

## **AGENDA**

### **INFORMATION TECHNOLOGY COMMITTEE**

Meeting Date: June 13, 2022  
Time: 11:00 AM  
Location: 50 Water St 17th Fl  
**VIRTUAL**

### **BOARD OF DIRECTORS**

### **CALL TO ORDER**

**MR. PEÑA-MORA**

### **ADOPTION OF MINUTES**

*April 11, 2022*

### **ACTION ITEM**

**DR. LONG**

- **RESOLUTION**

Authorizing an increase in the funding for the New York City Health and Hospitals Corporation (the “System”) to contract with Lumeon, Inc. (“Lumeon”) for an automated patient appointment reminder service, which was made in early 2020 for a 3-year term, with two 1-year renewal options available to the System, from its original funding limit of \$3,842,760 to a new not-to-exceed limit of \$8,553,000.

VENDEX: Approved / EEO: Approved

### **CHIEF INFORMATION OFFICER REPORT**

**DR. MENDEZ**

### **OLD BUSINESS**

### **NEW BUSINESS**

### **ADJOURNMENT**

### **NEW YORK CITY HEALTH + HOSPITALS**

## **MINUTES**

**Meeting Date:** April 11, 2022

### **INFORMATION TECHNOLOGY COMMITTEE**

#### **ATTENDEES**

##### **COMMITTEE MEMBERS**

Feniosky Peña-Mora, Chair

Dr. Mitchell Katz

Jose Pagan, BOD IT Committee member

Karen St. Hilaire representing Commissioner Gary Jenkins

##### **NYC HEALTH + HOSPITALS CENTRAL OFFICE STAFF:**

Dr. Kim Mendez, SVP/Corporate CIO

Dr. Michael Bouton, Corporate CMIO

Jeff Lutz, SAVP, Chief Technology Officer

Apoorva Karia, AVP, EITS Business Operations

Sean Koenig, Chief Application Officer

**INFORMATION TECHNOLOGY COMMITTEE – April 11, 2022**

**AS REPORTED BY: Feniosky Peña-Mora**

**COMMITTEE MEMBERS PRESENT:** Feniosky Peña-Mora, Dr. Mitchell Katz, José A. Pagán, Karen St. Hilaire representing Commissioner Gary Jenkins in a voting capacity – join at 11:10 and left at 11:30

Mr. Feniosky Peña-Mora, Chair of the Committee, called the April 11th meeting of the Information Technology (IT) Committee to order at 11:05A.M.

Mr. Peña-Mora proposed a motion to adopt the minutes of the joint Medical and Professional Affairs / IT Committee meeting held on February 7th, 2022.

Upon motion made and duly seconded the minutes of February 7th, 2022 IT Committee meeting was unanimously approved.

Dr. Mendez read the resolution:

**Authorizing New York City Health + Hospitals Corporation to execute a 3-year contract with Derive Technologies LLC for services to maintain workstations on wheels and medical carts, with 2 1-year options to renew an amount not to exceed \$6,500,000 over the entire potential 5-year term.**

Dr.

Jeff Lutz, Chief Technology Officer, presented background and current state information of maintenance of the systems medication and documentation carts. Mr. Lutz also provided a procurement summary of the maintenance contract process, an overview of the procurement, the RFP criteria, and MWBE closed pool solicitation process.

Mr. Pagán asked who currently provides services and Mr. Lutz clarified that Derive currently provided the maintenance services.

Mr. Peña-Mora noted for the record that Karen St. Hilaire will be representing Gary Jenkins, in a voting capacity. No further questions were presented by the board.

Upon motion made and duly seconded the approval of the resolution was unanimously approved for consideration by the Board.

Mr. Peña-Mora made a correction to the record with a clarification that the February 7th meeting was not a joint committee meeting with the Medical and Professional Affairs Committee.

## **EITS Update**

Dr. Kim Mendez continued with the IT Update presentation and turned the conversation over to Dr. Bouton for a Clinical Informatics update.

