AGENDA

INFORMATION TECHNOLOGY COMMITTEE

Meeting Date: June 9th, 2016
Time: 4:00 PM
Location: 125 Worth Street, Room 532

BOARD OF DIRECTORS

CALL TO ORDER — **DR. BARRIOS-PAOLI**

ADOPTION OF MINUTES
May 12, 2016

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

1) Authorizing the New York City Health and Hospitals Corporation ("NYC Health +Hospitals") to execute a contract with Deloitte Consulting, LLP to provide implementation services for the PeopleSoft Enterprise Resource Planning ("ERP") System. The contract will be for a term of three (3) years with two one-year options to renew exercisable solely by NYC Health + Hospitals for an amount not to exceed $18,203,795 during the initial three-year term. — **MR. GUIDO**

INFORMATION ITEM:

1) Security & Risk Management Overview — **MR. ARORA**

OLD BUSINESS

NEW BUSINESS

ADJOURNMENT

MINUTES

Meeting Date: May 12, 2016

INFORMATION TECHNOLOGY COMMITTEE

ATTENDEES

COMMITTEE MEMBERS

Lilliam Barrios-Paoli, PhD, Chair
Josephine Bolus, RN
Vincent Calamia, MD
Barbara Lowe, RN
Ram Raju, MD, President

NYC HEALTH + HOSPITALS CENTRAL OFFICE STAFF:

Paul Albertson, Senior Assistant Vice President, Supply Chain
Jun Amora, Director of Strategy, Supply Chain Services, Enterprise Information Technology Services
Olga Deshchenko, Director, Communications & Marketing
Kenra Ford, Assistant Vice President, Clinical Laboratory Operations, Office of HealthCare Improvement
Sal Guido, Senior Vice President and Chief Information Officer, Enterprise Information Technology Services
Michael Keil, Assistant Vice President, Enterprise Information Technology Services
Rahwa Kidane, Engagement Manager, Enterprise Information Technology Services
Patricia Lockhart, Secretary to the Corporation
Jeffrey Lutz, Senior Director, Enterprise Information Technology Services
Antonio Martin, Executive Vice President and Chief Operating Officer
Maureen McClusky, Senior Vice President, Post-Acute Care
Ann Ormsby, Senior Manager, Communications & Marketing
Robert Patterson, Associate Executive Director, Enterprise Information Technology Services
Salvatore Russo, Senior Vice President & General Counsel, Legal Affairs
Vijay Saradhi, Assistant Vice President, Enterprise Information Technology Services
Barry Schechter, Assistant Director, Enterprise Information Technology Services
Brenda Schultz, Assistant Vice President, Enterprise Information Technology Services
Jesse Singer, Senior Director, Medical & Professional Affairs
Eli Tarlow, Assistant Vice President, Enterprise Information Technology Services
Tony Williams, Senior Director, Enterprise Information Technology Services
Ross Wilson, MD, Senior Vice President and Corporate Chief Medical Officer, Medical & Professional Affairs

OTHERS PRESENT:

Larry Garvey, Cerner Corporation
Justine DeGeorge, Office of State Comptroller
Scott Hill, Account Executive, QuadraMed
David N. Hoffman, Compliance Officer, Physicians Affiliate Group of New York
Joni Watson, Office of State Comptroller

INFORMATION TECHNOLOGY COMMITTEE
Thursday, May 12, 2016

Dr. Lilliam Barrios-Paoli, Chair of the Committee, called the meeting to order at 12:05 PM. The minutes of the March 8, 2016 Information Technology Committee meeting were adopted.

CHIEF INFORMATION OFFICER REPORT

Mr. Guido, Senior Vice President and Chief Information Officer, presented the Chief Information Officer Report. He said today marks 40 days since the Epic electronic medical record (EMR) go-live at Queens and Elmhurst. He said there are many people who need to be thanked for a complex implementation that went relatively smoothly. He thanked the members of the Committee for their support, including Dr. Raju, Mr. Martin, and Dr. Wilson.

Mr. Guido said our partners at Clinovations, including Ed Marx and his team, have done a great job in getting us to the finish line. He offered kudos to Kenra Ford from Labs, who did a very complex integration within Epic. He stated that NYC Health+ Hospitals implemented Epic along with Cerner (Soarian) financials and labs. Mr. Guido mentioned that Ed Marx's stated that this was the first implementation of this type in an organization as large as ours. Dr. Raju also mentioned that this was also the first time that an EMR incorporated Behavioral Health patients.

Mr. Guido said there are some exciting things coming up for Epic. He said Long Term Care will, like Behavioral Health, go from paper to electronic on Epic. He also stated that by the time the EMR implementation is completed, our entire environment will be fully digitized.

Dr. Barrios-Paoli expressed her gratitude and congratulations.

Mr. Guido reiterated that it was a huge team effort.

Dr. Raju asked Mr. Guido to note for the record that there were no patient safety issues at all in the EMR implementation. Mr. Guido said there were none whatsoever and it went pretty smoothly, considering how big an implementation it was. He said NYC Health + Hospitals had 900 people come in to support the implementation.

Mr. Guido then addressed the report's Major IT Program Status Updates on a red-yellow-green color scale: Meaningful Use (Overall yellow, Budget green, On-Time yellow); Electronic Medical Record (Overall yellow, Budget and On-Time status green); Enterprise Resource Planning (all green); Radiology Consolidation (all green); and Data Sciences – Analytics (all green).

Mr. Guido informed the Committee that today's information item would be a presentation on Data Sciences, even though we are still gathering data, to show our progress. He said we have worked closely with Dr. Wilson, Dr. Raju, and Mr. Martin to get to where we are today.

He then spoke to some projects in progress:

IDNYC UPDATE

Mr. Guido said IDNYC (an identity card for undocumented immigrants produced by New York City) was deployed at Coney Island in the last several weeks. It allows individuals to use their IDNYC card for registration. He explained that a patient can swipe in at a hospital kiosk and they are automatically registered. He said we are also testing some biometric devices as well. Mr. Guido said the trials at Queens and Elmhurst Hospitals have gone well over the past several years. He stated that we have been working

with City Council and community leaders to explain the program and they are now advocating for us in their communities.

ACTIONHEALTH NYC

Mr. Guido explained this used to be called Immigration Health. It went live on May 2, 2016 and we have 120 patients registered. He said that in combination with the Mayor's Office and Dr. Wilson, we were able to modify our systems to accept IDNYC. Dr. Barrios-Paoli wanted to know if we ask patients if they are documented. Mr. Guido replied that we do not.

Mr. Guido said they have to fill out eligibility forms during registration in order to get in the system. He said that out of 250 people screened, about 120 are in the program today. Registration runs until July 1. He said our goal is to get 1200 people into the program. We then get another 1200 into a control group to see how easy it will be to implement care management for the undocumented. Mr. Guido said there is a third party doing the analytics to make sure we are adhering to all the requirements and to determine all the benefits from the financial and clinical standpoints. He indicated that it is going quite well so far.

SECURE TEXTING

Mr. Guido stated that Information Technology (IT) has worked closely with Dr. Wilson and the Chief Medical Officers (CMOs) at the facilities on this initiative. Secure texting allows for communication between a physician and patient; as well as between physicians with PHI (Protected Health Information) protected. It is for any patient information that needs to be sent in a rapid manner and can includes prescriptions and scheduling updates. Two (2) different products were tested and IT is in the process of awarding a contract. He also mentioned that around 300 clinicians are on it today. Mr. Guido stated it has gone very well and expressed his thanks to Dr. Wilson.

