AGENDA

INFORMATION TECHNOLOGY COMMITTEE

Meeting Date: April 9, 2019
Time: 10:00 AM
Location: 125 Worth Street, Room 532

BOARD OF DIRECTORS

CALL TO ORDER

MR. PAGAN

ADOPTION OF MINUTES

November 8, 2018

CHIEF INFORMATION OFFICER REPORT

MR. LYNCH

OLD BUSINESS

NEW BUSINESS

ADJOURNMENT

NEW YORK CITY HEALTH + HOSPITALS
MINUTES

Meeting Date: November 8, 2018

INFORMATION TECHNOLOGY COMMITTEE

ATTENDEES

COMMITTEE MEMBERS
Gordon Campbell, Chair
Scott French (representing Steven Banks in a voting capacity)
Barbara Lowe
Matt Siegler (representing Dr. Mitchell Katz in a voting capacity)

NYC HEALTH + HOSPITALS CENTRAL OFFICE STAFF:
Paul Albertson, Vice President, Supply Chain and Materials Management
Machelle Allen, MD, Senior Vice President, Chief Medical Officer
Hannah Byrnes-Enoch, Director, Population Health
Robert DeLuna, Senior Director, Communications & Marketing
Suzanne Fathi, Director, Information Technology
Colicia Hercules, Chief of Staff, Office of the Chairperson
Sean Koenig, Assistant Vice President, Information Technology
Barbara Lederman, Assistant Vice President, Information Technology
Khoi Luong, Director, Medical Affairs, Post-Acute Care Operations
Kevin Lynch, Senior Vice President, Chief Information Officer
Ana Marengo, Senior Vice President, Communications & Marketing
Maureen McClusky, Senior Vice President, Post-Acute Care Operations
Kim Mendez, Senior Vice President, Chief Nursing Executive
Joseph Reyes, Senior Director, Medical & Professional Affairs
Lisette Saravia, Senior Executive Secretary, Office of the Chairperson
Barry Schechter, Assistant Director, Information Technology
Brenda Schultz, Senior Assistant Vice President, Financial Planning
Lisa Stagar, Assistant Vice President, Finance

OTHERS PRESENT:
Tim Cosgrave, Cerner
Justine DeGeorge, Office of State Comptroller
Larry Garvey, Cerner
INFORMATION TECHNOLOGY COMMITTEE
Thursday, November 8, 2018

Gordon Campbell called the meeting to order at 10:05 AM. The minutes of the September 13, 2018 meeting were adopted.

CHIEF INFORMATION OFFICER REPORT

Kevin Lynch thanked the Committee and then spoke to the CIO Report.

(H2O) Epic Electronic Medical Record (EMR) Initiative:

Mr. Lynch said we have a new name for the enterprise medical record: H2O. It stands for Health and Hospitals Online. H2O has been successfully turned on at Woodhull/Cumberland and 10 associated Gotham Clinics for clinical and revenue cycle modules. He said we also retrofitted the Revenue Cycle module for Queens, Elmhurst, Coney Island, and 17 associated clinics which have already been using the clinical modules to provide patient care.

Mr. Lynch said patient care is being performed using H2O in a meaningful way. The project is progressing positively with the natural discovery and remediation of standard go-live issues. He said our enthused and energetic staff are using H2O effectively to provide patient care. We continue onsite support for the next several weeks and will have dedicated staff allocated for additional weeks, as needed.

Mr. Lynch said he and Dr. Kim Mendez have been touring facilities and watching people use the new system. It has been very successful. He said the next go-live will be Bellevue, Harlem, and their associated clinics on March 30, 2019 (141 days). He said our testing and training has been very successful. We have trained thousands of employees to use the system. He showed a red jacket that team members wear so they will be visible and easily accessible for at-the-elbow support. We are developing our own staff to move forward.

Gordon Campbell said you are doing a great job with the implementation. He asked if the old system gets shut down now that there is a new one.

Mr. Lynch said we cut off QuadraMed at midnight and then we bring up H2O. QuadraMed is read-only and orders in it have to be fulfilled.

Mr. Campbell asked how much is Epic off-the-shelf and how much is custom?

Mr. Lynch said there is some customization, but it is mostly foundation (standard) build, which is preferable for us.

Mr. Lynch added that we went live also with Cerner Labs and we will be going live with that in future rollouts. That was very significant and we had support around that. We are very happy with the efforts.

Mr. Lynch then spoke to the slide NYC H+H Acute Facilities + Post-Acute Care + Correctional Health Services + Gotham Health Facilities. He said we changed the symbol for jails to a scales of justice.

