AGENDA

INFORMATION TECHNOLOGY COMMITTEE

Meeting Date: April 12, 2018
Time: 11:00 AM
Location: 125 Worth Street, Room 532

BOARD OF DIRECTORS

CALL TO ORDER — **MS. YOUSSOUF**

ADOPTION OF MINUTES
February 7, 2018

CHIEF INFORMATION OFFICER REPORT — **MR. LYNCH**

ACTION ITEM — **MR. LYNCH & MR. LUTZ**

Resolution

Authorizing the New York City Health and Hospitals Corporation ("NYC Health + Hospitals' or the "System") to take the necessary steps to implement a Network and Unified Communication Infrastructure Upgrade throughout the System and to procure the necessary contracts for: staff augmentation to implement, configure, test and install the equipment, migration and cutover services, and wireless survey services, at a cost not to exceed $32 million in capital funds, which is allocated in the City Capital Budget, over the next four years, all of such procurements to be effected in conformity with NYC Health + Hospitals' Operating Procedure 100-5 but without further Board authorization provided that Enterprise Information Technology Services division of NYC Health + Hospitals ("EITS") shall make regular periodic reports to the Board of Directors to detail such procurement and to report on the progress of the implementation program and track the same to the budget hereby established.

INFORMATION ITEMS — **MR. LYNCH**

IT Update
Infographic Patient Care Locations

OLD BUSINESS

NEW BUSINESS

ADJOURNMENT

NEW YORK CITY HEALTH + HOSPITALS

MINUTES

Meeting Date: February 7, 2018

INFORMATION TECHNOLOGY COMMITTEE

ATTENDEES

COMMITTEE MEMBERS
Emily Youssouf, Chair
Mitchell Katz, MD, President and CEO
Josephine Bolus, RN
Barbara Lowe, RN

NYC HEALTH + HOSPITALS CENTRAL OFFICE STAFF:
Paul Albertson, Vice President, Supply Chain
PV Anantharam, Senior Vice President and Chief Financial Officer, Finance
Dr. Eytan Behiri, Chief Medical Information Officer, Information Technology
Isabella DeJesus, Intern, Legal
Suzanne Fathi, Director, Information Technology
Colicia Hercules, Chief of Staff, Office of the Chairperson
Janet Karegozian, Assistant Vice President, Information Technology
Barbara Lederman, Assistant Vice President, Information Technology
James Linhart, Deputy Corporate Comptroller, Comptroller's Office
Ana Morengo, Senior Vice President, Communications & Marketing
Eric Orner, Director, Communications & Marketing
Shaylee Papadakis, Finance
Salvatore Russo, Senior Vice President & General Counsel, Legal
Kevin Lynch, Senior Vice President and Chief Information Officer, Information Technology
Barry Schechter, Assistant Director, Information Technology
Brenda Schultz, Senior Assistant Vice President, Financial Planning
David Starr, GO Program, EMR Implementation, Information Technology

OTHERS PRESENT:
Tim Cosgrave, Cerner
Larry Garvey, Cerner
Jessica Groterol, Office of Management and Budget
Jose Sanfrego, MetroPlus

INFORMATION TECHNOLOGY COMMITTEE
Wednesday, February 7, 2018

Emily Youssouf called the meeting to order at 10:20 AM. She welcomed the new Chief Information Officer (CIO) Kevin Lynch. Mr. Lynch thanked her. The minutes of the November 8, 2017 meeting were adopted.

CHIEF INFORMATION OFFICER REPORT

Mr. Lynch said this will be a high level report because he has only been here for 20 days. He wanted to have this meeting to report on his observations thus far. He then gave his CIO Report:

Delivery System Reform Incentive Payment (DSRIP) Program

Mr. Lynch said one of our milestones was creating a Contact Center. We consolidated 11 centers where patients called in to make appointments and referrals into four locations with one centralized platform (one phone number). There will be updates and improvements to this system.

EMR GO Program Update

Mr. Lynch said this program has many names and it is to standardize our medical record system on a single (Epic) platform. He said we are on-track and our next go-live will be in November 2018 and will conclude in April 2020.

Mr. Lynch said he has been working with the team and vendor to find ways to compress that time frame in a safe and efficient way.

Emily Youssouf said this system goes by many names. She asked if we can use a uniform term.

Mr. Lynch agreed. He said at previous positions, we had one name and we will come up with one now.

Dr. Mitchell Katz said that previously we had a naming contest involving all employees. We called it Orchid because that was the name our winner came up with.

Mr. Lynch said we will do that and come up with a consistent name.

Mr. Lynch continued by saying we are working with Dr. Machelle Allen on governance, getting the right owners for the clinical and administrative parts of GO.

Enterprise Resource Planning (Project *Evolve*) Update:

Mr. Lynch said Phase 1 of this project involved Supply Chain and Finance. Wave 4 of Phase 1 is scheduled to go live on March 5 at NYC Health + Hospitals/Coler and NYC Health + Hospitals/Elmhurst. This will be followed by go-lives on March 19 at NYC Health + Hospitals/Bellevue and NYC Health + Hospitals/Gouverneur.