Dr. Wilson said that he would like to recognize the efforts of our House Staff Quality Council. He stated that they took this on and they pushed hard to get it done, with testing and engagement. He said it is a good example of a project being driven from the ground up: a group of nurses wanted to use this as a reminder call for HPV shots for teens. He said its strength is that it works on any phone, including private phones, so it is really easy.

Mr. Russo said that from a legal point of view, Legal Affairs worked with Mr. Guido on these issues.

Mr. Guido said it was a tremendous effort and we collaborated across the organization to get it done. He said we are looking forward to serving the clinical community in the future. Dr. Raju said there is unprecedented cooperation between IT, M&PA, Operations, and Finance. He stated that he has never seen the four (4) top leaders working together so well. He said it made a big difference and offered his congratulations to them. Dr. Barrios-Paoli also offered her congratulations.

ACTION ITEM #1:

Mr. Guido presented to the Committee the following resolution on Managed Print Services:

Authorizing the President of the New York City Health and Hospitals Corporation ("NYC Health + Hospitals") to negotiate and execute a five year contract with Canon Solutions America to provide system-wide Managed Print Services with one two-year option to renew solely exercisable by New York City Health and Hospitals Corporation, in an amount not to exceed $74.3 million for seven years.

The following EITS staff introduced themselves: Eli Tarlow, Assistant Vice President, EITS, and Jun Amora, Supply Chain Services.

Mr. Tarlow spoke to the PowerPoint presentation, "Managed Print Services Contract with Canon Solutions America." He gave the presentation, starting with Current State, showing that NYC Health + Hospitals

prints 480 million pieces of paper per year and has an employee-to-printer ratio of 2:1, which is above the industry standard. Our annual cost is $11.5 million. He said that we are pursuing a Managed Print Services (MPS) program to gain visibility and control printing to save money and boost productivity.

Mr. Tarlow spoke to the Core Benefits of the program, including average cost reduction of $1.6 million per year through consolidation of print vendors and services. It will also lead to reduced complexity, improved end user experience, full visibility, and the development of a strategic program.

Mr. Amora presented the Procurement Methodology. This led to proposals from Canon, Pitney Bowes, and Xerox. An Evaluation Committee with nine (9) members was created and made the decision. He spoke about Canon Solutions America – The Selected Vendor, which is already in many of our hospitals as well as with Corrections Services.

Mr. Guido showed a 7-Year Contract Budget, which is Not to Exceed: $74.3 million over 7 contract years (5 years + 2, 1-year extensions). He stated that there will be pretty significant savings year over year. Over the lifespan of the contract, we are looking at triggered (known) cost savings of around $10 million over the 7 years. In addition, he said there are opportunities for more savings as we get to a ratio of 4:1 or 5:1, and as we use ePrescribe. As data is digitized, printing should be reduced further.

Mr. Martin asked whether this was based on the 2:1 ratio and expressed his concern that we expect better than that. Mr. Guido responded that we all expect better than that. However, the challenges are cultural but we have a plan in place.

Dr. Barrios-Paoli said that this is not a democratic process. We had something similar in the Department of Aging when everyone wanted their own printer.

Ms. Lowe stated that as a nursing person, she recognizes that it might seem that we do not need so many printers but there are certain reports that need to be printed. She asked for further analysis to be performed.

Mr. Guido said there will be a governance group put in place on this with local representation and Central representation. If you look at the dollars we are spending, there are efficiencies that can be built in. He indicated that it is not a democratic governance group.

Approved for consideration by the full board.

ACTION ITEM #2:

Mr. Guido presented to the Committee the following resolution on SunGard Availability Services:

Authorizing the President of the New York City Health and Hospitals Corporation ("NYC Health + Hospitals") to execute documents necessary to increase funding for and extend the existing contract with SunGard Availability Services ("SunGard") for an active/active redundant data center, business continuity and associated professional services. The funding increase for the current contract, an amount not to exceed $8.01 million, covers the remainder of the Contract term through October 31, 2016, and the rest of the funding, in an amount not to exceed $23.1 million covers a two-year extension plus a one-year renewal option (exercisable solely by the NYC Health + Hospitals) for a total of $31.1 million (including a contingency of $3.02 million for costs that may be incurred in the event of any additional power and cooling needs and/or mores or changes to the equipment).

Mr. Guido clarified this resolution by saying this is a request to extend a current contract with SunGard, our data center provider. He said there is also a request for additional funding on our existing contract that was overspent, until October 2016. The reason for the increased spend was due to an upsurge in our storage

and consolidating. We needed additional power and especially cooling as we brought 11 data centers down to two. Mr. Guido said it is above the contingency.

Mr. Guido spoke to the PowerPoint presentation called, "SunGard Availability Services – Alternate Data Center." In the Background Summary, he explained that the contract for SunGard to provide an active/active redundant data center expires October 31, 2016. They currently provide space, power, and environmentals (power, cabling, cabinet space, etc.); they host mission critical servers and computer systems in an active redundant (disaster recovery and business continuity) center; and they assist us with annual disaster recovery mainframe planning and testing.

Mr. Guido read the Request, which was for spending authority of $31.1 million ($23.1 for contract extension, including $3.02 million contingency) and an $8.01 million increase to the current contract. He said the extension of the contract for two years, with a one year renewal, allows sufficient time for transition and migration to a new data center should SunGard not be selected. He indicated that this allows us some time to see if we are fairly priced in the market. There will be an RFP (Request For Proposal) going out in the next couple of weeks to make sure we are getting a good deal on the contracts. He said we are also going to do an ROI (Return On Investment) on building out data centers instead of continually paying out on OTPS (Other Than Personal Service) costs. He said it would be a fixed asset.

Mr. Martin asked if NYC Health + Hospitals would have it forever. Mr. Guido replied that we would and would not be incurring these costs.

Mr. Guido continued reading the Request part of the presentation. He asked for an increase of current contract spending authority to cover additional costs for heating and cooling. He also asked for contingency to pay for costs incurred in the event of additional power and cooling needs and/or changes to the equipment.

Mr. Guido read Reduction in On-Going Costs. He said that over the past several years, we have been consolidating and getting Energy Star equipment in place as well as virtualizing a lot of our work. He said this has allowed us to decrease current contract monthly cost. Mr. Guido explained we can now decrease our current spending from $890,000 per month ($10.7 million annually) to $559k ($6.7 million annually), which is 37% less. The savings of $4 million per year will save us $12 million over three years, which will make up the $8 million overage on our existing contract. He explained we have safeguards in place now to understand the scope of our cooling requirements to not go over on the contract. He went on to say that if we do have to go over, we will have time to come to this Committee and the Board for additional funding.

Ms. Lowe asked if we are approving the budget for current operation as well as the build. Mr. Guido replied that this is not for the build. He said if we want to go through an RFP process to see if we are competitively priced in the marketplace for data center services, perform a cost comparison and then return to the Committee with our recommendations. This will be in the coming months. He said if the RFP goes out in the couple of weeks, we hope to come back to this committee in September to report our findings.

Ms. Lowe asked if these two will dovetail on their time lines to which Mr. Guido replied yes.

Mr. Guido continued by reading the Budget Overview, FY16 OTPS Budget (Non-Epic EMR). He said this is our current budget so most people were familiar with the slide. He said it is our existing budget and not requesting additional money for the ongoing operations. He asked if there were questions.

