with active alerts for high risk medication and help manage medications at risk of diversion, at risk of being diverted from their intended use.

A decentralized automated medication distribution systems allows HHC clinicians to deliver the right medication in the right dosage/form at the right time to the right patient that improves patient outcomes to mitigate adverse events.

Patient Safety

- **Quality Enhancement**
  - Increase nursing time with patient
  - Help start patient therapies faster by reducing time to first dose
  - Standardized processes – the same drug distribution system used for all drugs at all times of the day
  - Improved medication management during patient transfers and discharges
  - Reduces missing patient doses and improves workflow efficiencies
  - Centralizes clinical information, including medication orders, labs and vitals
  - Mitigates adverse event

- **Risk Mitigation**
  - Reduces dispensing errors and duplicate dose administration
  - Minimizes risk of harm by alerting clinicians about potential medication errors before they reach the bedside
  - Biometrics capability supports JAHCO compliance with timed audit trail (Chain of Custody) for all transactions to thwart diversion and inventory loss prevention
  - Provides the ability to restrict access of meds to those that are on a patient's medication list or those that are emergently needed
  - Thwart diversion, improve loss prevention, eliminate medication stock-outs
  - Improved process management of discontinued medication

- Block Load: Through activation of the scan features, can block the load and refill of a specific medication item into a specific Pyxis station (i.e. blocks adult medication items from being filled in Neonatal Med Stations)

CareFusion is a global medical technology company with clinically proven products and services designed to improve the safety, quality, efficiency and cost of healthcare with $3.6 billion in revenue. CareFusion offers comprehensive product lines in the areas of medication and supply dispensing, intravenous infusion, respiratory care, infection prevention and surgical instruments. CareFusion brands are used in hospitals throughout the United States and more than 130 countries worldwide.

Currently equipment is rented under contract number 09-01-022, with an expiration date of 12/31/2014. The cost of the equipment, type of support and services varies greatly across the facilities.

The proposed contract would standardize the cost, support, services and coterminous the contract. The new contract would save approximately $1,000,000 per year.

- $5,458,240 savings over the term of the contract, or $1,091,648 annually
- The five (5) year estimated contract cost is $24,447,347 for current existing equipment
- A Contingency Reserve of 20% ($4,889,470) has been included for expansion opportunities
- Total Spend Authority totals $29,336,817

The new contract extends the discount to the CareFusion Pyxis Supply Stations. These are used to manage supplies on nursing floors and areas across facilities. This proposed contract is an enhanced Premier contract PPPH14CFS01creating a new contract lasting five years. The Supply Chain Council approved Pyxis MedStation as a standard on 01/09/2013.

Overview of Proposed CareFusion Contract

Initial Transaction Discount: 57% total product discount applied to the List Price for a Preferred Product under the Initial Rental and Support Transaction. T his discount is applicable within sixty (60) months of the Effective Date. Note: this is the total discount vs. the discount over the current discount.

Initial Rental and Support Transaction: Upgrade/conversion of the Pyxis systems currently installed at its facilities

Coterminous Expansion Product Discount: If a Member executes a transaction for additional Preferred Products ("Expansion Transaction") within twenty four (24) months of the Effective Date, then the Price and applicable discounts for each such Preferred Product under the Expansion Transaction will be the same as those offered during the Initial Discount Period ("Coterminous Expansion Discount"); provided, however, the following terms and conditions will apply:

- This Section will not be applicable to any Member that is not listed in BID #025-0117 Dated 03.30.06 attached as Schedule A ("New Facility").

Support Fee Discount: If a Member executes a transaction for additional Preferred Products, the total support discount applied to the List Support Price shall be twenty percent (20%) within sixty (60) months of the Effective Date. This discount is inclusive of GPO and Quantity discounts and is applied consecutively, and not cumulatively.

Initial Support Fee Lock: The support fees in the Initial Rental and Support Transaction will be locked for the term of that agreement.

Support Price Lock: The List Support Price for each Preferred Product used in the Initial Rental and Support Transaction will be locked for twenty four (24) months from the Effective Date for all applicable terms (60, 48, 36, 12) and Purchase transactions for Members.

Support Price Fee Increase Cap.: The Support Fee increase for an Expansion Transaction only will not exceed a cumulative average of three percent (3%) during years three (3) through five (5) of the Effective Date.

HHC History

Carefusion-Pyxis manages our medication management process and supplies at most of our facilities. The automation streamlines medications and supplies distribution, dispensing medications faster and more accurately meeting our patient needs. Our automation needs are increasing daily.

- The cost of the equipment, configuration of the devices and service & support levels varies greatly across the facilities.
- Contract end dates vary
- The 290 Pyxis devices are comprised of various configurations between the MedStation 3500 and MedStation 4000 with various service and support programs

Our intent was to standardize this goods contract, co-terminus the end dates, improving analytic and improve maintenance. The result is approximately **$1 Million dollars** per year of savings. This is an 'enhanced' Premier contract PPPH14CFS01, creating a new contract lasting five years.

- Standardization of Eight different Facility contracts to one
- Co-Terminus the Contract
- GOAL is a single enterprise system (***ES***)
- Initial upgrade all site to MedStation 4000, then to ***ES***
- Automation of the Medication Management Process and supplies
- Standardize the GPO discount ranges off list, ranging from 29%, to new 57% for all facilities.
- Improve Time require maintenance to 4 hours for all users
- Improve Analytics
    - Collects data to monitor, KPI in 4 functional areas Diversion and Inventory loss, Inventory Management, Safety and Compliance, System Maintenance
    - Performs improvement priorities, identify potential problem areas

- Drug dispensing Analytics –delivers views of unusual user patterns and inventory management concerns
- Use Analytic data in decision making that supports safety and quality of care.
- Encompass Joint Commission standards for safety and compliance
- Biometric fingerprint are used for MOST user access

Contract Management

- The Contingency Reserve is managed, monitored and tracked as not to go above spend authority by the **Pyxis Advisory Board** (PAB)
- PAB is comprised of central office leadership from Clinical, Pharmacy, Supply Chain and EITS
    - Works with HHC facilities to facilitate assessments and develop business justification for all future requirements
    - Presents contract spend authority updates to the Contract Review Committee (CRC) throughout the contract life
    - Will make appropriate recommendations for spend authority increase requests to the CRC

CONTRACT FACT SHEET

New York City Health and Hospitals Corporation

Contract Title: Pyxis/Carefusion

Project Title & Number: Pyxis Contract update

Project Location: Facilities

Requesting Dept.: Materials Management

Successful Respondent: Carefusion

Contract Amount: The contract shall be an amount of $24,447,347 and a 20% contingency of $4,889,470 for an amount not to exceed $29,336,817

Contract Term: 5 vears

Number of Respondents: One
(If Sole Source, explain in Background section)

Range of Proposals: $ N/a to $

Minority Business Enterprise Invited: Yes If no, please explain:

Funding Source: General Care Goods , monthly Rental
Grant: explain
Other: explain

Method of Payment: Lump Sum Per Diem Time and Rate
Other: explain Monthly

EEO Analysis: Pending

Compliance with HHC's McBride Principles? X Yes No

Vendex Clearance Yes No N/A In Progress

(Required for contracts in the amount of $100,000 or more awarded pursuant to an RFP, NA or as a Sole Source, or $100,000 or more if awarded pursuant to an RFB.)