Mr. Lynch said he has been attending governance meetings and things are looking good. There are always challenges but we are working on those as well.

Mr. Lynch said Phase 2, which is Payroll, Time & Labor, and Absence Management (Time Capture), is scheduled to go live in January 2019. Instead of large paper sheets we fill out now, it will be electronic time capture. There will also be a new payroll system. It will go live in January 2019. He said the Time Capture will go live 60 days after Payroll, though we are working with the team and the vendor to see if we can make that happen sooner.

Ms. Youssouf said the time frames on these projects have been continuously extended. We look forward to seeing if these time frames are realistic.

Mr. Lynch said in IT, we have a governance model that is designed to have timelines that make sense. He said we need to take time to make sure the milestones are done correctly. As of today, these projects are on-track and we keep track of them.

Dr. Katz said Mr. Lynch and he worked together. Dr. Katz refers to Mr. Lynch as a "primary care doctor for IT." He goes to the site to figure out what the problem is. He said he wants to raise an issue now to show that Mr. Lynch will help show how IT can help with patient care.

Dr. Katz said he conducted a town hall recently at NYC Health + Hospitals/Jacobi and invited people to email their questions and suggestions to make things better. He said this is an issue Mr. Lynch and I faced in Los Angeles. He said a doctor at Bellevue wrote that, in order to make a long distance call, they have to go through an operator. He said this is from the days when long distance calls actually cost money. Today, that is not the case. When care providers need to call family members about a patient, it can take up to 20 minutes to get an operator since there are only two (it is not their fault; they are very busy). In that time, the doctor might have to hang up to deal with a patient. We do not know if this is because we did not make the change during phone contract negotiations. But it impacts patient care. It should not be 20 minutes to call family.

Dr. Katz said he is giving this as a challenge to Mr. Lynch since he solved it before.

Mr. Lynch said that when he was at the larger Board meeting when he first joined at the end of 2017, he told everyone that he is an IT professional. He said we never touch patients but we help the doctors and nurses and others who help the patients. We want to get rid of anything that hinders care and we want to help providers do their jobs.

INFORMATION ITEM 1:

IT OBSERVATIONS AND FUTURE PLANS

Mr. Lynch spoke to a presentation called IT Committee Meeting, Information Item: IT Observations and Future Plans. Under Governance, he said we will develop a strategic direction with leadership using the Health Information Technology Governance Model. This includes strategic leadership from both Clinical and Information Technology. He said it will include members from appropriate facility-based and Central Office clinicians, as well as IT resources. There will be different types of governance for different projects. This will help to align our decision making process with strategic goals.

Ms. Youssouf said we had Supply Chain separated from IT, which I do not understand why this happened. Is that under you now?

Mr. Lynch said not now but the projects that come up will allow us to collaborate with them.

Paul Albertson said over the years, we centralized our purchasing model and we are the central point of negotiation with vendors and for our business partners. He said we have been working with IT. He said he discussed continuing this with Mr. Lynch already.

Mr. Lynch said this governance model will be in place to prioritize all projects aligned with strategic goals and communicate as a system how they will be operationalized. This helps IT and all projects within. Governance means making good informed decisions.

Barbara Lowe asked if there is a dashboard that would allow us to have a bird's-eye view of projects.

Mr. Lynch said yes, and it will be helpful. We want to share our dashboard so that everyone can see it in an open environment.

Under Project Management, Mr. Lynch said all health information technology projects will be enterprise in nature to be used consistently across all NYC Health + Hospitals clinical and administrative locations. There might be an exception (legislative) but they will be the exception.

Mr. Lynch said we need a structured, disciplined method to initiate and track all health information technology projects. All projects need vetting and prioritization. We have project management teams to work on this, but we will also need the business owners' help as well. Project management and governance go hand-in-hand at this stage.

Josephine Bolus said some of the projects reach expiration date and people rush in here, asking for funding, and are sometimes even in default. That has been a big problem. We had a committee that was supposed to keep track of all the projects to make sure nothing like that would happen. It would give us more time to study these requests. We really need someone to watch these things so that we have options other than allowing the expansion of projects.

Ms. Youssouf agreed. She said IT here is huge. The dashboard is important because sometimes the issue is where we are with a given project. We need to know it is under control. I know people have tried hard but things have not always come together.

Mr. Lynch said this is a challenge but doable. He said we have to set and keep milestones. Sometimes you are at the end of a project you realize you need extra but that is not accepted in strong project management.

Mr. Lynch gave ERP as an example. It started in January. We are one-twelfth of the way there. Are we one-twelfth of the way there? Did we get a good start? Good starts means good finishes. We are going to be tracking these things via milestones. That does not stop emergencies, not to make excuses, but there are complexities. It helps us keep expectations and milestones on track.

Mr. Lynch said we have contractors in some necessary positions but otherwise we have IT staff as our team.

Mr. Lynch continued with Inventory Resources. He said I have spent a lot of time speaking with people and looking at what we have. I am working on dashboards.