Mr. Martin said he would recommend doing an analysis on what it would cost to build. He said it does not make sense that we would spend $31 million over three years when we can invest $40 million as a one-time cost and it would be a space NYC Health + Hospitals would own.

Mr. Guido said he agreed and we want to make sure we have the data to present you with the most accurate information. He said we would prefer to have that capital outlay to build out the data center and reduce our costs significantly over time. From an ROI point of view, it would pay for itself in three (3) years.

Approved for consideration by the full board.

INFORMATION ITEM:

Mr. Guido introduced Vijay Saradhi, Assistant Vice President, Data Sciences, who gave the following update on Compass:

Mr. Saradhi said he first wanted to thank the team of engineers who put this program together in a short period of time and also thanked Mr. Guido for his support.

Mr. Saradhi introduced Compass, an application developed which provides directional data to policy makers so that they can make decisions based on real-time data. He said the program is currently in its beta phase, which mean testing the data to ensure its reliability. Lincoln Hospital is currently piloting Compass and in the coming months, the plan is to roll it out at all hospitals.

Mr. Saradhi showed the Compass system and walked the Committee members through it. He highlighted various data points, including Patients and Visits, Infection Statistics, Readmission, Length of Stay, Daily Data, Opioid Prescription, ED Overview, Payers/Insurance Statistics, and Patient Satisfaction. He said it is a corporate view of data.

Mr. Saradhi stated that data can be shown at any facility level, using Kings County as an example. He showed data in real time with actual people who came in on a particular day. Mr. Saradhi stated that data could be viewed on a daily, quarterly or yearly basis. It helps us see how we are doing as a business. He showed a summary view but by clicking a button, produced in-depth details. Information by age group or gender as well as by type of visit could also be accessed, as far back as ten (10) years by facility.

Ms. Lowe commented that she viewed this data as episodes. The information made her think of clinical severity data which is essential for deployment of resources for the patient and everything on the cost side. Mr. Saradhi commented the material being presented is our ability to present information from various sources. He stated the tool allows executives to have a high-level view of data. For example, if Dr. Wilson wants to see clinical view data, this platform supports that. High-Risk Patient data could also be viewed.

Mr. Guido reiterated that our goal was to show the Committee the environment but not to get to in-depth. He stated that high-level information can be drilled down to view the actual patient and the actual doctor. Ms. Lowe stated that the real-time data is very important. She said it helps people make decisions.

Mr. Guido underscored the close collaborative working relationship with Dr. Wilson on this initiative. He also stated that IT was working with Mr. Martin on the operational aspects to help better manage our business. He told the Committee that this was a preview and not dive too deeply since we have only been working on this for the past six (6) months.

Dr. Wilson commented that this touches on what we discussed at the last meeting with data analytics. He said what we are doing here is building a platform. He said it raises questions but also opportunities. He said we are asking, what do we want it to do? With so many different customers, we can get different types of reports on different types of data. He also stated that it raises challenges because it draws on different sources and it challenges the data from all of our systems. He explained it also seriously challenges the question of who designs the reports. The dashboard is easy to see but people want the data, and then they do not know what to do with it. He said they use data to drive change and this is essential.

Mr. Guido said the data has to be centralized. He stated that we have to be practical because the facilities require this data but we have to plan for the future. Dr. Barrios-Paoli reiterated that all facilities should report on the same things for comparison instead of everyone just choosing what they want.

Ms. Lowe said there should be some balances to this since it is really about the patient's safety and of course, there is the financial side. She stated that they need to apply this information to the patient.

Mr. Guido commented that Dr. Wilson pointed out something critical which is patient integrity. He said we now have seven (7) different instances of QuadraMed and one Epic. We have Soarian and Unity. So if you look at the source data, we have 12-15 different sources coming in. He said each facility documents differently. He gave Mammography as example. He explained that each facility might code it differently within their systems. He stated that our job is to make sure we understand how they are coding it and aggregating it to report one metric. This presents a challenge but we have a team within Mr. Saradhi's group that does that. We work extremely closely with Dr. Wilson's group on the integrity. He mentioned both a Data Governance and Standards piece and prioritization of what we do next. We have approximately fifty (50) requests in for data but we have to make it viewable to everyone in the same way.

Dr. Wilson said last December, the Leadership Committee had a discussion about the importance of data analytics. He explained this body of work is the essential underpinnings of that work, and, as he foreshadowed at that meeting, we are now at a point where we need to create the governance structure, the decision making processes for stakeholders. He said this is our next step so that we can connect all those data requirements and organization performance metrics. He said this will allow us to take the next steps.

Mr. Guido again stated to the Committee that this was a preview of what Mr. Saradhi and his team has accomplished to date.

There being no further business, the meeting was adjourned 12:55 PM.

CHIEF INFORMATION OFFICER REPORT

Information Technology Committee of the NYC Health+Hospitals Board of Directors – June 9, 2016 @ 4:00PM

Thank you and good afternoon. The Epic Electronic Medical Record (EMR) is well underway at NYC Health + Hospitals/Queens, NYC Health + Hospitals/Elmhurst and Home Care. The EMR team is now focusing their attention on NYC Health + Hospitals/Jacobi and NYC Health + Hospitals/North Central Bronx (NCB), which are the next set of facilities to go live with Epic. The GO team has already begun engagement with both hospitals, setting up meetings and using the lessons learned from our April 1st Go Live. Implementation at Jacobi and NCB Hospitals is scheduled for the end of 2016.

I have several other updates that I want to provide the committee with:

Major IT Program Status Updates:

EITS PROGRAM	OVERALL STATUS	BUDGET STATUS	ON-TIME STATUS
MEANINGFUL USE			
ELECTRONIC MEDICAL RECORD (EMR)			
ENTERPRISE RESOURCE PLANNING (ERP)			
IMAGING			
DATA SCIENCES (ANALYTICS)			

On-Time no issues to report Caution – watch for potential project or budget overruns Critical – Missed timelines

Clnical Information Systems Application Rationalizaiton Project:

- Prior to the Epic EMR implementation, Clinical Information Systems (CIS) took on the enormous task of an Application Rationalization process, which is an intense, long-term transformation of business capabilities and processes.
- CIS began to review all clinical applications to determine which processes would be replaced by Epic functionality, would be considered redundant, or in the case of multiple copies, be consolidated into one single instance. Epic is expected to replace about 30% of the identified application instances.
- There are approximately 380 Clinical Applications (CIS is aware that are on the network) and over 1200 instances of these applications, some existing in multiple facilities. Examples of the same application existing in multiple sites are Dentrix and PACS (Radiology Integration Project).
- The Enterprise Dentrix project will unite fourteen (14) sites (on various versions of Dentrix) into one single Enterprise version. Once completed, a single dental record, for the first time, will be available across NYC Health + Hospitals to all our dental providers allowing a total picture of all dental care throughout the system.
- Other rationalization benefits include:
    - Standardized Enterprise Reporting
    - Streamlining maintenance (configuration, testing, training, upgrade, and support) as well as the number of resources necessary to maintain a single system instead of 14+ variations.
    - Cost savings by reducing multiple software licenses and hardware while the net effect of Standardized Workflow and Billing (being centrally managed) will be appreciated by the reduction of resource hours which were necessary at each site to close and bill 300-400 dental visits daily.
- The Dentrix project is on an accelerated time line with the majority of the consolidation scheduled to be completed by late fall of 2016 and the total project completed by first quarter 2017.
- Radiology Integration project (PACS) will transform NYC Health + Hospitals radiology operations so that any radiology image could be read at any location within

the organization using a single platform while providing the tools necessary to generate transparent performance metrics.