Dr. Bouton provided a detailed review of the Systems effective use of the EPIC system. He provided an update on the Epic Gold Star program and NYC H+H's achievements to date. Our System is currently at a Level 8 this year, which puts us within 20%percentile of national EPIC users. Dr. Bouton went on to discuss the Epic (vendor) Honor Roll program and the overall impact of a better patient experience when leveraging Epic electronic health record functionality as well as the positive financial incentive of \$670,000 from Epic.

Dr. Bouton provided an update regarding two initiatives that will be going live April 2022, which includes the new functionality that supports the patient registration team know that they are there without going to the registration desk. The second initiative is that if a patient sees their primary care doctor and they want to be seen next week and there is no appointment available for three weeks, the patient can be placed on a wait-list and a text message or Mychart message is sent to the patient when an appointment opens up. Dr. Bouton went on the discuss the goal where although improvement was made, the goal was not met for this year which is the turnaround time on in-basket messages. Current goal is to respond within 48 hours. Improvement has been made from 50% to 60% this year. He then stated this is a cultural change that we need to drive through and there are technical things that have been done to make the process easier.

Dr. Bouton presented graphical information displaying the biomedical integration initiative. The graphs showed the revised target goal for the year was to integrate new devices into our System. By integrating these devices, the information automatically flows from the machine into Epic and is verified by a provider inside of Epic, this has improved patient safety and provides our staff the most up to date and timely information

Dr. Bouton provided an update on the Systems MyChart activation rate. We are firmly in the top 10 percentile nationally, with the Epic median at right around 50%. Our System is currently at 72%, which is an increase from 60% at the beginning of the year.

Dr. Bouton provided an update on the status of languages in MyChart. Dr. Bouton stated English and Spanish are currently being shown and simplified Chinese is actively being launched.

Dr. Bouton further emphasized that NYC H+H EITS is pushing Epic to develop expanded languages in MyChart that align and support our patient needs.

Dr. Katz stated he was interested in the metrics, not just the logins, but the number of times people are with someone. It would be a valuable indicator of the interaction with patients. Dr. Bouton stated it was part of the patient engagement metric and will provide follow up.

Mr. Pagan asked how do we compare to other Systems on how fast things get answered from the in-basket? Dr. Bouton stated the Epic threshold for hitting the honorable status is 75% and acknowledged our System is below the average. There are work groups e.g. MyChart Steering Committee, which includes ambulatory care and patient engagement leadership who are focusing on this area of improvement.

It was noted to be one of our metrics for the past year and a half or two years. Currently there are site specific MyChart steering committees set up at 8 of our sites with initiative to turn that metric around. Dr. Bouton stated he would provide updates in the future.

Dr. Mendez provided an update on the Data Center Migration project. The overall project timeline is between May 2021 and May 2023. There are two current data centers that are at end of life and EITS is in the midst of transitioning to two new data centers. The Infrastructure team has been installing new storage, testing the foundation components for the 1<sup>st</sup> wave move which is taking place April 2022. The 2nd Data Center at Cyrus One is currently in the pre-planning stages. As of April, the project is at approximately 40% complete, with a goal of being 50% completion by the end of May 2022. The project is currently on target and budget.

Dr. Mendez then shared an update on the Application Learning Department, which is the educational arm of Epic. As the team has transitioned beyond EPIC, they have now included other clinical application trainings to support the System. As part of focusing on the effective use of the electronic health record, a program called Thrive training was developed. The content of the program is based upon tickets received, stakeholder feedback information and a focus to support regulatory surveys. The kickoff for this program was a workshop for Joint Commission preparation. As a key aspect to the program, having staff at the bedside being trained in chart review and navigating the system comfortably. The team has also put together a hospital billing work queue training

session. A new area of virtual 1:1 training will be launched for staff across the System soon. The session could be on an application or within Epic such as a provider can request personalization support. A link was provided to staff to submit a request to 1:1 support. As the learning team continues to receive feedback from the end users, they will further augment and provide additional training.