Ms. Bolus said my question is, why are we outsourcing with all the resources we have? Can we get a handle on what we have? We have so many people, but we need to go out and get outside resources? We want to know what is happening with the money we give them.

Dr. Katz said I told everyone here that I want to do our work with staff, whether that is nurses or IT. We contract out when we need some specific thing that we cannot do, such as legal or IT. We are generalists and sometimes we need help from experts. For some reason, big parts of NYC Health + Hospitals have been contracted out. You cannot improve an organization with people from outside. You need to motivate and inspire your people in ways I know this Board can. IT is heavily consultant-oriented. If it is specialized, that is okay. But we are looking to offer people jobs so they feel a stake in the organization and become part of us. You cannot have accountability from people who do not work for you.

Ms. Youssouf agreed saying this is something we have discussed again and again. She said consultants take the knowledge when they walk out the door.

Dr. Katz said we have let go of millions of dollars of consultant work in the past four weeks. PV Anantharam is working on the total dollar amount. It will be a large number. You will see a very different way of doing business in the future. We want people whose first commitment is to NYC Health + Hospitals.

Ms. Youssouf said I am happy to hear this.

Mr. Lynch turned to the slide and said he put them in order: People, Landscape of all clinical and administrative locations, IT Systems and Projects. With people, I am finding out who they are, what they do. This includes my personally evaluating contract renewals and looking at organization charts. In big projects like GO and ERP, our goal is self-sustainability.

Mr. Lynch said the other part is the landscape of all clinical and administrative locations. He turned to the four charts that detail Acute Care Centers, Post Acute Care, Gotham Health Major, Neighborhood Health Centers, smaller clinics (such as school based clinics), and administrative locations. We want standard naming conventions on these too. He said I sent this to staff members and I got great feedback. Then I got lists of dozens more facilities. That is important from IT perspective because we do not have enterprise systems. For example, we have three with Epic but the others are on various versions of QuadraMed.

Ms. Bolus said this can be confusing for doctors and nurses because they have to copy and paste from various sources. We do Rikers (Corrections) and all the smaller ones in different places.

Mr. Lynch said okay, that is a new one. We need to add that to this list. We need infrastructure in place and standardization to access IT systems we need. We also need to look at the list of projects. We have to ensure we capture all existing projects and develop structured method to onboard all future requests/projects (as described above). There has to be prioritization to meet our strategic needs. We need to finish what we start.

Ms. Youssouf said there always seems to be exceptions. We cannot change this so we need to put a band aid on it, etc. I am happy you are here. You have a big job and we hope you can pull it together to move forward. We need to understand because IT is a huge budget cost. It should be but we want to know where the money is going and outcomes.

Mr. Lynch said we want to serve in the most safe and efficient way. We will have to make some hard decisions about not putting money into legacy systems and going full force into the new standard systems. We will be reporting to you on this.

Ms. Youssouf said we look forward to seeing you often.

Mr. Lynch said looking forward to working with you.

Dr. Katz said this is a very functional Committee and Board. People need to understand we are moving forward and not stagnant. We are here to help Mr. Lynch succeed.

Ms. Youssouf said you have the Committee's full support.

There being no further business, the meeting was adjourned at 11:00 AM.

CHIEF INFORMATION OFFICER REPORT

Briefing for the Information Technology Committee of the NYC Health + Hospitals
April 9, 2018

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

EMR GO Program Update:

- Current Schedule – The present approved Enterprise Epic implementation timeline continues to have all eleven of NYC Health + Hospitals' acute care facilities going live prior to April 2020.
- Our team continues discovery for an implementation strategy that will complete the Epic rollout at NYC Health + Hospitals acute care facilities in calendar year 2019. Once confirmed, we will seek formal approval to adopt the new compressed implementation timeline.