- The project will transform and optimize radiology workflows, leveraging existing systems and updating or adding IT components where necessary. Keeping with the 20/20 vision of Patient Centric care, this endeavor, once fully implemented, will allow NYC Health+ Hospitals the ability to review and read results from all Radiology imagining within and not have to rely on outside readings.
- This is a multi-phase approach, with the teams already completing the majority of the Design Sessions, Site Assessments and hardware/storage delivery. The next phase, already underway, involves Concierge Services, system wide testing, workflow and EMR integration.

Enterprise IT Services (EITS) Staff Survey:

- Since assuming the role as Interim CIO in February 2015, I have tried to keep our 1100+ EITS staff informed, engaged and educated on the strategic initiatives put forth by Dr. Raju in his 20/20 vision. I believe that EITS staff should be cognizant of their roles within the NYC Health + Hospitals, how they contribute to its success and make our patient's healthcare experience better. I also want our staff to be satisfied in the work they accomplish.
- In an effort to gauge staff's understanding of their role and how they support Dr. Raju's transformation of our system as well measure their overall satisfaction in their work experience within EITS, a short questionnaire was developed and will be distributed to all staff for their feedback and comments.
- A third party will be responsible for disseminating the survey, receiving all responses and ensuring that confidentiality of all respondents is maintained. Results from the survey will be reported on an aggregate basis and shared with the EITS staff.
- My goal is to use results from this survey to underscore to staff what we have accomplished as a group and target those areas where some additional development may be needed. I remain committed to developing and implementing a plan to better our EITS staff.

This completes my report today. Thank you.

RESOLUTION

Authorizing the New York City Health and Hospitals Corporation ("NYC Health + Hospitals") to execute a contract with Deloitte Consulting, LLP to provide implementation services for the PeopleSoft Enterprise Resource Planning ("ERP") System. The contract will be for a term of three (3) years with two one-year options to renew exercisable solely by NYC Health + Hospitals for an amount not to exceed $18,203,795 during the initial three-year term.

WHEREAS, NYC Health + Hospitals' financial management applications currently in operation are over 30 years old and require upgrades, and consisting of five different software vendors and home grown systems to support NYC Health + Hospitals' healthcare programs; and

WHEREAS, NYC Health + Hospitals' financial management applications do not integrate with NYC Health + Hospitals' procurement management or human resources systems; and

WHEREAS, without an ERP system joining together NYC Health + Hospitals' disparate financial, procurement and human resource systems, NYC Health + Hospitals will be required to maintain outdated interfaces and systems; and

WHEREAS, NYC Health + Hospitals requires an ERP system to replace other independent financial systems and to integrate them with procurement and human resources functions corporate-wide; and

WHEREAS, a solicitation was issued to 27 vendors, that included 8 vendors that hold a third party contract ("TPC") and the 19 EITS IT requirements vendors and Deloitte Consulting LLP was selected by the evaluation committee as its proposal offers NYC Health + Hospitals the best combination of technical ability, approach and price based on the evaluation factors set forth in the solicitation; and

WHEREAS, the overall responsibility for monitoring the contract shall be under the Senior Vice President of Finance, the Senior Vice President/Chief Information Officer and the Vice President Supply Chain Services.

NOW, THEREFORE, be it

RESOLVED, THAT the New York City Health and Hospitals Corporation ("NYC Health + Hospitals") be and hereby is authorized to execute a contract with Deloitte Consulting, LLP to provide implementation services for the PeopleSoft Enterprise Resource Planning ("ERP") System. The contract will be for a term of three (3) years with two one-year options to renew exercisable solely by NYC Health + Hospitals for an amount not to exceed $18,203,795 during the initial three-year term.

Executive Summary
Proposed Contract with Deloitte Consulting. LLP

The accompanying Resolution requests approval to enter into a contract with Deloitte Consulting, LLP ("Deloitte") to provide implementation services for the Enterprise Resource Planning ("ERP") System with for an amount not to exceed $18,203,795 for a term of three years with two one-year options to renew; the funding is for the initial contract period and does not include the renewal options. The contract is being funded through the ERP budget previously presented to the Board of Directors.

Under the contract, Deloitte will lead and support the business change processes, ERP software implementation, project planning, milestone setting, design, interfaces, conversions, and maintenance activities. This includes the implementation of Oracle/PeopleSoft ERP (Financials, Supply Chain and Payroll/Time and Attendance), and associated ancillary and support applications. Deloitte will provide specialized leadership and support expertise for the implementation teams working throughout NYC Health + Hospital's eleven hospitals, five long-term care sites, six neighborhood health centers, and 80 plus clinics and ensure that a support structure and process is in place for the effective deployment of the ERP.

The ERP will replace the existing financial systems that are over 30 years old into one integrated system with multiple modules for Finance, Supply Chain, and Human Resources. Based on an assessment conducted to identify gaps, opportunities, and priorities for NYC Health + Hospitals back-office systems: Finance, Supply Chain, Budget, Grants, Time & Attendance, Payroll, Accounts Payable, Fixed Asset, Cost Accounting and General Ledger, it was determined that there are too many independent IT systems and that their architecture is not integrated. These disparate systems result in the overutilization of resources and manual data entries. The use of multiple system platforms drives up IT maintenance and support expenses with a diminishing business benefit due to the lack of integration.

Given the complexities involved in replacing the existing antiquated system and the specialized expertise required to design, project manage and implement the ERP system, NYC Health + Hospitals requires a seasoned vendor with ERP implementation experience within a large health care delivery system. The Deloitte implementation team is among the largest healthcare consulting practices equipped to deliver high-impact solutions to ensure that best practices are incorporated in this ERP roll-out.

A single ERP system allows for organic integration, workflow, business process, and reporting, streamlining operations and reducing cost of implementation and system maintenance. Reporting is much quicker and easier since all the information is stored in the same manner and in the same place. An ERP allows for increased productivity, accountability, performance-based management reporting and dashboards using outcome-based indicators. The goal is to implement a user friendly and fully integrated ERP application with related modules, data integration, training, implementation assistance and ongoing software support. The ERP architecture will be highly flexible to enable rapid change to support business needs and provide access to data.

A solicitation was issued to 27 vendors that included 8 vendors that hold a third party contract ("TPC") and 19 EITS IT requirements vendors. Proposals were received from 2 vendors, Deloitte and HCI Group. The evaluation committee selected Deloitte as its proposal offers NYC Health + Hospitals the best combination of technical ability, approach and price based on the evaluation factors set forth in the solicitation. Deloitte demonstrated expertise in the implementation of PeopleSoft ERP in a multi-site healthcare organizations.

CONTRACT FACT SHEET

New York City Health and Hospitals Corporation

Contract Title: ENTERPRISE RESOURCE PLANNING

Project Title & Number: Enterprise Resource Planning – Implementation Partner

Project Location: 160 Water Street, New York, NY 10038

Requesting Dept.: Finance /Supply Chain Services/EITS

Successful Respondent: Deloitte Consulting, LLP

Contract Amount: $18,203,795

Contract Term: 3 years with two (2) one-year renewals

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

Range of Proposals: $27 million – 36 million

Minority Business Enterprise Invited: _X_ Yes __No

Funding Source: __General Care X Capital

__Grant: explain

__Other: explain

Method of Payment: Time and Rate

Other: explain ***Payments will be made based on agreed upon deliverables***

EEO Analysis: Approved 3/2/16

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):*

EITS is seeking to enter into a contract with Deloitte Consulting LLP ("Deloitte") to implement an Enterprise Resource Planning (ERP) system for an amount not to exceed $18,203,795, for a term of three (3) years with one (2) one-year option to renew. The funding is for the initial contract term and does not include the renewal periods.