He then spoke to slide entitled: NYC H+H Current Electronic Medical Record + Revenue Cycle Landscape. He said we still have five instances of QuadraMed with five different Revenue Cycles. We will be addressing these going forward.

Mr. Lynch said NYC H+H EMR/future state. This shows that all sites will be on H2O Clinical and Revenue Cycle by the end of 2019.

Mr. Lynch talked to slide NYC H+H H2O and QuadraMed Instances post October 20, 2018. It showed the systems each facility has currently.
Mr. Lynch showed NYC H+H H2O Ecosystem. It shows which applications interface with H2O. He showed NYC H+H Legacy Clinical IT Systems. This shows more than 200 applications we will be leaving as we move to this new system.

Mr. Campbell asked about the temporary staff.

Mr. Lynch said we will keep them through the implementation of Epic at the end of 2019 and a little bit afterwards. We will then scale down. He said we will need 260-275 staff to sustain the 30 or so Epic modules. There are teams for each of those modules.

Mr. Campbell asked if they are Epic or NYC Health + Hospitals’ staff.

Mr. Lynch said Epic will always support us as a vendor. But we are building our own internal staff rather than rely on contractors. There will be contractors in that 260-275 number.

Barbara Lowe asked about people getting informatics degrees.

Mr. Lynch said you have to be certified in Epic to work on the system. They will go through the training.

Mr. Lynch spoke about the H2O & Revenue Cycle Implementation Timeline. He said it is very aggressive as we are already planning the next rollouts at Harlem, Bellevue, and their Gotham Health sites.

Mr. Lynch acknowledged the staff that worked on and was involved in the logistics of this go-live. Sean Koenig is on our team and he is here to represent them. We are lucky to have him and his team here and they get the lion’s share of the credit for doing this. We also want to thank the clinicians and other end-users who stepped up to learn the system. We are going to leverage their experience for future rollouts. We reached out to sites that were not yet getting Epic and they sent people, and that was very helpful since we did not have additional people. They will take that experience back to their sites.

**Enterprise Radiology Integration Update:**

Mr. Lynch spoke about Enterprise Radiology Integration. That is our PACS (picture archiving and communication system). He said it is now live at Coney Island, Woodhull, Kings County, Metropolitan, and we just went live this past weekend at Lincoln.

He said we adjusted the go-live dates at the remaining sites to align with other prioritized projects. We did not want them to overlap with our Epic rollouts. The remaining sites include: Harlem, Bellevue, North Central Bronx, Jacobi, Queens and Elmhurst. He then spoke to the slide Enterprise Radiology Integration Initiative Time Line.

Mr. Campbell said the technology is really cool and what you can do remotely is great.

Mr. Lynch said it has been a real patient-satisfier.

**Enterprise Resource Planning (Project Evolve) Update:**

Mr. Lynch talked about Project Evolve, which is our Enterprise Resource Planning program. He said Cost Accounting is still planning their go-live to be aligned with other priority projects. He said Finance is leading this and we are comfortable with the progress being made.

Mr. Lynch said Phase 2 (PeopleSoft Payroll/Time & Labor/Absence Management/Electronic Time Capture) is progressing.

Mr. Lynch said Payroll Go-Live is on track for January 2019. We have to run it in December 2018 for it to be ready for this. We have continued detailed testing efforts including multiple parallel payroll cycles. He said we are tracking expected milestones/gate-checks to ensure we are ready of a successful go-live.
Regarding Time and Labor/Absence Management, Mr. Lynch said modules are on track for May 2019 and Electronic Time Capture is on track to begin rolling out in June 2019. He showed the paper time sheets that are currently in use and said we will no longer use these once the system is implemented. He said we will need to teach staff to use a thumb print.

Mr. Campbell asked if this will be applicable for all employees?

Mr. Lynch said it will be for all Group 12.

Mr. Lynch spoke about Clairvia Clinical Scheduling. He said it is in progress and expected to go live for Wave 1 in Spring 2019. Design and build efforts have progressed positively for our Wave 1 facilities, including Coney Island, Kings County, Sea View, McKinney and East New York. He said the rollout of Waves 1B – 1F will continue through Fall 2019.

**INFORMATION ITEM 1:**

**INFORMATION TECHNOLOGY BUDGET OVERVIEW**

Mr. Lynch said this was in response to a request from the Committee. He then introduced Barbara Lederman.

Mr. Lynch spoke to the presentation called Information Technology Budget Overview. The first slide showed the three main buckets we use for our IT budget: First, H2O Project Budget (Clinical & Revenue Cycle) which had Operating: $515M (FY13-FY21) and Capital: $537M (FY13-FY21). Second is the Enterprise Information Technology Services Budget (Other than H2O) had Operating (FY18): $240M and Capital (FY19-FY21): $156M. Third is the Capital Restructuring Finance Program (CRFP) had an NYS Grant (goes from 2017-2021). The IT Portion of the Total Grant Award: $212M.