In closing the update, Dr. Mendez then shared, as the final topic, the development of the Service Management Office as part of EITS restructuring. As part of the next developmental step, the Service Management office will help shift from a segmented, reactive approach to a more proactive customer centered model.

The new office will manage the entire life cycle for all of our services. One key goal is to bring various support services under one umbrella including the Enterprise Service Desk, Change management, Knowledge Management and Configuration Management. The Configuration Management Database (CMDB) is an integral part of service configuration management as it is the core to everything EITS does across the System. It helps manage the application portfolio, drives decisions for security and our data center migration as well.

Mr. Peña-Mora stated that he was pleased with the information item regarding continued improvement and EITS being proactive, as most IT organizations usually receive complaints for not responding fast enough. He commended Dr. Mendez for looking ahead and ensuring continued improvement.

Mr. Peña-Mora asked if there are any old business or new business to bring to the committee, hearing none, Mr. Peña-Mora then adjourned the meeting at 11:48 am.

## **RESOLUTION**

Authorizing an increase in the funding for the New York City Health and Hospitals Corporation (the “**System**”) to contract with Lumeon, Inc. (“**Lumeon**”) for an automated patient appointment reminder service, which was made in early 2020 for a 3-year term, with two 1-year renewal options available to the System, from its original funding limit of \$3,842,760 to a new not-to-exceed limit of \$8,553,000.

**WHEREAS**, in 2019, the System conducted an RFP under the supervision of Supply Chain Services and the Contract Review Committee for an automated patient reminder system for use in primary care and women’s health services and, with their approval, determined to award a 3-year contract to Lumeon with the System holding two 1-year options to renew and with the total cost over the potential 5-year term capped at \$3,842,760; and

**WHEREAS**, because the value of the Lumeon contract was below the threshold for the System’s Board of Directors, the Lumeon contract was not presented to Board for approval; and

**WHEREAS**, the Lumeon program has proved to be so successful that adoption for primary care exceeded expectations and parts of the System not originally anticipated have asked to use the Lumeon program for such uses as mobile insulin titration, NYC Care, surgical appointments, family member/caregiver notifications and remote medical device monitoring; and

**WHEREAS**, with the greater penetration of the Lumeon program throughout the System, the originally established funding limit of \$3,842,760 will be exhausted by September 2022; and

**WHEREAS**, the System’s management believes that the requested additional funding of \$4,710,240, bringing the total available funding to \$8,553,000, will be sufficient to fund the contract throughout its remaining term of approximately 27 months, assuming the System exercises both of its 1-year renewal options; and

**WHEREAS**, the System’s Senior Vice President for Ambulatory Care and Population Health will be responsible for the management of the agreement.

**NOW THEREFORE, be it**

**RESOLVED**, that the New York City Health and Hospitals Corporation (the “**System**”) be and hereby is authorized to increase the funding for the System’s contract with Lumeon, Inc. (“**Lumeon**”) for an automated patient appointment reminder service, which was made in early 2020 for a 3-year term, with two 1-year renewal options available to the System, from its original funding limit of \$3,842,760 to a new not-to-exceed limit of \$8,553,000.

**EXECUTIVE SUMMARY**  
**INCREASE IN FUNDING LIMIT FOR CONTRACT WITH**  
**LUMEON LTD. FOR AUTOMATED PATIENT APPOINTMENT REMINDERS**

**OVERVIEW:** Following an RFP conducted in 2019, New York City Health and Hospitals Corporation (the “**System**”) awarded a 3-year agreement with Lumeon, Inc.. (“**Lumeon**”) with the System holding two 1-year options to renew. The agreement by which Lumeon was to provide a patient appointment reminder program, gave the System two 1-year options to renew under a funding limit of \$3,842,760.