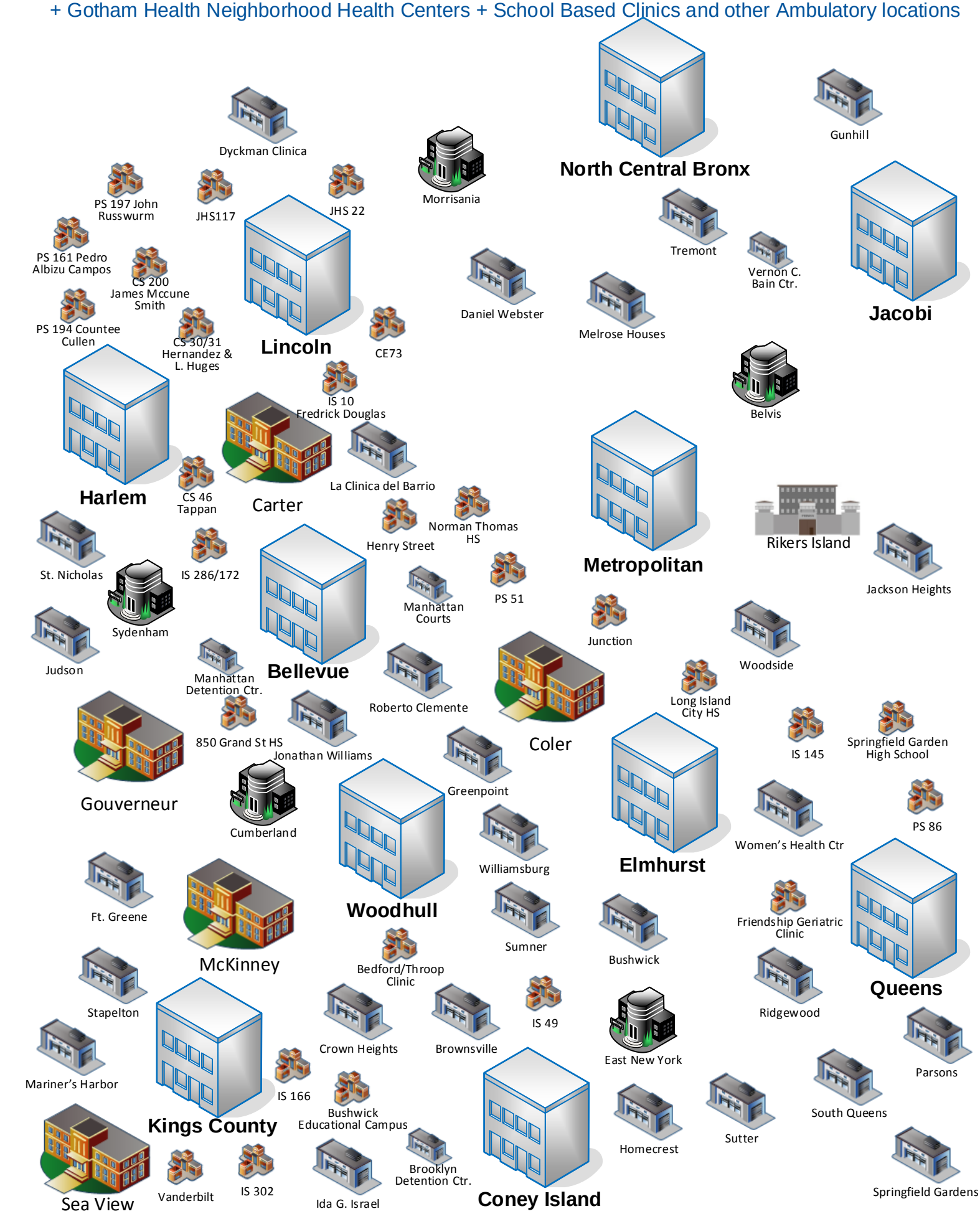
Enterprise Resource Planning (Project *Evolve*) Update:

- Phase 1 – PeopleSoft Finance (A/P) & Supply Chain:
    - Wave 4 successfully went live in two staggered deployments:
        - March 5th – Coler and Elmhurst
        - March 19th – Bellevue and Gouverneur
    - Wave 5 Go-Live (Final) is on track for deployments listed below:
        - May 21st – Jacobi and North Central Bronx (NCB)
        - June 4th – Coney Island, Seaview, Mariner's Harbor, Stapleton, and Metropolitan
- Phase 2 – PeopleSoft Payroll/Time & Labor/Absence Management
    - Go-Live on track for January 2019.
- Time Collection Devices:
    - Rollout will be a phased approach throughout 2019.

This completes my report today. Thank you.