Background *(include description and history of problem; previous attempts, if any, to solve it; and how this contract will solve it):*

Our mission is to reduce the contract cost, coterminous contract dates, and standardize the platform to an enterprise system.

We renegotiated the current contract, the current discount from 29% to 57% discount. Coterminous all local facility contracts

A decentralized automated medication distribution systems allows HHC clinicians to deliver the right medication in the right dosage/form at the right time to the right patient that improves patient outcomes to mitigate adverse events.

Patient Safety Enhancement

A decentralized automated medication distribution systems allows HHC clinicians to deliver the right medication in the right dosage/form at the right time to the right patient that improves patient outcomes to mitigate adverse events.

- **Quality Enhancement**
  - Increase Nursing time with Patient
  - Help start patient therapies faster by reducing time to first dose
  - Standardized processes – the same drug distribution system used for all drugs at all times of the day
  - Improved medication management during patient transfers and discharges
  - Reduces missing patient doses and improves workflow efficiencies
  - Centralizes clinical information, including medication orders, labs and vitals
  - Mitigates adverse event
- **Risk Mitigation**
  - Reduces dispensing errors and duplicate dose administration
  - Minimizes risk of harm by alerting clinicians about potential medication errors before they reach the bedside
  - Biometrics capability supports JAHCO compliance with timed audit trail (Chain of Custody) for all transactions to thwart diversion and inventory loss prevention
  - Provides the ability to restrict access of meds to those that are on a patient's medication list or those that are emergently needed
  - Thwart diversion, improve loss prevention, eliminate medication stock-outs
  - Improved process management of discontinued medication

Page 49 of 49. PRICING SHEET. Replace the text of the Pricing Sheet with the following:

Initial Rental and Support Transaction. The initial Transaction that New York Health and Hospitals Corporation will enter for the upgrade/conversion of the Pyxis® systems currently installed at its facilities (**"Initial Rental and Support Transaction"**)

Initial Transaction Discount. The total product discount applied to the List Price for a Preferred Product under the Initial Rental and Support Transaction shall be fifty seven (57%) percent ("**Initial Transaction Discount**"). This discount is inclusive of GPO and Quantity discounts and is applied consecutively, and not cumulatively. This discount is applicable within sixty (60) months of the Effective Date when a Member executes a transaction for additional Preferred Products.

Coterminous Expansion Product Discount. If a Member executes a transaction for additional Preferred Products ("**Expansion Transaction**") within twenty four (24) months of the Effective Date, then the Price

and applicable discounts for each such Preferred Product under the Expansion Transaction will be the same as those offered during the Initial Discount Period ("**Coterminous Expansion Discount**"); provided, however, the following terms and conditions will apply:

- The Coterminous Expansion Discount applicable to New York Health and Hospitals Corporation shall not exceed five percent (5%) of the Contract Value for all Preferred Products under the Initial Rental and Support Transaction ("**Coterminous Expansion Discount Threshold**").

- This Section will not be applicable to any Member that is not listed in BID #025-0117 Dated 03.30.06 attached as Schedule A ("**New Facility**").

Support Fee Discount. If a Member executes a transaction for additional Preferred Products, the total support discount applied to the List Support Price shall be twenty percent (20%) within sixty (60) months of the Effective Date. This discount is inclusive of GPO and Quantity discounts and is applied consecutively, and not cumulatively.

Initial Support Fee Lock. The support fees in the Initial Rental and Support Transaction will be locked for the term of that agreement.

Support Price Lock. The List Support Price for each Preferred Product used in the Initial Rental and Support Transaction will be locked for twenty four (24) months from the Effective Date for all applicable terms (60, 48, 36, 12) and Purchase transactions for Members.

Support Price Fee Increase Cap. The Support Fee increase for an Expansion Transaction only will not exceed a cumulative average of three percent (3%) during years three (3) through five (5) of the Effective Date.

Contract Review Committee

Was the proposed contract presented at the Contract Review Committee (CRC)? (include date):

Presented November 20, 2013

Has the proposed contract's scope of work, timetable, budget, contract deliverables or accountable person changed since presentation to the CRC? If so, please indicate how the proposed contract differs since presentation to the CRC:

NO

Selection Process *(attach list of selection committee members, list of firms responding to RFP or NA, list of firms considered, describe here the process used to select the proposed contractor, the selection criteria, and the justification for the selection):*

Extension of current contract

Scope of work and timetable:

CONTRACT FACT SHEET (**continued**)

Provide a brief costs/benefits analysis of the services to be purchased.

NYCHHC Pyxis Medication Cart Summary								
			FY13	FY14	FY15	FY16	FY17	5Yr (FY13-FY17)
Current Pyxis Contract Spend for existing equipment & support		Monthly Cost	12 Month Total					
MedStation Equipment	$	286,615	$ 3,439,380	$ 3,439,380	$ 3,439,380	$ 3,439,380	$ 3,439,380	
Support	$	39,662	$ 475,944	$ 475,944	$ 475,944	$ 475,944	$ 475,944	
Knowledge Portal (MedAnalytics)	$	3,748	$ 44,976	$ 44,976	$ 44,976	$ 44,976	$ 44,976	
Pharmacy Supply Med/Surg	$	47,083	$ 565,000	$ 565,000	$ 565,000	$ 565,000	$ 565,000	
Pharmcy Supply Procedural	$	21,584	$ 259,000	$ 259,000	$ 259,000	$ 259,000	$ 259,000	
Current Pyxis Contract Spend Total	**$**	**398,692**	**$ 4,784,300**	**$ 4,784,300**	**$4,784,300**	**$4,784,300**	**$4,784,300**	**$ 23,921,500**
New Contract Cost for existing equipment & support								
Equipment	$	203,105	$ 2,437,260	$ 2,437,260	$ 2,437,260	$ 2,437,260	$ 2,437,260	
Support	$	44,140	$ 529,680	$ 529,680	$ 529,680	$ 529,680	$ 529,680	
Knowledge Portal (MedAnalytics & DataInsight)	$	3,476	$ 41,712	$ 41,712	$ 41,712	$ 41,712	$ 41,712	
Pharmacy Supply Med/Surg	$	47,083	$ 565,000	$ 565,000	$ 565,000	$ 565,000	$ 565,000	
Pharmcy Supply Procedural	$	21,584	$ 259,000	$ 259,000	$ 259,000	$ 259,000	$ 259,000	
New Contract Cost for existing equipment & support Total	**$**	**319,388**	**$ 3,832,652**	**$3,832,652**	**$3,832,652**	**$3,832,652**	**$3,832,652**	**$ 19,163,260**
Savings								
Contract Savings: Old vs New	$	79,304	$ 951,648	$951,648	$951,648	$951,648	$951,648	$4,758,240
Recurring Savings McKesson Decommission @Kings County			$ -	$175,000	$175,000	$175,000	$175,000	$175,000
Savings Total				$1,126,648	$1,126,648	$1,126,648	$1,126,648	**$4,933,240**
Future Expansion (All Facilities)			0	**$1,042,348**	0	0	0	**$1,042,348**
Total			**$ 4,784,300**	**$ 4,700,000**	$4,841,000	$4,986,230	$5,135,817	**$ 24,447,347**
					3% Inflation Rate	3% Inflation Rate	3% Inflation Rate	

Provide a brief summary of historical expenditure(s) for this service, if applicable.

see above for details

Provide a brief summary as to why the work or services cannot be performed by the Corporation's staff.