The next slide was H2O Project Executive Budget Summary. It had Summary through FY19 including Accruals, Remaining Balance, and Totals. We have spent a little more than half the money so far. He said we are in a good place for the capital spend on this project. We had to use a lot of the money up front for circuits and others.

Mr. Lynch spoke about the Operating budget on the slide. Again, we have spent a little more than half and we are in a good space there.

The next two slides were H2O Operating Accruals vs Balance as of September 20, 2018. The first slide was FY13-FY21 Clinical and Revenue Cycle Operating Budget Summary. He said we are doing well when it comes to total operating budget, application support (full-time employees), implementation support, interfaces, hardware, third party & other software (these are related to the interfaces), and the Epic contract.

The second slide in the series was FY13-FY21 Clinical and Revenue Cycle Capital Budget Summary. It also shows we spent just over half. Mr. Lynch went through total capital budget. When he spoke about implementation support, he said we are building an internal staff. This is important because the red jacket people are good at Epic but not as familiar with our organization.

Mr. Campbell asked how much this system has changed our workflows.

Mr. Lynch said significantly, especially intake areas. We introduced five new pieces of equipment including e-signature for consents. We take pictures of the patient for patient safety. We have scanners for identification and patient labels with bar codes. We also put in credit card swipe to collect copays at locations.
Matt Siegler said we learned lessons with this rollout. Our partners in labor understood the need for this and that was tremendous. He said the amount of leadership collaboration was great thanks to senior leadership and the culture they have at the sites.

Ms. Lowe said you have to understand things like how many miles nurses walk per day.

Mr. Lynch said now they do not have to go back and forth as much thanks to mobile carts.

Scott French referred to slide 23 and application support. He asked if this is a concern regarding time left on the project and the balance remaining. Will you have to adapt the budget?

Mr. Lynch said this number represents how many full-time employees we hired or are going to hire. We have not filled vacancies yet. It is not time-related.

Mr. Campbell asked if there is anywhere we anticipate being over budget.

Mr. Lynch said no, not at this time.

Ms. Lowe said there is one missing element and that is the staffing model with PeopleSoft. She said it was supposed to be finished by 2020. Is that still on the burner?

Mr. Lynch said yes, we use PeopleSoft as our source of truth for human resources. It will feed into Clairvia for acuity.

Kim Mendez said it will be a typical year with Clairvia coming in 2019.

Ms. Lowe asked if it will be real time.

Ms. Mendez said yes, it will interface with ADT at acute care facilities with Clairvia.

Mr. Lynch showed the slide called FY18 Historical Spend (Non H2O – Operating). This is the maintenance of stand-alone systems. We are inventorying all of them to measure costs, including Maintenance ($173 million), such as Microsoft licenses. There is Staff Augmentation ($42 million). This includes Data Sciences and Enterprise Service Desk, which takes 200-300 calls per day. That number went up to almost 1000 during go-live. We are resolving them at a nice clip.

Mr. Campbell asked about average answer times.

Mr. Lynch said it was under two minutes at peak and at one point we were at 45 seconds for wait times at certain points. We had a low abandonment rate and first call resolution was in 60% zone. They were simple things we could take care of.

Mr. Lynch said we also have Upgrades ($24 million). Some examples include Bluecoat Upgrade and Network Refresh, which are systems we (and all IT shops) use.

The next slide Mr. Lynch presented was Approved Capital Projects with Expense. He mentioned Network Refresh for $160.1 million. This was approved in 2015. It was necessary for the H2O implementation. We have spent about $58 million for upgrade and $2.9 million for services.

Mr. Campbell said any contracts above $5 million come before the Board.

Mr. Lynch agreed. He then pointed at the Enterprise PACS which just went live at Lincoln. He said Hardware at Jacobi and Sungard (which is in New Jersey). This is so in case one goes down, we can have another that works (failover). He said Enterprise Resource Planning has spent money on upgrades, services, and maintenance, but we have a little over $32 million left. We feel good about these numbers.
Mr. Lynch talked about slide called Board Approved Contracts for Ongoing Operating Expenses. Barbara Lederman said these are contracts that are over $5 million that came before the Board. They are mostly ongoing maintenance. This slide shows how much we have spent and how many years are left before we come back.

Mr. Lynch said Sungard is good until the end of 2019. We will continue with it and we will come back to the Board to extend that. We will be doing the same when the time comes for Microsoft.

Mr. Campbell asked if we could bundle all of Microsoft with the help of Dewitt.