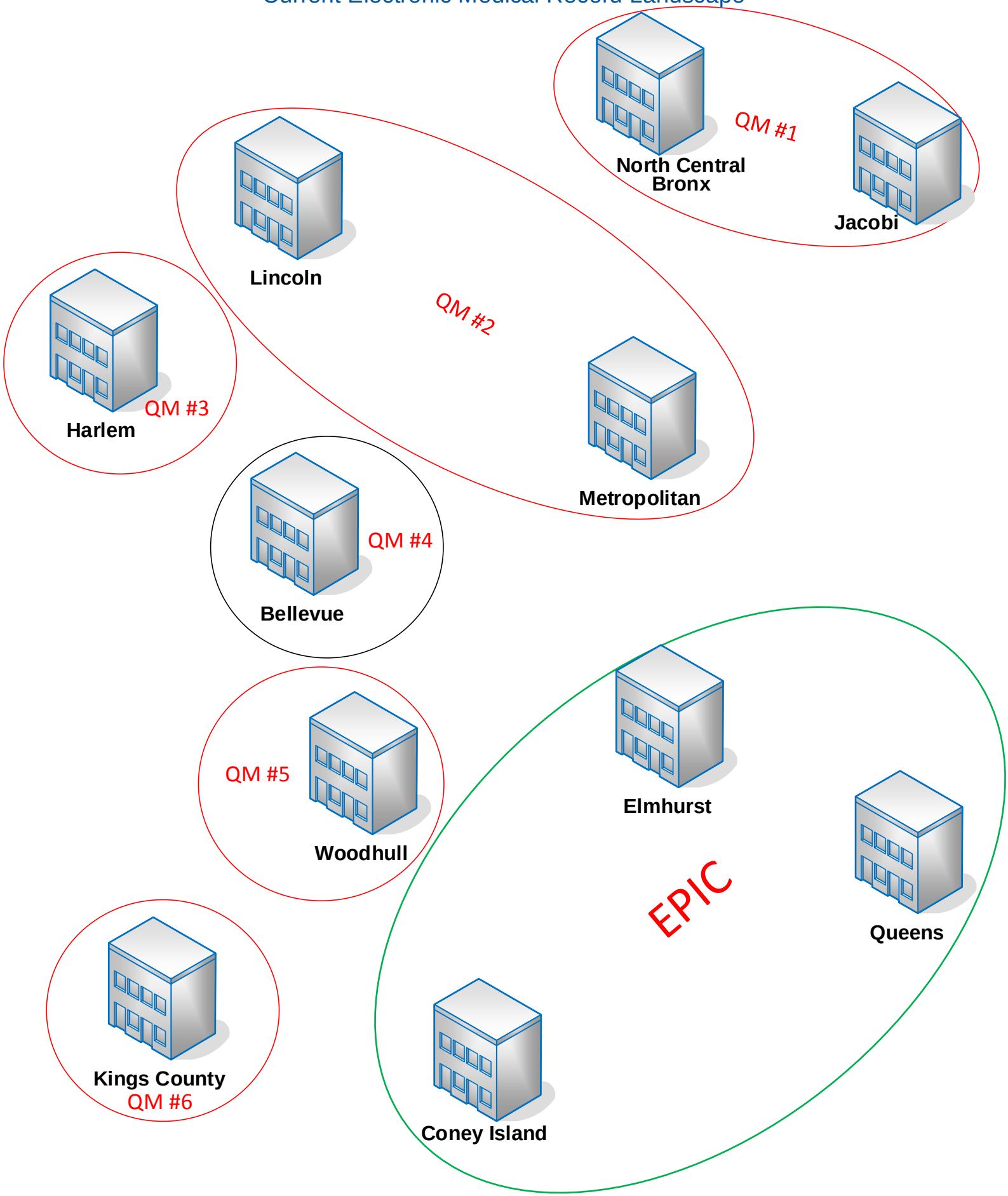
NYC H+H

Acute Facilities + Post Acute Care + Correctional Health Services+ Gotham Health Major Facilities + Gotham Health Neighborhood Health Centers + School Based Clinics and other Ambulatory locations