Under the contract, Deloitte will lead and support the business change processes, ERP software implementation, project planning, milestone setting, design, interfaces, conversions, and maintenance activities. This includes the implementation of Oracle/PeopleSoft ERP (Financials, Supply Chain and Payroll/Time and Attendance), and associated ancillary and support applications.

Deloitte will provide specialized leadership and support expertise for the implementation teams working throughout NYC Health + Hospital's eleven hospitals, five long-term care sites, six diagnostic & treatment centers, and 80 plus clinics and ensure that a support structure and process is in place for the effective deployment of the ERP.

The ERP will replace the existing financial systems that are over 30 years old into one integrated system with multiple modules for Finance, Supply Chain, and Human Resources. One ERP allows for organic integration, workflow, business process, and reporting, streamlining operations and reducing cost of implementation and system maintenance. Reporting is much quicker and easier since all the information is stored in the same manner and in the same place. Many of our current manual paper-driven processes such as bank transfers and timesheets will no longer exist as we implement electronic time keeping and electronic bank transfers.

Our current back office systems represent more than five different software vendors and "home grown" systems. Most of these systems reside on the Mainframe and the processes are very manual and outdated. Most of these systems have interfaces that are scheduled to run to move data from one system to another. When there is a change in one system such as a new department or new general ledger account, it must be manually added to all the other systems

By moving to one integrated ERP system Health+Hospitals will experience:

1. Better gathering and sharing of information, enterprise-wide reporting, and improved internal controls.
2. Improved reporting, forecasting, and planning
3. Reduced data entry and redundancy
4. Reduced reliance on paper-based processes
5. Reduced reliance on legacy and custom developed systems
6. Reduce the number of IT interfaces required between independent systems
7. User-friendly system
8. Best Practices, automated work flows and electronic approvals are built into the software.
9. Ability to access and analyze information in real-time to improve decision making

Was the proposed contract presented at the Contract Review Committee (CRC)? (include date):
CRC Approval 5/24/16

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):*

This solicitation was issued to 27 vendors that included 8 vendors that hold a third party contract ("TPC") and the 19 EITS IT requirements vendors. The third party vendors were selected based on market research to identify vendors that had demonstrated expertise in the implementation of PeopleSoft ERP in a multi-site healthcare organizations.

The solicitation specified the following minimum qualifications requirements ("MQRs"):

- must have implemented PeopleSoft ERP solution – Finance, Supply Chain, Payroll, Time and Labor, Time Collection, Hyperion Budget and Cost Accounting - within three (3) healthcare integrated delivery network (IDN) systems with a minimum of 15 facilities and during the past three (3) calendar years
- must provide ERP solution via a State, Local or Federal government procurement contract or Healthcare Group Purchasing Organization (GPO) procurement contract.
- Must have experience integrating PeopleSoft ERP with EMR's, such as QuadraMed and Epic, along with Patient Revenue Systems (Soarian Financials).
- must also have experience in implementing the PeopleSoft Human Capital Management module.

Proposals were received from 2 vendors, Deloitte and HCI Group.

The evaluation committee rated the proposals based on the following criteria:

Healthcare Experience	20%
Technical Merit/Solution	30%
Vendor Suitability and Approach	20%
Key Personnel/Management	10%
Cost to Value	20%

The evaluation committee asked both vendors to provide oral presentations. The evaluation committee then scored both proposals as follows:

Rank	Vendor	Score
1	Deloitte	86%
2	HCI Group	52%

The evaluation committee selected Deloitte as its proposal offers NYC Health + Hospitals the best combination of technical ability, approach and price based on the evaluation factors set forth in the solicitation.

The solicitation required that prior to contract award, the selected vendor would conduct a 30-day Business Process Review, at no cost to NYC Health + Hospitals. The purpose of the Business Process Review was to allow the proposer to discuss with NYC Health + Hospitals stakeholders current and future business processes and plans in order to give the vendor a comprehensive understanding of the size and depth of work that needs to be completed for the ERP implementation.

Based on their findings, Deloitte was required to submit a best and final technical and price proposal, including:

1. Current State and Process Review Document
2. Future State Design Document
3. Gap Analysis
4. Detailed Project Plan
5. Not exceed pricing that includes deliverable/milestone based payments

On May 11, Deloitte presented the best and final technical and price proposal to the evaluation committee, stakeholders and senior leadership from EITS, Finance and Supply Chain. Further discussions and negotiations were conducted to finalize the scope of work and further reduce the cost.

Scope of work and timetable:

The implementation will be delivered in two releases:

Release 1 *
Financial Management – anticipated deployment July 2017
Supply Chain - initial deployment July 2017 with phased additional deployments across all sites throughout 2017

Release 2 *
Payroll Processing – anticipated deployment January 2019
Time & Labor - phased rollouts through 2019-2020
Cost Accounting - anticipated deployment July 2019

Implementation will be completed by a combination of Deloitte resources and Health & Hospitals staff. Following the end of the Deloitte engagement, the balance of the work will be completed by Health and Hospitals staff.

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

The existing financial systems are over 30 years old and are becoming harder to maintain. The hardware is obsolete and programming skillsets needed to maintain systems are not easily obtained as there are fewer people in the industry who can provide support. We anticipate that the cost of the ERP system will be offset by reduced IT maintenance of current systems.

In addition, the project team will be a blended team consisting of Deloitte resources and NYC Health + Hospitals staff. The NYC Health + Hospitals staff will work closely with Deloitte during the implementation of the core functionality after which the Deloitte resources will start to be reduced and rolled off the project. The NYC Health + Hospitals staff will continue the extended functionality implementation after Deloitte leaves the project, thereby reducing the total cost of the project.

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

There are no historical comparable contracts for these services.

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

PeopleSoft's software is proprietary and it will replace over five financial systems that are obsolete. Deloitte is bringing in staff that have implemented PeopleSoft ERP at multiple healthcare systems. Given the complexities involved in replacing the existing antiquated system and the specialized expertise required to design, project manage and implement the ERP system, NYC Health + Hospitals requires a vendor with ERP implementation experience

within a large health care delivery system.

The project team will be a blended team consisting of Deloitte resources and NYC Health + Hospitals FTE staff. The NYC Health + Hospitals staff will work closely with Deloitte during the implementation of the core functionality after which the Deloitte resources will start to roll off the project. This methodology will help to develop the internal NYC Health + Hospitals staff and provide the experience and knowledge required to continue the extended functionality implementation after Deloitte rolls off the project. Thereafter the NYC Health + Hospitals staff will be responsible for rolling out additional functionality and provide on-going updates and maintenance.

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?

It is not anticipated that the contract will produce artistic, creative or intellectual property.