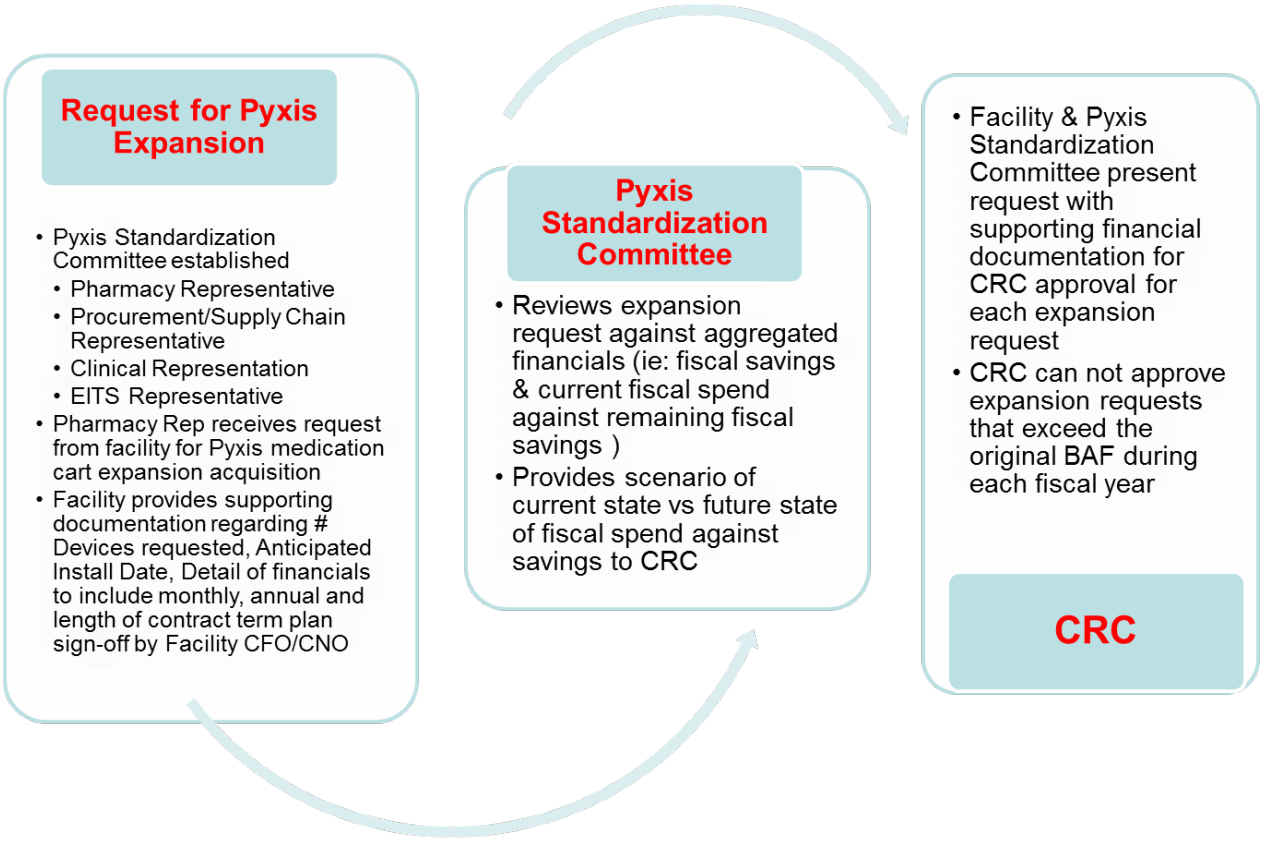
NA

If the contract produce artistic/creative/intellectual property? Who will own It? Will a copyright be obtained? Will it be marketable? Did the presence of such property and ownership thereof enter into contract price negotiations?

NA

CONTRACT FACT SHEET **(continued)**

Contract monitoring: Executive Vice President, Chief Operations Officer



Pyxis Advisory Committee

Procurement Ofice – Paul Albertson, Sr Assistant Vice President
Director of Pharmacy – Vincent Giambanco, Director
Office of the Chief Medical Officer
EITS Representation

Equal Employment Opportunity Analysis

In progress

Received By E.E.O. _____
Date

*Analysis Completed By E.E.O.*_____
Date

_____
Name

NYC Health and Hospitals Corporation

Automated Medication Dispensing Contract
CareFusion Pyxis

December, 2013

Presenter:
Antonio Martin
Executive Vice President &
Chief Operating Officer

NEW YORK CITY HEALTH AND HOSPITALS CORPORATION

Why CareFusion Pyxis

- CareFusion is a leader in Healthcare
  - CareFusion is a global medical technology company with its products used in more than 130 countries worldwide and has a market share of 70% for U.S. medication dispensing Pyxis market

- How does Pyxis improve patient safety and quality of patient care
  - Pyxis is a medication dispensing station currently used in HHC Facilities
  - Pyxis Profile System provides patient specific alerts to avoid medication errors
  - The MedStation interfaces with the hospital's EMR
  - Keeps medication inventory records
  - Provides integrated workflow between clinicians and pharmacists
  - Allows for controls to limit access to only approved users and medication formulary
  - Blocks adult medication from being dispensed in neonatal units
  - Assists in identifying potential adverse drug events

Proposed Contract

- CareFusion Pyxis Master Agreement
  - The proposed contract consolidates many different agreements entered into by HHC facilities
  - The master agreement being proposed with Pyxis will achieve a $1,091,648 in annual savings, totaling $5,458,240 over the five year contract term based on the current units in the HHC facilities
- The Corporation will now have one Master Agreement for five years that will assure a 57% discount for current equipment and any new units the corporation may wish to obtain
- The total amount of $24,447,347 is broken up as follows:
  - The current spending requests will lower contract spending for the current units being utilized at the facilities for the contract term of 60 months
  - An additional 73 units will be purchased for certain facilities in which a need has been determined
  - Certain units will require upgrades and interfaces, these costs have also been included as part of the contract.
- Contingency 20% ($4,889,469) has been included to provide expansion of opportunities for additional units for HHC facilities
- The Corporation has established a Pyxis Advisory Board (PAB), which is comprised of clinical, pharmacy, supply chain and IT representation to verify and confirm all future Pyxis needs across the Corporation

Thank You

NEW YORK CITY HEALTH AND HOSPITALS CORPORATION

MetroPlus Health Plan, Inc.

Report to the New York City Health and Hospitals Corporation's Medical and Professional Affairs Committee

Arnold Saperstein, MD

Executive Director, MetroPlus Health Plan

December 12th, 2013

Contents

- MetroPlus Background, Mission, Values
- Membership
- Provider Network
- Relationship with HHC
- HHC Financial Arrangement
- Administrative Cost Comparison
- Consumer Guide Results
- MLTC
- FIDA
- Exchanges
- Challenges

MetroPlus Background

- Licensed since 1985 in New York State as a Managed Care Organization
- In 2001 the Plan converted from an HMO to a Prepaid Health Services Plan (PHSP)
- Wholly owned subsidiary corporation of the New York City Health and Hospitals Corporation (HHC)
- Lines of business include Medicaid Managed Care, Family Health Plus, Child Health Plus, Medicare plans, two Special Needs Plans (SNP) for the care of HIV+ members in Medicaid and Medicare, Managed Long Term Care, FIDA, Exchange Products and MetroPlus Gold

Mission

- The **MetroPlus Mission** is to provide our members with access to the highest quality, cost-effective health care including a comprehensive program of care management, health education and customer service. This is accomplished by partnering with the New York City Health and Hospitals Corporation (HHC) and our dedicated providers.