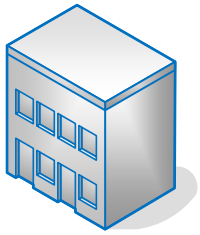
NYC H+H

Current Electronic Medical Record Landscape

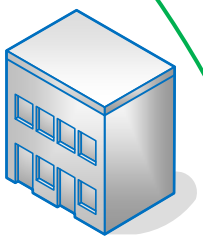


NYC H+H

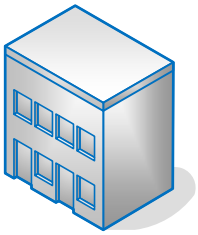
EMR future state



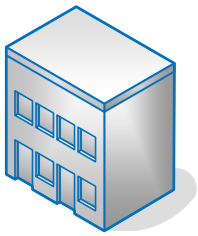
North Central Bronx



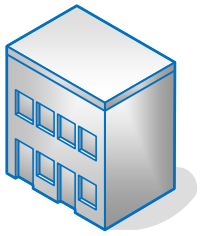
Jacobi



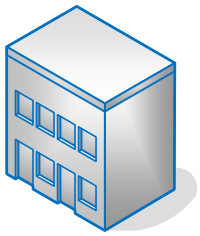
Lincoln



Harlem

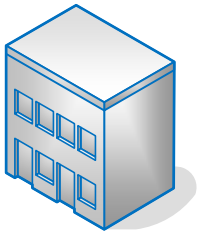


Metropolitan

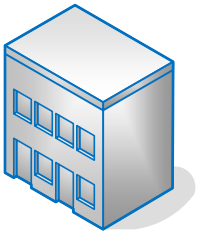


Bellevue

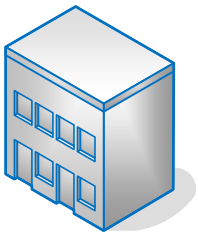
EPIC Clinical &
Revenue Cycle



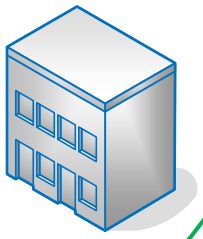
Elmhurst



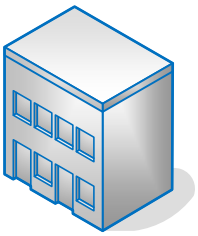
Woodhull



Kings County



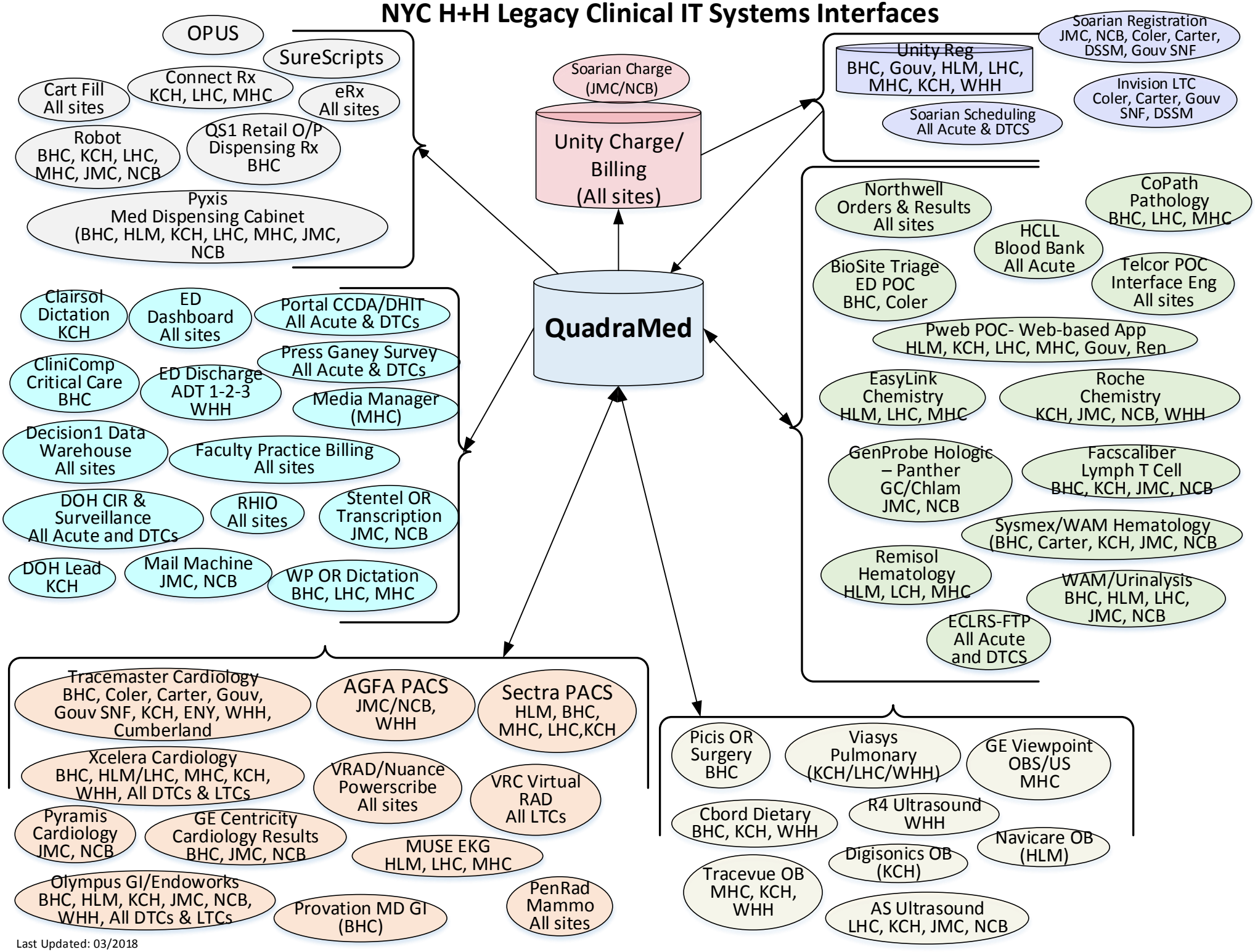
Queens



Coney Island

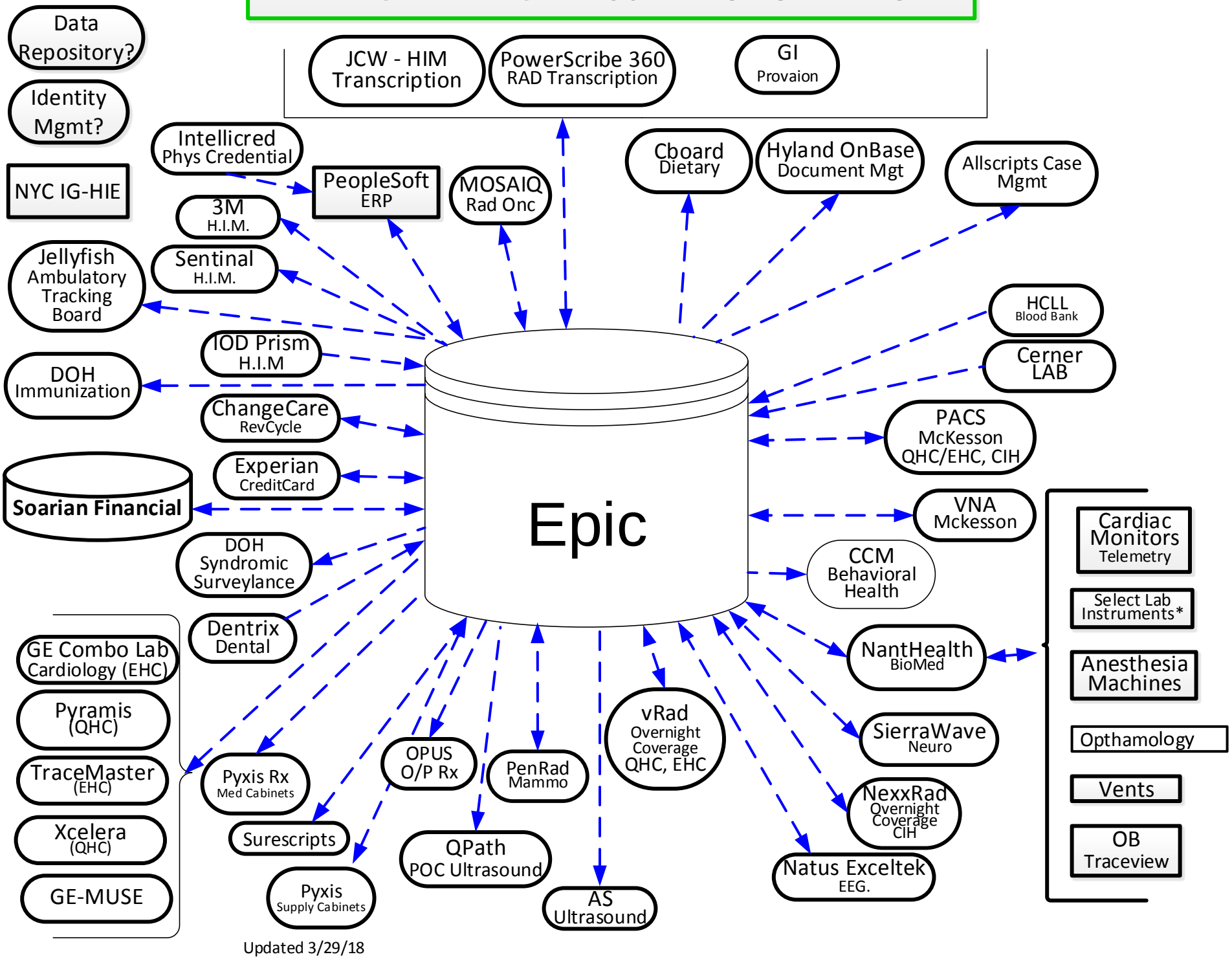
Updated 02/22/18

NYC H+H Legacy Clinical IT Systems Interfaces



Last Updated: 03/2018

NYC H+H Clinical IT SYSTEMS



Updated 3/29/18

RESOLUTION

Authorizing the New York City Health and Hospitals Corporation ("NYC Health + Hospitals' or the "System") to take the necessary steps to implement a Network and Unified Communication Infrastructure Upgrade throughout the System and to procure the necessary contracts for: staff augmentation to implement, configure, test and install the equipment, migration and cutover services, and wireless survey services, at a cost not to exceed $32 million in capital funds, which is allocated in the City Capital Budget, over the next four years, all of such procurements to be effected in conformity with NYC Health + Hospitals' Operating Procedure 100-5 but without further Board authorization provided that Enterprise Information Technology Services division of NYC Health + Hospitals ("EITS") shall make regular periodic reports to the Board of Directors to detail such procurement and to report on the progress of the implementation program and track the same to the budget hereby established.