Mr. Lynch said we are working with them to increase our buying power with the City.

The last slide Mr. Lynch presented was NYS Grant, including Grant/Cash Disbursement Summary. He said we were allocated $212 million and we will be prioritizing our spending on projects. We have a contact center for our call center to schedule appointments.

Mr. Lynch said we wanted to give details and a review of our three budget buckets.

Ms. Lowe asked for the future, will value-based funds we approve be used to sustain the electronic health record.

Mr. Lynch said there will be ongoing maintenance and support going forward. After 2021, we will need support so in 2019 and 2020, we will need to create a path for that.

Mr. Campbell said he wanted to thank Mr. Lynch, his team, and everyone in the organization.

There being no further business, the meeting was adjourned at 10:55 AM.
Governance Update

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

Inventory Resources

- **People**: Developing a path to greater self sustainability.
- **Landscape of all clinical and administrative locations**:
- **IT Systems**: Clinical, Financial, HR, centralized, federated, interfaced and stand alone.
- **Projects**: Ensure we capture all existing projects and develop structured method to onboard and prioritize all future requests/projects.
NYC H+H
Current Electronic Medical Record Landscape

Lincoln
Harlem
QuadraMed #3

Bellevue
Metropolitan
QuadraMed #4

North Central Bronx
Jacobi
QuadraMed #1

QuadraMed #2

Kings County
QuadraMed #6

Woodhull
Elmhurst
Queens
Coney Island

H₂O
NYC H+H
EMR future state

H₂O Clinical & Revenue Cycle

+61 Gotham Clinics

Updated 08/30/18
Health Information Prioritization Committee top projects

- H2O (Epic) + Cerner Lab enterprise implementation
- Enterprise Resource Planning (Finance, Supply Chain, HR, Payroll, Time Collection, Nurse Scheduling)
- Enterprise Radiology PACS Imaging
- 340B Pharmacy Split billing
- Enterprise Provation GI
- Enterprise Cardiac Monitoring
- Population Health (CRFP)
- Correctional Health Services EMR project
- Post Acute Care EMR project
H2O Deployment Schedule
Version 7.4 DRAFT

#4
Bellevue
Gotham Health | Gouverneur
Harlem
Gotham Health | Sydenham

#5
Metropolitan
Lincoln
Gotham Health | Belvis
Gotham Health | Morrisania
Jacobi
North Central Bronx

#6
Kings County
Gotham Health | East NY

#7
Henry J. Carter LTACH

Approved by GO Executive Committee on 7/30/2018

Pre-Work  Validation  Build  Testing
Testing/Training/Op Readiness Overlap  Site Readiness (Training, Op Readiness)  GO Support

= GO Live
# Enterprise Resource Planning (ERP) Project Timeline

## ERP Project Phase 2

<table>
<thead>
<tr>
<th>Track 1 - Payroll</th>
<th>Payroll Processing</th>
<th>Track 2 - T&amp;L, AM, TCDs</th>
<th>Time &amp; Labor/Absence Mngmt</th>
<th>Electronic Time Capture</th>
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### Where We Are Today

- Go live moved from May to July

### Clairevia

- **Nursing & Physician Scheduling**

### Legend

- **Payroll/T&L**
- **Design**
- **Configure**
- **Testing & Integration & Go-Live**
- **Rollout**

*Rollout means the Go-live will be spread out by facilities instead of everyone switching over at once to the new system.*

### Table

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<tr>
<th>ERP Project Phase 2</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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<td>Payroll Processing</td>
<td>Go-live moved from May to July</td>
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### Chart

- **A = Kings, ENY, McKinny, SeaView, Coney**
- **B = Cumberland, Woodhull**
- **C = Queens, Elmhurst, Henry J Carter**
- **D = Harlem, Sydenham, Gouverneur, Bellevue, Coler**
- **E = MET, Jacobi, NCB, Morrisania, Belvis, Lincoln, School Based Clinics**
Enterprise Radiology Integration Initiative Time Line

- **April, 2018**: Coney Island (Agfa)
- **June**: Woodhull (Agfa)
- **July**: Metropolitan (Sectra)
- **August 27th**: King's County (Sectra)
- **November 5th**: Lincoln (Sectra)
- **December 3rd**: Harlem (Sectra)
- **February 2, 2019**: Bellevue (Sectra)
- **April 8, 2019**: Jacobi / NCB (Agfa)
- **May 6, 2019**: Queens (Agfa)
- **June 10, 2019**: Elmhurst (Agfa)

**Agfa Imaging Sites**  **Sectra Imaging Sites**

**Enterprise McKesson PACS Imaging Sites**