The Lumeon program has been so successful that its appointment reminders are now used not just in the System’s primary care practices but also in all ambulatory care practices across the System. Additionally, other, unanticipated uses of the Lumeon program have been identified including mobile insulin titration, NYC Care, surgical appointments, family member/caregiver notifications and remote medical device monitoring. Because of the greater than anticipated penetration of the Lumeon program across the System, the originally provided funding of \$3,842,760 will be exhausted by September 2022 and an additional \$4,710,240 will be required to fund the contract for the balance of its term.

**PROCUREMENT/ AUTHORIZATION** The Lumeon contract was procured through an open and competitive RFP that was supervised and approved by the Contract Review Committee through the contract award to Lumeon. Because the original funding threshold was less than \$5M, the approval of the Board of Directors was not sought. However, now that the full amount of the contract as increased pursuant to the subject resolution exceeds that threshold, the approval of the Board is requested.

**PROGRAM:** The Lumeon program provides automated patient appointment reminders including the ability to notify patients of appointments through text, automated phone calls, or email based on patient preference. Texts and email reminders are in 14 languages. Patients can respond to confirm or cancel, and those responses are integrated with Epic. Daily reports are generated that are accessible to sites with actionable data on visit confirmations and cancellations. Text alerts can be sent for proactive communication, e.g. change in-person to virtual visit because of impending blizzard. With increased funding, the System will be able to use Lumeon for additional uses such as mobile insulin titration, NYC Care, surgical appointments, family member/caregiver notifications and remote medical device monitoring.

**MWBE:** Lumeon has been given a complete MWBE waiver. Neither of the scopes of work in its business can be subcontracted. The first part of its business is licensing its software which involves only intellectual property with nominal services. The second part of its business is managed services which are handled entirely by Lumeon’s trained W-2 employees.





To: Colicia Hercules  
Chief of Staff, Office of the Chair

From: Keith Tallbe  
Senior Counsel Tallbe, Keith  
Office of Legal Affairs

Re: Vendor responsibility, EEO and MWBE status

Matter: Automated Appointment Reminders

Vendor: Lumeon Inc.

Date: May 25, 2022

---

Digitally signed by  
Tallbe, Keith  
Date: 2022.05.25  
15:26:55 -04'00'

The below chart indicates the vendor's status as to vendor responsibility, EEO and MWBE:

**Vendor Responsibility**  
Approved

**EEO**  
Approved

**MWBE**  
3% RFP Goal  
0% Utilization Plan  
Total Waiver

The above status is consistent and appropriate with the applicable laws, regulations, and operating procedures to allow the Board of Directors to approve this contract.

# **Automated Patient Communications via Lumeon, Inc.**

## **Request to Increase NTE Information Technology Committee June 13, 2022**

**Ross Kristal, MD, Senior Director  
Lisa Hendricks, Senior Assistant Vice President  
Ted Long, MD, Senior Vice President**