WHEREAS, NYC Health + Hospitals is undertaking a Network and Unified Communication Infrastructure Upgrade ("Network Refresh") project to upgrade the network infrastructure to accommodate application growth, increase bandwidth for faster application response times, support interoperability and maintain stability, and to migrate to a Unified Communication Voice-Over-Internet-Protocol (VOIP) voice and data communication system; and

WHEREAS, an updated communication system is essential to operate efficiently and to support new technologies for such initiatives as the Epic Electronic Medical Record, Epic Revenue Cycle, DSRIP, and payroll/ time keeping systems; and

WHEREAS, the Network Refresh will provide the ability to share various business, clinical and data applications both within NYC Health + Hospitals and over the Internet, allowing NYC Health + Hospitals to communicate from system to system and/or system to end-user/clinician, our patients and business partners; and

WHEREAS, the Network Refresh project is funded via the City's Capital Budget in the amount of $160 million over the next 4 years, to procure all networking and VOIP hardware and equipment components, and all services needed to implement, configure and install the equipment, migrate and cutover to the new infrastructure; and

WHEREAS, of the total amount of $160 million, at the present time, NYC Health + Hospitals is seeking authority to procure the necessary services, including wireless surveys and staff augmentation, to implement the Network Refresh for an amount not to exceed $32 million; and

WHEREAS, EITS will work with the Office of Supply Chain Services to procure contracts under Operating Procedure 100-5 with vendors that supply the necessary services, and will report to the Board of Directors the award of such contracts at regular periodic intervals; and

WHEREAS, the Senior Vice President/Chief Information Officer will be responsible for the supervision, management and reporting of this project.