Vision

- The **MetroPlus Vision** is to provide access to the highest quality, cost-effective health care for our members, to achieve superior provider, member and employee satisfaction, and to be a fiscally responsible, ongoing financial asset to HHC. MetroPlus will strive to be the only managed health care partner that HHC will ever need. This will be accomplished by our fully engaged, highly motivated MetroPlus staff.

Values

- **Performance excellence** - hold ourselves and our providers to the highest standards to ensure that our members receive quality care
- **Fiscal responsibility** - assure that the revenues we receive are used effectively
- **Regulatory compliance** - with all City, State and Federal laws, regulations and contracts
- **Team work** - everyone at MetroPlus will work together internally and with our providers to deliver the highest quality care and service to our members
- **Accountability** - to each other, our members and providers
- **Respectfulness** - in the way that we treat everyone we encounter

MetroPlus Membership

- Membership at 419,080 as of December 3rd, 2013.
- MetroPlus membership has dropped 5% in the last 12 months. (21,6605 member loss)

Line of Business	# of Members	
	December 3rd, 2012	December 3rd , 2013
Medicaid	375,094	357,056
Family Health Plus	36,100	33,390
Child Health Plus	14,479	12,086
Medicaid HIV SNP	5,698	5,367
Medicare	6,191	7,465
MetroPlus Gold	3,123	3,286
MLTC	0	430
Total	440,685	419,080

Primary Care Assignment	
HHC	53%
Community	47%

* In the last year, HHC has lost 1% of its primary care assignment to community providers. This has decreased 3% over the last two years.

MetroPlus Membership Losses

- Decrease in membership is attributed to several factors:
  - Loss of membership after change in dental vendor
  - Loss of membership to Healthfirst and Fidelis
  - Involuntary disenrollment due to loss of Medicaid eligibility
  - Third party health insurance reconciliation
  - HRA backlog

- Strategies to address losses
  - Change in marketing strategies
  - Increased outreach to members for recertification

Provider Network

- MetroPlus has 17,374 provider sites as of December 3rd , 2013

Primary Care Providers (PCPs)	3,357
Specialty Providers	13,260
OB/GYN	757
TOTAL	17,374

- HHC PCPs have declined in the past, but we have seen an increase this year

	2Q11	2Q12	2Q13
HHC PCP sites*	526	517	554

Relationship with HHC

- Close collaboration with HHC at all levels of the clinical and administrative spectrum.
  - Forward-thinking environment
  - Mutual population served: low-income, inner city communities, many racial minorities with higher health risk profiles
  - Mutual achievements

- The continued growth of MetroPlus and our expansion into new lines of business will allow for the capture of new populations.
  - Assist HHC in maintaining their patient and revenue base

HHC Financial Arrangement

- HHC assumes full risk for all members who select an HHC site.
- HHC assumes risk for all the medical care other than primary care when the member selects a community physician (that is part of the HHC Community Provider network) as their primary care provider.
- MetroPlus assumes full risk for all members assigned to a primary care provider not affiliated with the HHC network and for all members in Medicaid HIV SNP and Medicare plans.

Benefits of HHC Risk Arrangement

- Allows for the alignment of incentives.
  - Improved outcomes and decreased utilization benefits both MetroPlus and HHC.
- Opportunity to maximize the percentage of plan revenue payable to HHC.
- Lessons learned from years of partnership will allow MetroPlus and HHC to successfully develop and operate an Accountable Care Organization (ACO) model of care.

2012 Admin Cost Comparison (Q2, 2012)

Plan Name	Medicaid		Family Health Plus		Child Health Plus	
	Member Months	PMPM	Member Months	PMPM	Member Months	PMPM
Affinity Health Plan	1,259,975	$ 24.00	185,259	$ 33.65	112,358	$ 36.21
Amerigroup	1,017,522	$ 47.13	174,318	$ 43.07	94,541	$ 29.57
Capital District Physicians Health Plan	385,818	$ 33.01	31,883	$ 35.79	104,451	$ 37.58
Empire Healthchoice		$ -			354,916	$ 24.20
Excellus Health Plan	818,588	$ 30.62	128,094	$ 32.52	271,359	$ 27.64
Health Insurance Plan of Greater New York, Inc.	1,203,305	$ 41.70	162,594	$ 51.75	85,092	$ 58.76
HealthFirst PHSP, Inc.	2,638,274	$ 28.58	298,394	$ 40.15	157,839	$ 38.53
HealthNow/BCBS-WNY/Community Blue	240,947	$ 25.82	30,504	$ 30.47	62,507	$ 29.69
HealthPlus, Inc.	1,037,346	$ 41.99	140,928	$ 42.13	114,145	$ 45.28
Independent Health Association, Inc.	250,332	$ 42.08	20,016	$ 30.70	7,864	$ 76.93
MetroPlus Health Plan	2,168,441	$ 21.23	217,892	$ 22.08	103,425	$ 24.08
MVP Health Plan	181,613	$ 45.63	17,612	$ 53.12	13,442	$ 50.17
Neighborhood Health Providers	1,078,592	$ 24.20	120,772	$ 34.04	72,011	$ 31.59
NYS Catholic Health Plan (Fidelis)	3,464,145	$ 20.34	581,227	$ 18.34	428,076	$ 8.60
SCHC Total Care, Inc.	180,801	$ 26.07	16,066	$ 25.55	20,408	$ 12.83
United Health Care Plan of NY, Inc.	1,454,680	$ 41.75	250,150	$ 40.85	133,607	$ 35.97
Univera Community Health (Buffalo)	217,375	$ 21.02	36,909	$ 37.75	38,686	$ 17.13
WellCare of New York, Inc.	360,813	$ 55.45	63,725	$ 52.82	28,534	$ 28.12
Westchester PHSP/HealthSource/Hudson Health Plan	499,686	$ 24.97	68,612	$ 29.15	123,023	$ 30.40

Aggregate with MetroPlus	$ 31.35	$ 36.33	$ 33.86
Aggregate without MetroPlus	$ 31.91	$ 37.17	$ 34.40

MetroPlus Health Plan

Consumer's Guide to Medicaid Managed Care in NYC: MetroPlus Ranking

- MetroPlus has been rated the #1 Medicaid Managed Care health plan in NYC for seven out of the last eight years. For the first time ever, in 2011 MetroPlus was ranked #1 in New York State and New York City.

Year	Rank
2012	1st
2011	1st
2010	1st
2009	1st
2008	2nd
2007	1st
2006	1st
2005	1st

*Based on indicators chosen by the New York State Department of Health (NYSDOH) and published in the Consumer's Guide to Medicaid Managed Care in New York City. The 2011 guide, based in part on quality ratings submitted by health plans and a NYSDOH member satisfaction survey, shows MetroPlus with an 73% overall rating. In 2012, MetroPlus was tied for first place with HIP Health Plan. The ratings are based on measures including plans' preventive and well-care for adults and children, quality of care provided to members with illnesses and patients satisfaction with access and service.