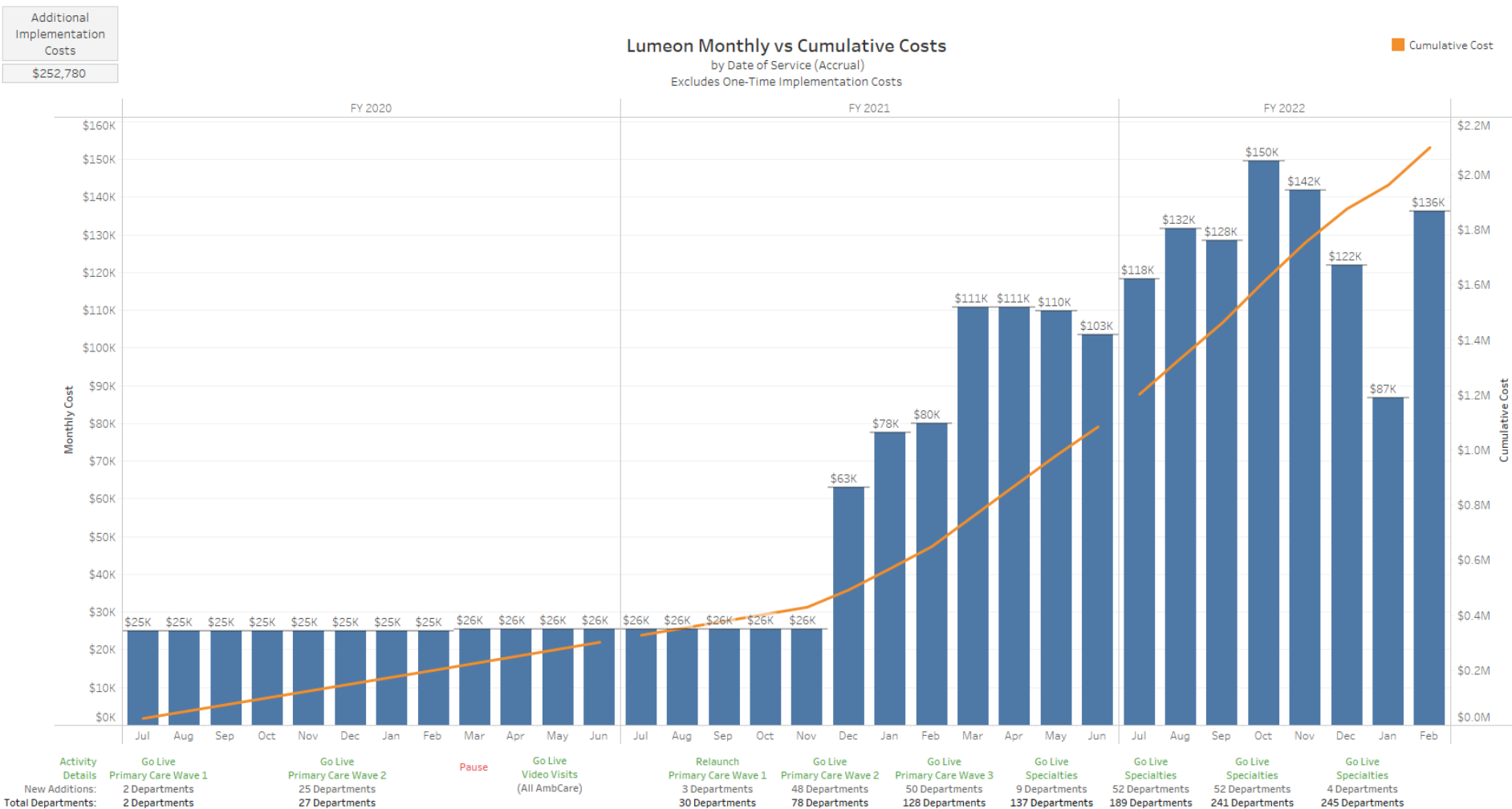
**Office of Ambulatory Care & Population Health**

# Background

---

- In 2018, an RFP was conducted for an automated patient appointment reminder system.
- Lumeon was selected and approved for a 3 year contract (through FY22) with two one-year optional extensions (through FY24).
- The original NTE was based on estimated development cost and estimated appointment volume for primary care and women's health services only.
- As of February 2022, all primary care and some specialty clinics are live with Lumeon automated patient appointment reminders.
  - Notify patients of appointments through text, automated phone calls, or email based on patient preference
  - Text and email reminders are in 14 languages
  - Patient can respond to confirm or cancel, and those responses are integrated with Epic
  - Daily reports accessible to sites with actionable data on visit confirmations and cancellations
  - Text 'alerts' for proactive communication, e.g. change in-person to virtual visit because of impending blizzard