NOW THEREFOR, IT IS RESOLVED that New York City Health and Hospitals Corporation be and hereby is authorized to take the necessary steps to implement a Network and Unified Communication Infrastructure Upgrade throughout the System and to procure the necessary contracts for: staff augmentation to implement, configure, test and install the

equipment, migration and cutover services and wireless survey services at a cost not to exceed $32 million in capital funds, which is allocated in the City Capital Budget, over the next four years, all of such procurements to be effected in conformity with NYC Health + Hospitals' Operating Procedure 100-5 but without further Board authorization provided that Enterprise Information Technology Services division of NYC Health + Hospitals ("EITS") shall make regular periodic reports to the Board of Directors to detail such procurement and to report on the progress of the implementation program and track the same to the budget hereby established.

EXECUTIVE SUMMARY

Background:

New York City Health + Hospitals is undertaking a Networking and Unified Communications Infrastructure Upgrade ("Network Refresh") to configure, test, install, and cutover from a Private Branch Exchange (PBX) to a Unified Communication Voice-Over-Internet-Protocol (VOIP) voice and data communication system. The Network Refresh will upgrade and maintain a network infrastructure that will accommodate application growth, increase bandwidth for faster application response times, support interoperability and maintain stability.

The Network Refresh project includes the procurement of all the hardware to connect the facilities to the data center (routers and core switches), the hardware to connect departments to these core switches, the circuits for connectivity between the facilities, the wireless network at each facility, an upgraded phone system running Voice Over IP technology and the associated wiring and services needed to design, install and tune the installations once completed.

There are two primary drivers for this refresh. The first is to replace aging equipment (the average age for the phone systems is 30 years, while the average age for the network equipment is 10 years). The second is to meet the needs of enterprise initiatives including ERP, Epic, BioMed and the Contact Center. The upgraded network infrastructure will support end user devices including desktop computers, mobile devices, biomedical devices, and future needs such as video consultations as part of telehealth and telemedicine.

The implementation of the Voice Over IP (VoIP) technology will allow our calls to flow over our network within the facility and across the facilities and will allow NYC Health + Hospitals to change their long distance and calling services from a pay per minute to paying per call with unlimited minutes similar to a cell phone plan. Currently the only facilities using this technology are Henry J. Carter with current implementations underway at Queens and Elmhurst.

The largest portion of the $160 million allocated in the City's Capital Budget will be used to procure the equipment needed to support the infrastructure, while $32 million will be spent for services related to design, implementation, wireless surveys, and tuning of the equipment purchased. All of these services will be performed at each facility.

At each facility, the process starts with a wireless survey, to scan the facility and identify any conflicting wireless networks from surrounding buildings, instruments, or other devices that could cause interference with the network. Once the survey is completed, the provider can indicate where the wireless access points need to be placed throughout the facility building(s) in order to provide optimal coverage. Once implementation is completed, the provider will come in and review the performance of the network, to identify any gaps in coverage that were not previously addressed during the installation phase.

Similar services are also performed for the Voice Over IP system, to identify any wiring replacement to the end user devices, or between the networking equipment, required to ensure optimal services. The variance in cost across the facilities

depends on the size of the facility and the number of departments and related complexity due to additional needs.

EITS has completed a network refresh at Elmhurst, Queens, and Woodhull, with partial work done at Coney Island, Jacobi, and North Central Bronx, with capital funds obtained before the current funding.

Financing: The program is funded through the City's Capital Budget, over the next 4 years. Of the total amount of $160 million, at the present time, NYC Health + Hospitals is seeking authority to procure the necessary services, including wireless surveys and staff augmentation, to implement the Network Refresh for an amount not to exceed $32 million.

Procurement: The services required for the proposed implementation will come from many service providers for wireless surveys and staff augmentation. Contracts for such services will greatly range in value from hundreds of thousands of dollars to millions of dollars. All vendors will be procured in accordance with the procurement rules of NYC Health + Hospitals conducted in the normal course by the Office of Supply Chain Services. All contracts will be reported to the IT Committee of the Board at regular periodic intervals with such detail and in such format as the Committee requests.

IT Committee Meeting

Information Item: IT Update

Kevin Lynch, Senior Vice President and Chief Information Officer

April 12, 2018

Governance Update

- We have developed an **Executive Technology Committee** that has set the following strategic directions:
  - All Health Information Technology projects will be Enterprise projects
  - Will be initiated and tracked in a consistent, standard process
  - Prioritize the need to get off of QuadraMed and onto Epic

- **Health Information Technology Prioritization Committee**
  - Members include appropriate facility-based and Central Office clinicians and IT resources
  - Charter: Prioritize all projects that IT will dedicate resources to complete
  - Decision-making body aligned with the strategic direction of NYC Health + Hospitals

Inventory Resources

- People: Developing a path to greater self sustainability
- Landscape of all clinical and administrative locations:
- IT Systems: Centralized, federated, interfaced and stand alone
- Projects: Ensure we capture all existing projects and develop structured method to onboard all future requests/projects