2013 Changes

- Managed Long Term Care
- FIDA
- New York Health Exchange

Managed Long Term Care (MLTC) Overview

- MetroPlus began offering full services for enrolled members as of January 2013 and received our first auto-assigned members in February 2013.

- Managed long-term care (MLTC) offers assistance to people who are chronically ill or have disabilities and who need health and long-term care services, such as home care or adult day care. The goal of the MLTC plan is to allow these individuals to stay in their homes and communities as long as possible. The MetroPlus MLTC plan arranges and pays for a large selection of health and social services, and provides choice and flexibility in obtaining needed services from one place.

- Our current membership is 430 MLTC members.

FIDA

- FIDA is a State of NY partnership with CMS to test a new model for providing Medicare-Medicaid enrollees with more coordinated, person centered care experience.
- Enrollment phased in over several months beginning in 2014
  - Beneficiaries receiving community-based long-term services and supports will be able to opt in to the demonstration beginning on July 1, 2014.
  - Eligible beneficiaries who have not made a choice to opt in or out will be assigned to a Medicare-Medicaid Plan through a process that will match beneficiaries with the most appropriate plan beginning on September 1, 2014.
  - Those who have not made a choice to opt in or out will be assigned to a Medicare-Medicaid Plan beginning no earlier than January 1, 2015.

New York Health Exchange

- MetroPlus offers a total of (38) products across the Individual and SHOP markets.
  - Individual (includes non standard)
  - SHOP (includes non standard)
  - Child Only
  - Catastrophic

- MetroPlus offers the lowest cost products in three out of four metal levels.

- 100% of FEs trained as CACs.

- Approximately 5,000 current applicants with completed applications.

New York Health Exchange
Impact on Medicaid and Family Health Plus

- Medicaid:
  - Beginning January 1, 2014, all new Medicaid applications for MAGI populations will be processed by the Exchange.
    - Pregnant Women
    - Children
    - Parents/Caretaker Relatives
    - Adults under age 65, not on Medicare

New York Health Exchange
Impact on Medicaid and Family Health Plus

- FHP:
  - Individuals may apply for Family Health Plus through December 31, 2013.
  - During 2014, existing FHP enrollees will be transitioned to Medicaid or a QHP, with the program ending at the end of 2014.
  - Beginning January 1, 2014, new applicants who are parents/caretakers with incomes between 138-150% of FPL who qualify for a QHP will have their premium paid by the State if they enroll in a silver plan.
  - Current FHP enrollees who, at renewal, are eligible for a QHP, will also receive the premium wrap.

New York Health Exchange Pricing

METRO PLUS	PLATINUM	$443.24
HEALTHFIRST	PLATINUM	$623.30
NEW YORK FIDELIS	PLATINUM	$577.18
	Average	$704.44
	Median	$636.79

METRO PLUS	GOLD	395.76
HEALTHFIRST	GOLD	526.02
NEW YORK FIDELIS	GOLD	477.71
	Average	$596.19
	Median	$539.49

METRO PLUS	SILVER	359.26
HEALTHFIRST	SILVER	450.00
NEW YORK FIDELIS	SILVER	390.15
	Average	$507.89
	Median	$459.22

METRO PLUS	BRONZE	334.44
HEALTHFIRST	BRONZE	384.19
NEW YORK FIDELIS	BRONZE	308.33
	Average	$425.00
	Median	$395.33

Current Exchange Membership

Metal Level	Benefit Type	0 to 19	20 to 35	36 to 49	50 to 59	60+	Total
Bronze	Non-Standard	22	206	122	41	27	**418**
Bronze	Standard	14	49	29	13	6	**111**
Gold	Non-Standard	11	145	132	70	41	**399**
Gold	Standard	8	29	28	19	9	**93**
Platinum	Non-Standard	23	268	230	186	92	**799**
Platinum	Standard	8	42	46	28	22	**146**
Silver	Non-Standard	15	1,250	574	454	200	**2,493**
Silver	Standard	16	282	144	121	61	**624**
Total		**117**	**2,271**	**1,305**	**932**	**458**	**5,083**

Age		% of Membership
0-19	117	2%
20-35	2,271	45%
36-49	1,305	26%
50-59	932	18%
60+	458	9%
Total	5,083	**100%**

Benefit Type		% of Membership
Standard	974	19%
Non-Standard	4,109	81%
Total	5,083	**100%**

*non-standard products include the essential health benefits with the voluntary addition for dental and vision care

MetroPlus Health Plan

Challenges

- Securing access for our new Exchange membership
  - HHC Access Project

- Managing utilization and costs in the Exchange products
  - Expected Exchange enrollment: 40,000 members

- 2015 Exchange Bid due in March 2014 before any real utilization data available

Overview of HHC Access Improvement Initiative
Medical + Professional Affairs Committee
Board of Directors, Health + Hospitals Corporation
December 12, 2013

Christina Jenkins, MD
Sr. AVP, Quality, Performance + Innovation
Division of Medical + Professional Affairs

NEW YORK CITY HEALTH AND HOSPITAL CORPORATION

Agenda

- Background
- Baseline Assessment
- Engagement Design + Access Metrics
- Results To-Date
- Keys to Success

Background

- Improving access is a top Corporate priority and an essential precursor to improving health and reducing costs.