# NYC HEALTH+ HOSPITALS Background: Financial Spend Data





# Changes/Request

- Changes since approval:
  1. Expanding appointment reminders beyond primary care practices to all ambulatory care practices across the system.
    - Specialty appointments account for over 50% of all ambulatory care appointments
    - Missed specialty appointments leads to delay in care, which can have clinical implications
  2. Additional use cases for this automated patient communication tool.
- Seeking to increase the NTE by \$4,710,240, from \$3,842,760 to \$8,553,000 through FY24
  - Spend to date (4/2022): \$2.87M; Expected total spend (12/2022) \$3.84M;
  - Projected Spend (2023) 2.8M; Projected Spend (6/2024) 1.9M
- Vendor performance has been satisfactory.
  - Current Lumeon healthcare customers: The Jewish Board (NYC), Keck Medicine USC, Kaiser Permanente Colon Cancer Alliance, Reliant Medical Group
- We have negotiated a better pricing structure for NYC Health + Hospitals that will go into effect with the 1 year extension.
- We will be issuing a new RFP for these automated patient communication services during the first 1 year extension period.

# Programmatic Change #1

---

## Expanding automated patient appointment reminders to all ambulatory care practices across the enterprise.

- **Industry standard**
- **Improved patient experience** to receive the same appointment reminders for all ambulatory care practices within a facility and across the system
- **Cost effective, centralized system** (some facilities use more expensive, less effective, facility-arranged robo-call systems, which we could retire)
- **Decrease use of admin time** making outbound reminder calls allowing them to do more work that benefits the system
- **Decrease number of calls to contact center** to confirm appointments allowing agents to do more work that benefits the system
- Likely **increase in utilization and reduction in no show** rates
- **Epic growth consultants strongly recommended** automated appointment reminders for specialty practices as an intervention to improve clinic efficiencies and patient experience

# Benefits of Lumeon: Facility Testimonials

In my own personal experience, as well as the clinic overall, the **Lumeon reminders have made a noticeable difference in patient show rates. More patients are showing up, and patients who can't show up are appropriately rescheduling their appointments** so that other patients can be seen. Even in **recently reviewing dashboards for our clinic, we have seen that our no show rates have been declining since we initiated Lumeon scheduling.** For our busy clinic, it is essential that we minimize our no show rates to allow for the most patients to receive timely care.

*-Matthew Vorsanger, MD, Department of Cardiology, Bellevue*

**...I believe Lumeon has had a big impact on my clinic. My no show rate has historically been around 35-40 % over the years but recently I have noticed a significant drop in my no show rate.** I looked over my clinic numbers for the week of 3/7/22 to 3/11/22 so these are unofficial and it showed a 10-20% no show rate. I can't wait to see the dashboards over time to see the overall trend.

**My patients have been telling me that it has been very helpful for them to have the reminder call/texts and a few even told me that it makes cancelling or rescheduling their appointment easier.** One patient said in the past they tried to call the Hospital to cancel their appointment and after being transferred a few times and being left on hold they gave up so they were just a no show...

*-Scott Singer, PA-C, Department of Urology, Bellevue*

**Lumeon has been a wonderful tool for our practice. It has improved our no-show rate and allows us to quickly communicate with our patients about significant events.**

For example, **women's Health Services department was suffering from no-show rates over 33%. However, after the implementation of text reminders our rates dropped to 25% or less (based on June-Aug 2021 data)**

**Physiatry department** which was plagued with **no-show rates of up to 50% or more, now has no-show rates between 25-30% on a regular basis.**