Contract monitoring (include which Senior Vice President is responsible):
P.V. Anantharam SVP, Finance
Sal Guido, SVP/CIO
Paul Albertson, VP, Supply Chain 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):*

Received By E.E.O. ___ _____
Date

Analysis Completed By E.E.O. **March 2, 2016**
Date

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32030

Gail Proto
Senior Director
Affirmative Action/EEO
160 Water Street, 13th Floor
New York, NY 10038
Gail.Proto@nychhc.org
Tel: 212-788-3383

TO: Ava Laughman
Assistant Director
Central Office – Supply Chain Services

FROM: **Gail Proto** GP

DATE: **March 2, 2016**

SUBJECT: EEO CONTRACT COMPLIANCE REVIEW AND EVALUATION

The proposed contractor/consultant, Deloitte Consulting LLP, has submitted to the Affirmative Action Office a completed Contract Compliance Questionnaire and the appropriate EEO documents.

This company is a:

[] Minority Business Enterprise [] Woman Business Enterprise [X] Non-M/WBE

Project Location(s): NYC Health + Hospitals

Contract Number: GSA #GS-10F-0083L

Project: Provide Chart of Accounts Redesign Services

Submitted by: Office of Supply Chain Services

EEO STATUS:

1. [x] Approved

2. [ ] Conditionally approved with follow-up review and monitoring-No EEO Committee Review

3. [ ] Not approved

4. [ ] Conditionally approved subject to EEO Committee Review

COMMENTS:

c:

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Contract Award for ERP Implementation Services – Deloitte Consulting LLP

IT Committee
June 9, 2016

Elizabeth Guzman, AVP, Finance
Jun Amora, Senior Director, Supply Chain Services
Janet Karageozian, AVP, Business Applications

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Request

Award Contract to Deloitte Consulting, LLP for PeopleSoft ERP Implementation Services

- Contract Term 3 years + 2 one-year renewals
- Not to exceed $18.2 million; payment based on milestones and deliverables
- Funding for this contract is provided through the Enterprise Resource Planning (ERP) budget previously presented to the Board of Directors in December 2015
- Finance, EITS and Supply Chain presented the software / maintenance contract awarded to Mythics/ Oracle at the December 2015 Board meeting
- The software solution for the new ERP had to be identified prior to awarding the implementation partner contract

Deloitte Consulting will provide ERP Implementation Services

- Finance, Supply Chain and Project Management experts with direct experience implementing PeopleSoft applications in Healthcare Organizations
- Partner with NYC Health + Hospitals to establish standardized processes and best practices
- Detailed project plan, design, interfaces, conversions and maintenance activities

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Business Justification

Current State

- Financial legacy system was installed in 1977 and does not fully meet our current business demands
- Disparate systems limits the visibility of data and creates redundant work.
- Reliance on multiple systems and many manual processes to collect data.

THE ERP will be a single source of data allowing for:

- Gathering and sharing information, enterprise-wide reporting, and improved internal controls.
- Improved reporting, forecasting, and planning
- Reduced data entry and redundancy
- Reduced reliance on paper-based processes
- User-friendly system
- Best Practices, automated work flows and electronic approvals are built into the software.
- Ability to access and analyze information in real-time to improve decision making

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Procurement Process

Solicitation

- Issued to 27 vendors including third party contractors and the EITS IT requirements vendors..
- 2 proposals were received

Evaluation

- Based on the evaluation criteria that included experience, key personnel qualifications, vendor suitability, technical approach and price, and the oral presentations, the evaluation committee scored the Proposals:

Rank	Vendor	Score
1	Deloitte	86%
2	HCI Group	52%

- Deloitte was selected as its proposal offered NYC Health + Hospitals the best combination of technical ability, approach and price based on the evaluation factors set forth in the solicitation
- As required by the solicitation, Deloitte conducted a 30-day Business Process Review at no cost, and presented a detailed project plan and best and final pricing to the evaluation committee and stakeholders

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Approved ERP Budget

Enterprise Resource Planning (ERP) Projected Expenses Projected Expenses		
Item	**Description**	**Implementation Budget (Years 1 - 5) FY 2016 - FY 2020**
Software & Maintenance (Mythics/Oracle Contract)	Includes Software, Training, and Software maintenance.	$ 19,250,019
Hardware & Maintenance	Includes servers, storage, time capture devices, inventory handheld devices and maintenance fees.	$ 5,841,470
Implementation Support	Third party vendor consulting & temporary agency staff, including IT, finance, supply chain and nurse/physician scheduling.	$ 26,570,285
ERP Support Team	New NYC H+H staff that will be used throughout the implementation period (including fringe benefits). These costs will become on-going after implementation.	$ 20,360,038
Total Five-Year Costs (Including 10% Contingency)		**$ 72,021,812**

Deloitte Contract for $18.2 million is included within this line item of the ERP implementation budget

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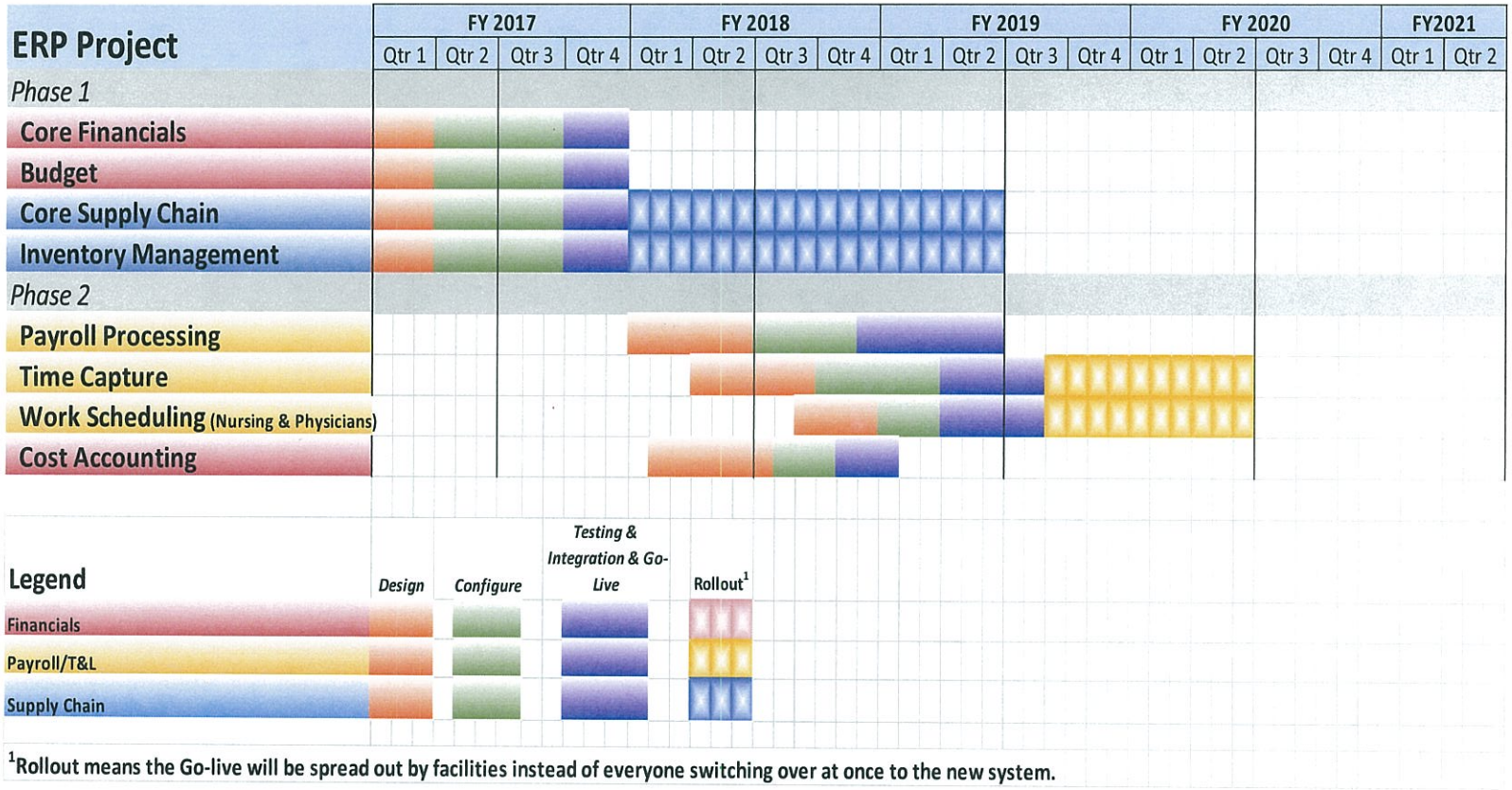
ERP Implementation Deployment Timeline



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

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Questions?