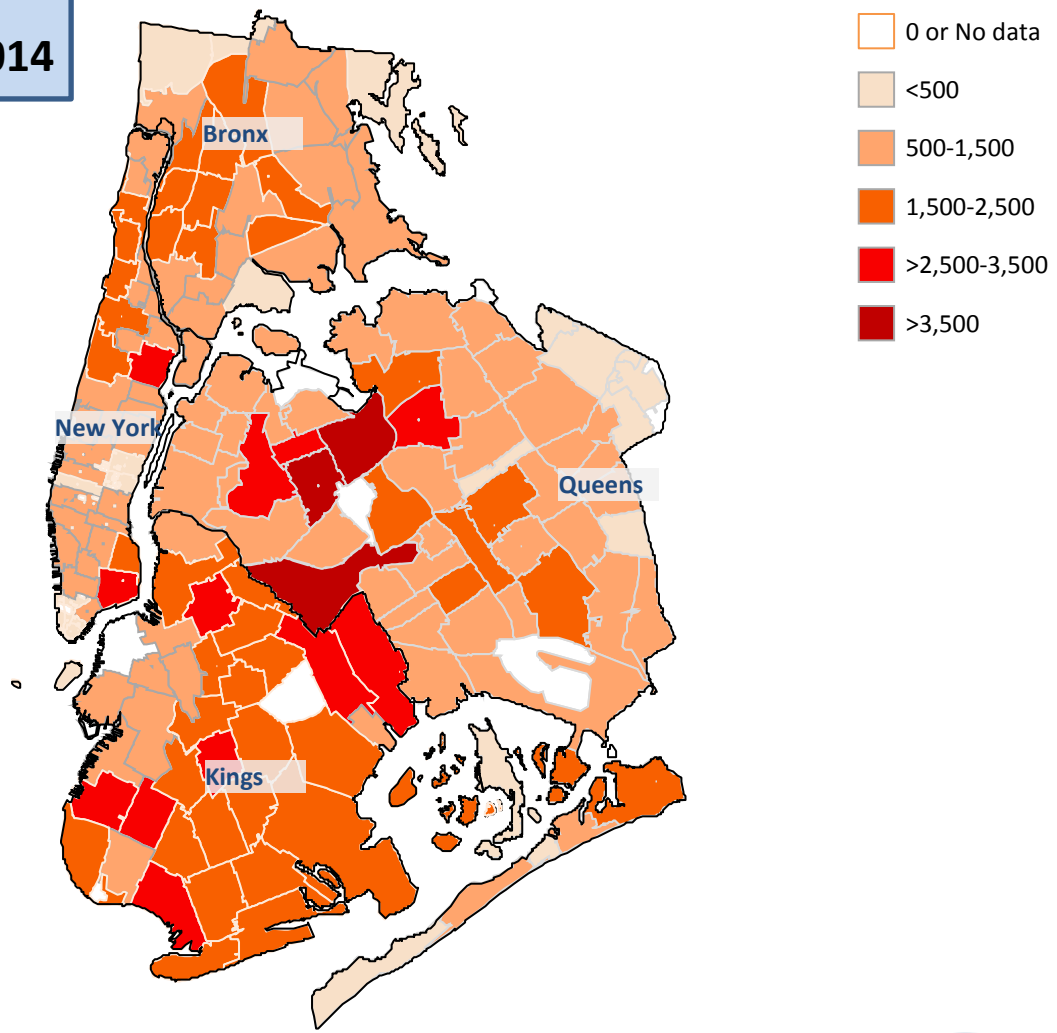
- Access improvement is strategically vital to our ambulatory care redesign efforts, increasing our managed care population, and achieving the benefits of an Accountable Care Organization (ACO)

- The work of preparing our delivery system to better serve our patients is supported via engagement with McKinsey + Company

NYC Individual Exchange Volumes + Distribution

Projection by Zip Code, CY2014

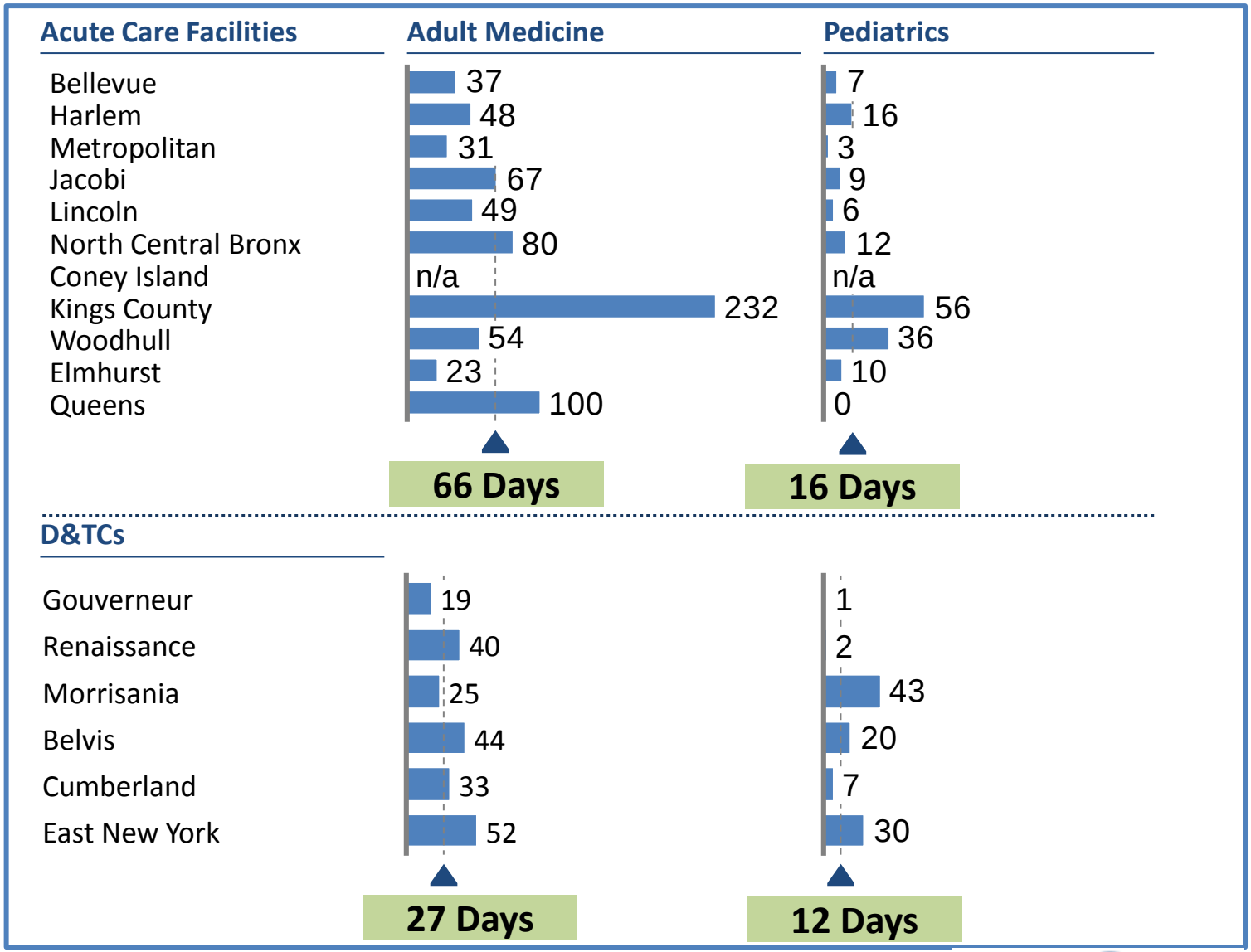
MetroPlus estimate:
40,000 new patients in 2014



SOURCE: MPACT release 6.1, 2011 census data, american hospitals database, HHC Inpatient Utilization Data August 2013 (# of HHC hospital beds)