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Security & Risk Management
An Overview
Information Technology Committee
June 9, 2016

Sal Guido, SVP & CIO
Vikrant Arora, AVP & CISO

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Agenda

- Why are we at risk?
- From Whom? – Threat Landscape
- What are we doing about it?
- CyberFlu

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Why are we at risk?

Currencies converted to US dollars

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Threat Landscape – It's a business out there!

Table 1. Prices for zero-day vulnerabilities.

Adobe Reader	
Mac OS X	
Android	
Flash or Java Browser Plug-ins	
Microsoft Word	
Windows	
Firefox or Safari	
Chrome or Internet Explorer	
iOS	

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Threat Landscape – We are under attack!

	Viruses Blocked	**~1k** viruses blocked/week		**2** Ransomware attempts within the past 6 months
	Web Exploits	**~26M** requests to bad websites/week		**> 2M** SPAM messages blocked/week
	Insider Threat	**~7K** users blocked since April 2015		**77** security incidents raised last month
	Internet Threats	**~23K** DoS attempts/week		**1265** MU Risk Analysis Findings
	Exfiltration	**~1.2 TB** data/week **~35K** ePHI records/week		**36%** of Non US Attacks China, Taiwan, and Brazil are the top 3 attackers

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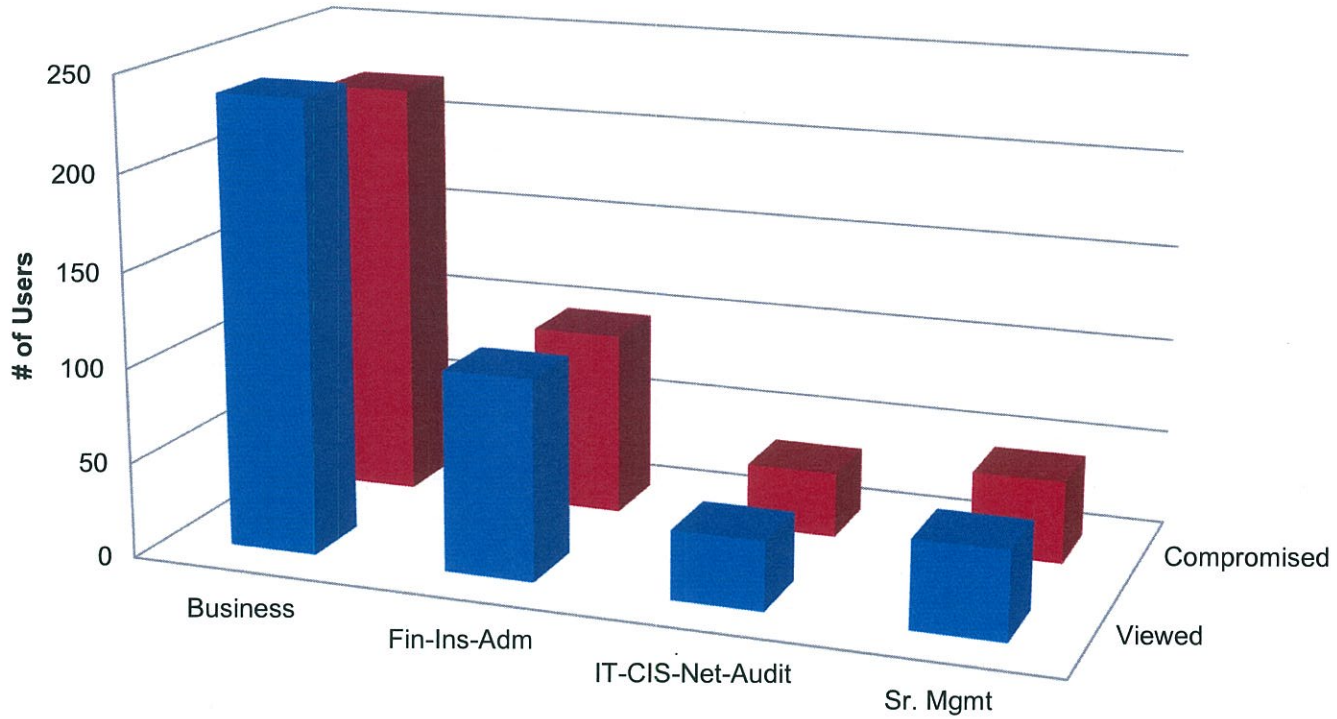
Threat Landscape – Phishing Problem



	Business	Fin-Ins-Adm	IT-CIS-Net-Audit	Sr. Mgmt
Viewed	237	105	36	46
Compromised	221	97	34	43

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Threat Landscape – National Emergency!

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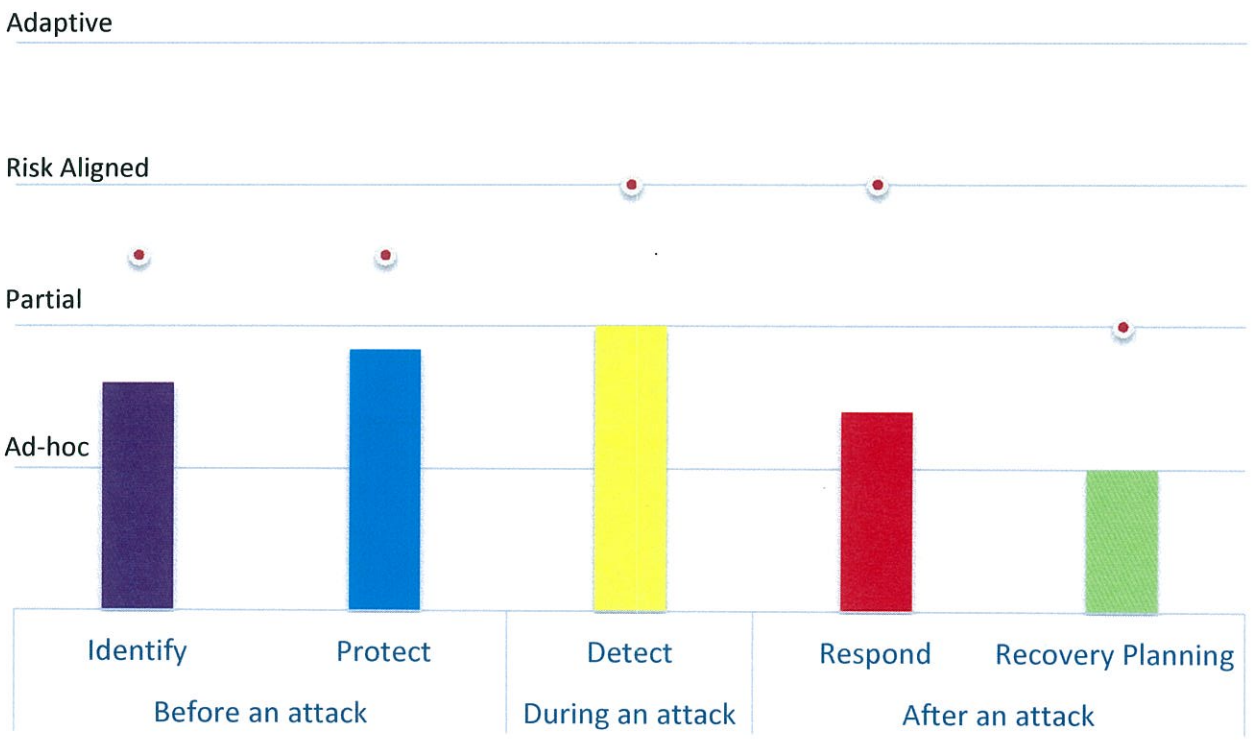
What are we doing about it?