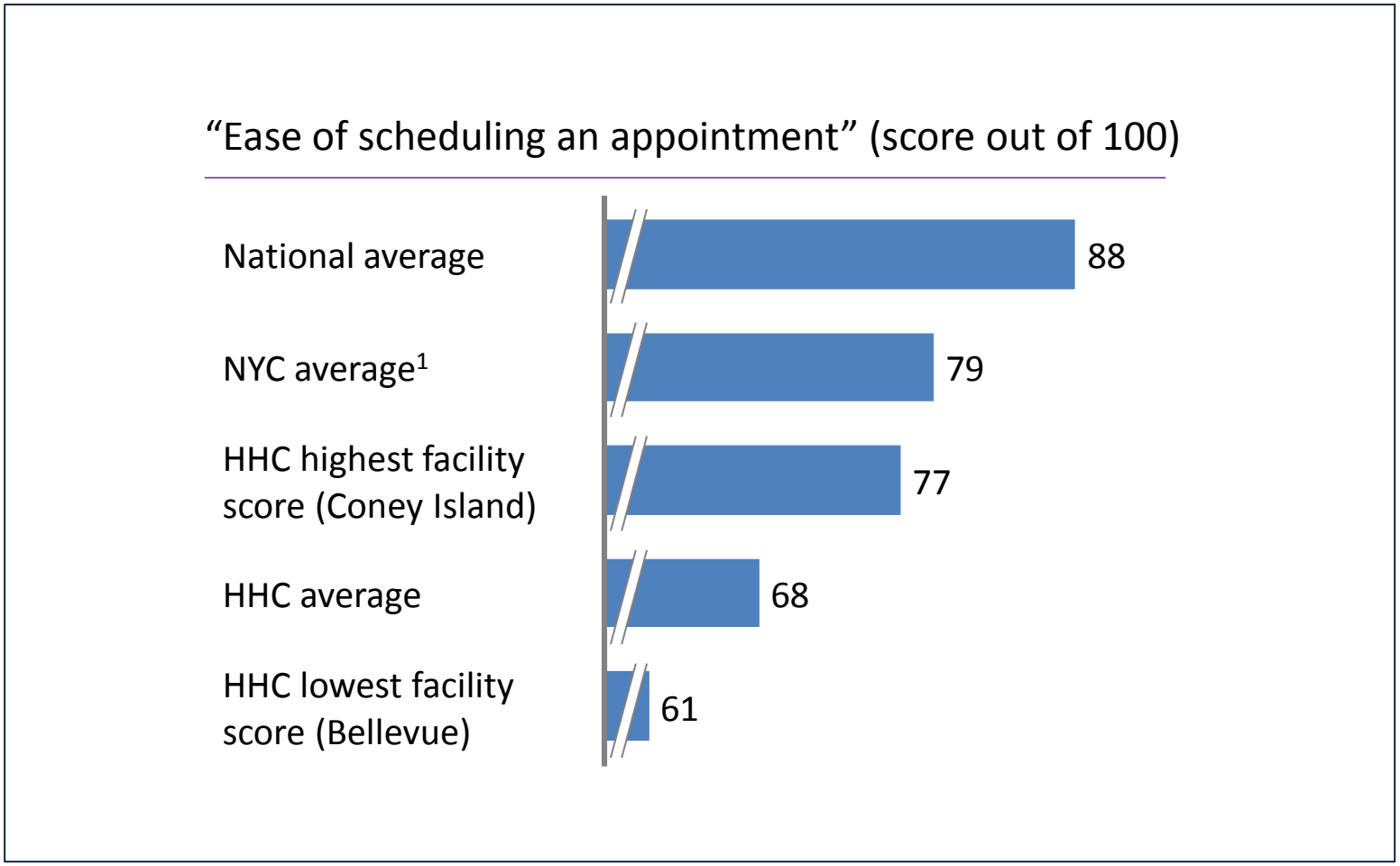
Baseline Appointment Wait Times, New Patients

Mystery Shopping, February 2013 (n=102)



Baseline Access-Related Patient Satisfaction, HHC Adult Medicine

Press-Ganey data, Jan-Oct, 2012



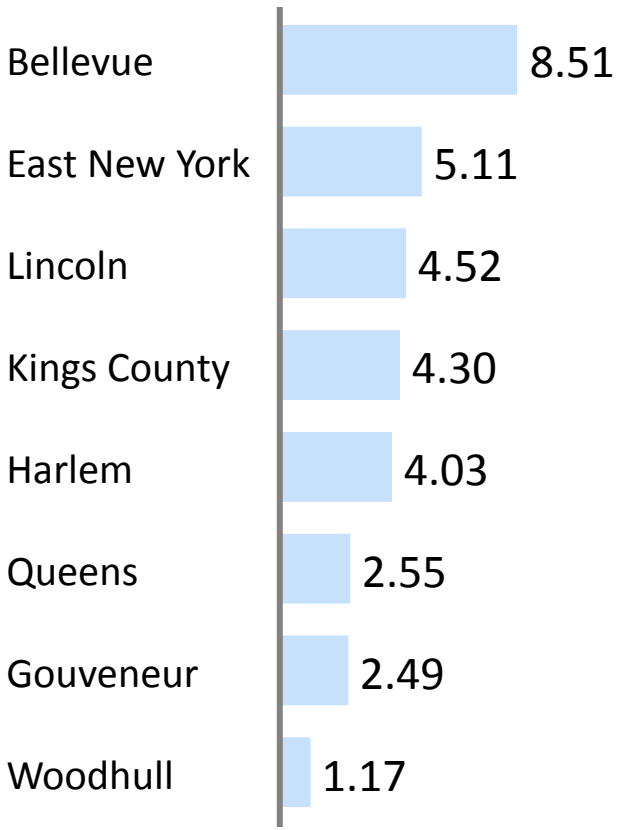
1 NYC average based on all 46 NYC hospitals that use Press-Ganey

Baseline Query of Patient Scheduling Experience

Mystery Shopping , Feb-Mar 2013

Average call center wait times across 8 facilities (n=44)[1]

Min.Sec



Patients experience a number of frustrations in the scheduling process

~10% were unable to get an appointment

"I was told there were **no more appointments being made** for new patients and to call back between 8-9am the next day"

"They wouldn't provide me an appointment over the phone and told **me I would have to come in to the clinic to register**"

"The first time I called the wait was over ~30 minutes, I called again and was disconnected, and **the third time I waited another ~30 minutes before being disconnected…again**…"

Those who did schedule still faced challenges

"It took a very long time because the scheduler **had to go into every physician's schedule** to find the next appointment"

"I was finally greeted after 8 minutes…only to be **put on hold again**…"

1 Time to reach live scheduler; only includes calls where appointment successfully scheduled; Standard deviation for wait times were Bellevue 5:41, about 3:30 for Harlem, Lincoln, Kings, and Gouveneur, about 2:30 for ENY and Queens, and 36s for Woodhull

SOURCE: Phone calls to scheduling lines– methodology included 6 calls to each facility evenly spread over two days and at set 2.5 hour blocks in the morning and in the afternoon

Engagement Design

Baseline Assessment (February – April, 2013)

- Goal: Analyze overall HHC access performance
- Define initial scope of opportunity

"Pilot" Phase: Six Facilities (April, 2013 -ongoing)

- Goal: Define what "moves the needle" for access
- Validate scope of opportunity
- Process:
  - In-depth data + qualitative analysis of core clinics
  - Staff-designed workflows for implementation
  - Weekly performance monitoring via standard metrics
  - Spread to additional clinics

"Rollout" Phase: Eleven Facilities (Sept, 2013 - ongoing)

- Goal: Use proven solutions from pilot phase along with staff-designed workflows to drive improvement
- Process: same as in pilot phase

Corporate-Wide Improvement Efforts (Feb, 2013- ongoing)

- Call Center improvements
- MetroPlus alignment
- Technology solutions to increase capacity/access
- Automated performance dashboards

Corporate Access Metrics + Targets

	Metric	Target
HHC Metrics	3rd next available appointment (days): New and Revisit	<= 14 calendar days within 6 months
	Fill rate (%)	85% within 1 month
	No-show rate (%)	< 20% OR 15% improvement every 6 months
	Total patients seen per week	Continuous improvement
	Patient satisfaction score (CAHPS +/- brief survey)	Improvement to national average within 12 months
	In-clinic wait time (min)	< 30 min from appointment time to clinician interface within 12 months

Access Improvement Drivers

	Example Solutions
1 **Optimization of Scheduling and Operations**	▪ Eliminate paper-based schedules ▪ "Scrub" templates for inappropriate/duplicate appointments ▪ Transparency between provider, clinic reception and central scheduling ▪ Set systematic rules for over-booking ▪ Match schedules to peaks and troughs in patient demand
2 **Reduce no-show rates**	▪ Use automated reminder calls throughout clinics ▪ Targeted personal reminder calls and no-show calls ▪ Reduce mail-based scheduling
3 **Increase throughput**	▪ Shift appropriate work to nurses/PCAs ("top of license" practice) ▪ Implement policies to improve on-time clinic starts
4 **Customer service**	▪ Enable and enforce high-quality call center services ▪ Strengthen communication with community providers
5 **Demand Management**	▪ Define referral and discharge protocols ▪ Strategic nurse-led phone triage for follow-up visits ▪ In-clinic triage for walk-ins

Results to-date

1. There is a validated ~20-25% capacity opportunity at existing resource levels across the Corporation

2. In our 6 pilot facilities (31 clinics), we've seen:

    - ~25% decrease in average wait times for new visits in adult medicine, pediatrics, and adult mental health clinics
    - ~20% decrease in average wait times for new visits across subspecialty clinics
    - Qualitative and data-backed evidence of excellence and high engagement

3. Access work is underway in 13 of 17 facilities. We will complete rollout by 1st week January, 2014

Facility-level Dashboard

Primary Care and Mental Health, Pilot sites at t= 7 months

Baseline / Current performance

At target
Improving
Neither

Facility	Clinic	Metrics: Days to 3rd next available – new	Fill rate %
Harlem	Medicine	38 / tbc[2]	59 / 90
	Pediatrics	14 / 2	65 / 90
	Mental health	11 / 12	56 / 70
Kings	Medicine	0 / tbc[2]	68 / 100
	MPC3	233 / 45	72 / 100
	Pediatrics	14 / 6	89 / 91
	Mental health	46 / 22	71 / 94
Gouverneur	Medicine	14 / 10	83 / 83
	Pediatrics	0 / 0	59 / 70
	Mental health	6 / 9	70 / 54[3]

2 Significant discrepancy between clinic reports and mystery shopping wait times: for Harlem, 12/4 mystery shopping was 44 days, reported 1st next available 0 days, for Kings, 12/5 mystery shopping at clinic was 90+ days, reported 3rd next available was <14 days

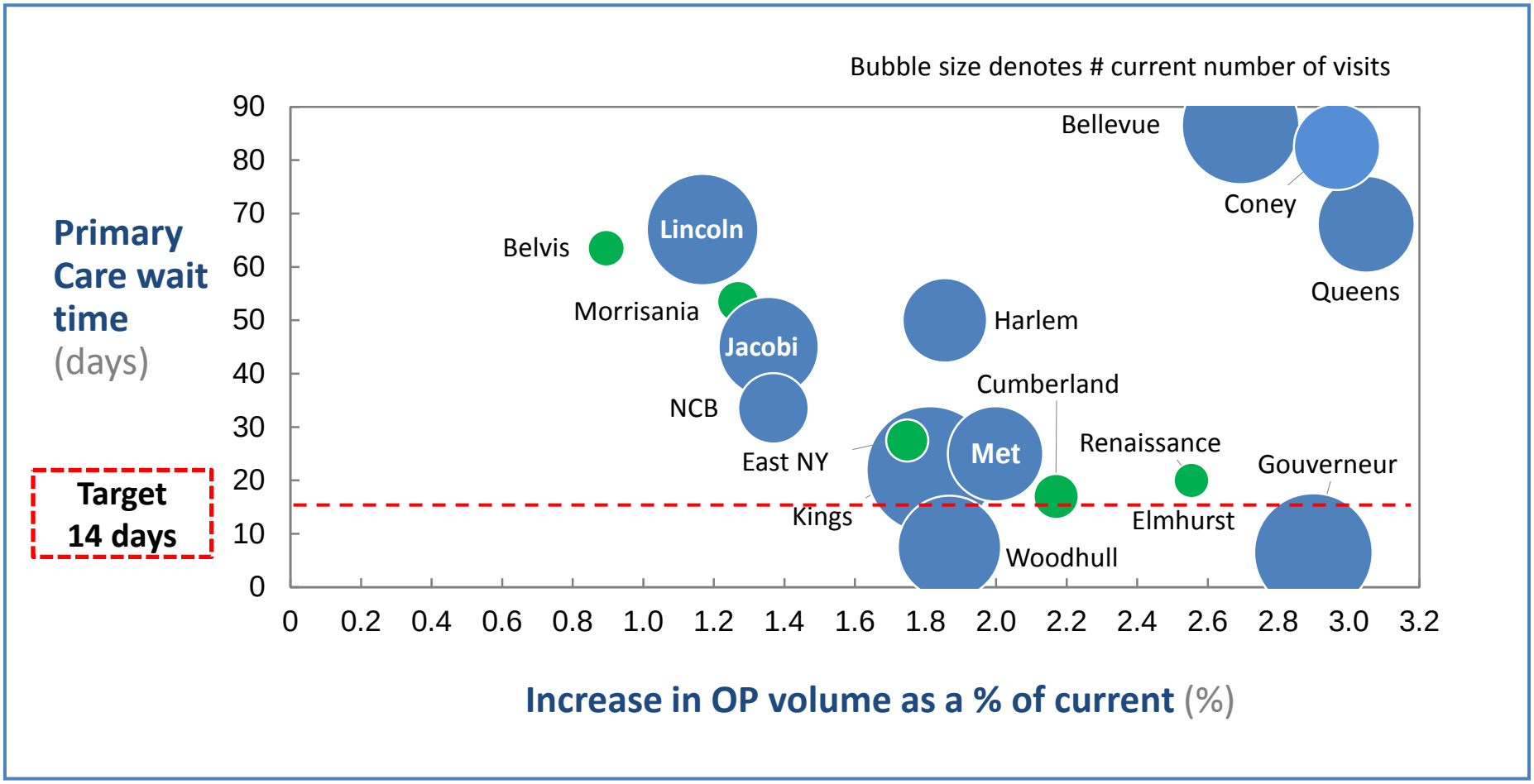
3 Fill rate for established only

SOURCE: Baseline data collection April 2013; Clinic visual mgt boards through week Nov 18/25; 3 week rolling avg for fill rates

PRELIMINARY

Projected Distribution of Outpatient Volume, 2014

Outpatient Volumes vs Primary Care Wait Times[1]



1 Calculated using September/October wait times from mystery shopping

SOURCE: Billing data FY2013 months July – September annualized (# of visits), MPACT release 6.1 (scenario R5AAXH - low uptake, low opt out), phone calls made to scheduling lines

Keys to Success

In order to sustain success and "unlock" the 20-25% capacity within our facilities, we need 3 things:

1. Automated Soarian reporting on key performance metrics
2. High-performing call center capabilities
3. Alignment of resources to support continuous performance improvement
   - Breakthrough resources in ambulatory care
   - In-facility ambulatory care coaching program

AND…

We will likely need to strengthen the community provider network around facilities of high-risk