Information Security Program – Current (FY 16) Vs Desired State (FY18)

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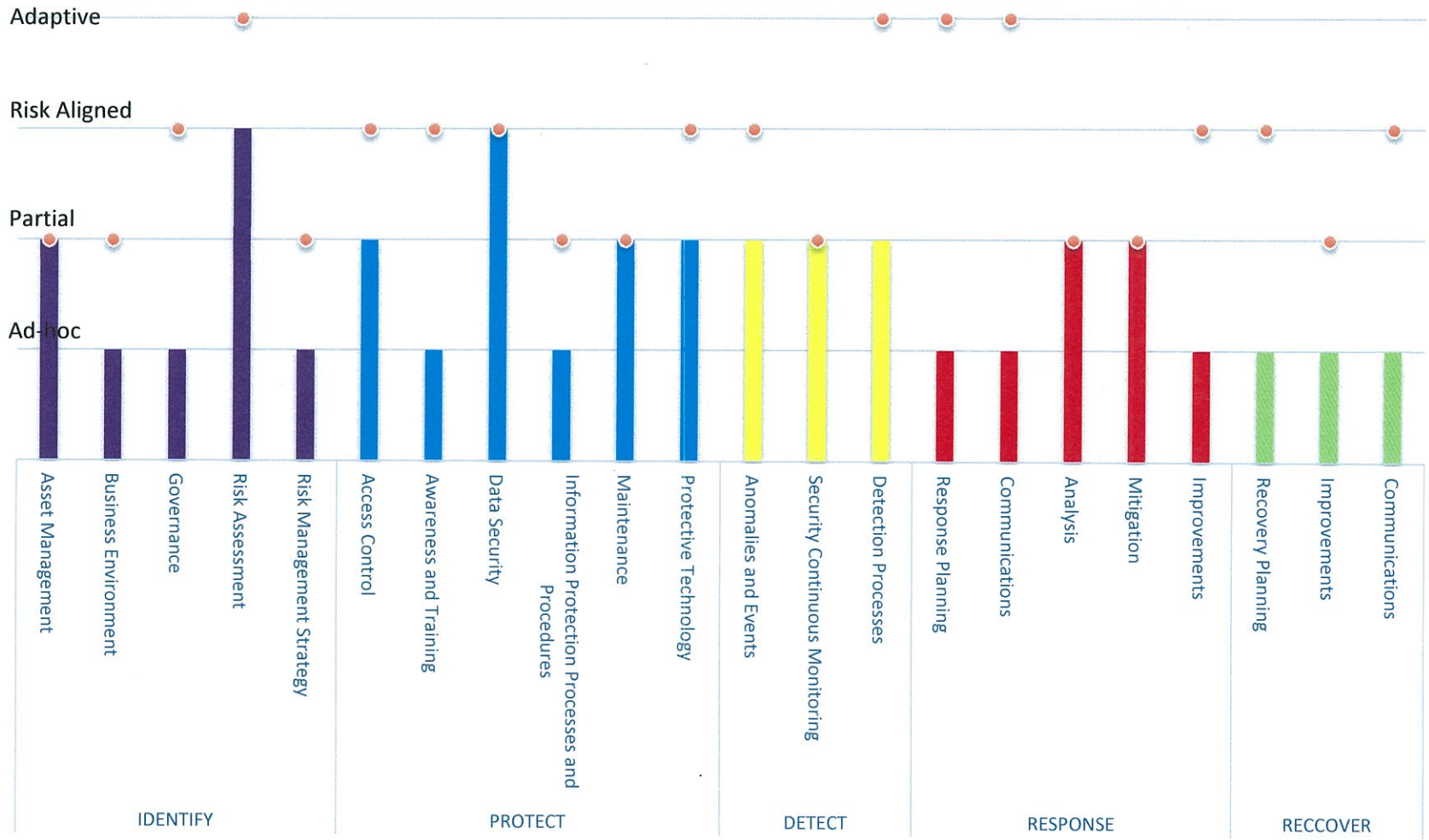
What are we doing about it?



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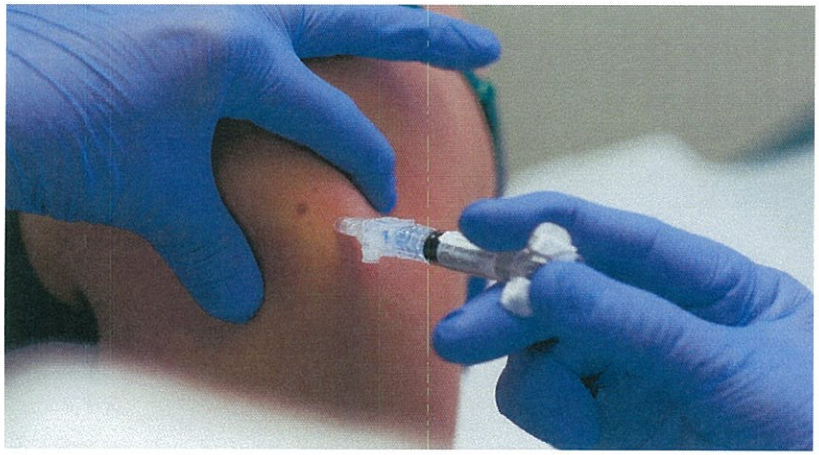
CyberFlu



Why people don't get the flu shots?

In 2015, the CDC analyzed 14 years of influenza-related communication research highlighting the public's knowledge, attitudes, and beliefs about influenza

- Belief that they (or their child) are not susceptible to this serious illness.
- Belief that they are healthy, have a strong immune system, and/or have never contracted influenza and therefore, "flu vaccine recommendations do not apply to me (or my child)".
- Question the effectiveness and importance of the vaccine.
- Fears about vaccine side effects, including attributing symptoms of other concurrent illnesses to the vaccine.
- Belief that other preventive measures can be used instead because these are as effective as or more effective than vaccination.
- Have personal experience with influenza and believe that it is a "manageable" illness.

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References

http://www.modernhealthcare.com/article/20150528/NEWS/150529899

https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Pages/What's-the-Latest-with-the-Flu.aspx?nfstatus=401&nftoken=00000000-0000-0000-0000-000000000000&nfstatusdescription=ERROR:+No+local+token