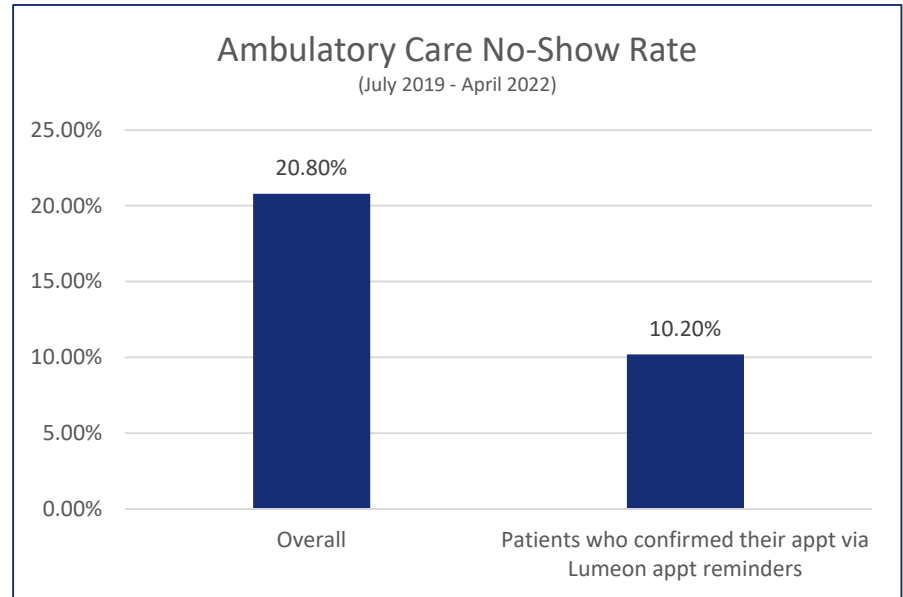
**We used Lumeon to successfully reach patients during a snowstorm in January. The system works well for communicating to patients, en masse, for urgent or emergent situations.**

*-Amy Harris, Associate Executive Director, Ambulatory Care, Elmhurst Hospital*

## Patient Survey

- **Surveyed population:**
  - Patients at all Acute Care and Gotham facilities
  - Those that received and replied to their appointment reminder text message from March 17 to March 21, 2022
  - Preferred language is English and Spanish
- **Survey Question:**
  - NYC Health + Hospitals cares about your feedback. Was the text reminder helpful for you to attend or cancel your appointment?  
Reply 1 if Yes  
Reply 2 if No
- **Survey Data:**
  - Surveys responded: 77%
  - “Yes” response: 97.3%
  - “No” response: 2.7%

## No-Show Rate



- Patients who confirm their appointments via Lumeon appointment reminders have a 50% lower no show rate.
- With system wide implementation, and improving appointment reminder engagement, system wide no show rates can be further reduced with the use of automated appointment reminders.





## Additional use cases for this patient communication tool

- Departments across the system have been or are would like to utilize Lumeon's services to efficiently and effectively improve care and patient experience.

Mobile Insulin Titration  
Intervention (MITI)

NYC Care Membership  
Renewal and Quarterly  
Newsletter Notifications

Surgery Appointment  
Reminders

Family Member/  
Caregiver Surgery Text  
Notifications

Remote Medical Device  
Monitoring

Future Use Cases

# NYC HEALTH+ HOSPITALS Vendor Performance Evaluation

<div> <div> NYC HEALTH+ HOSPITALS </div> <div> Department of Supply Chain Vendor Performance Evaluation LUMEON </div> </div>	
DESCRIPTION	ANSWER
Did the vendor meet its budgetary goals, exercising reasonable efforts to contain costs, including change order pricing?	YES
Has the vendor met any/all of the minority, women and emerging business enterprise participation goals and/or Local Business enterprise requirements, to the extend applicable?	N/A
Did the vendor and any/all subcontractors comply with applicable Prevailing Wage requirements?	N/A
Did the vendor maintain adequate records and logs, and did it submit accurate, complete and timely payment requisitions, fiscal reports and invoices, change order proposals, timesheets and other required daily and periodic record submissions (as applicable)?	YES
Did the vendor submit its proposed subcontractors for approval in advance of all work by such subcontractors?	N/A
Did the vendor pay its suppliers and subcontractors, if any, promptly?	N/A
Did the vendor and its subcontractors perform the contract with the requisite technical skill and expertise?	YES
Did the vendor adequately supervise the contract and its personnel, and did its supervisors demonstrate the requisite technical skill and expertise to advance the work	YES
Did the vendor adequately staff the contract?	YES
Did the vendor fully comply with all applicable safety standards and maintain the site in an appropriate and safe condition?	N/A
Did the vendor fully cooperate with the agency, e.g., by participating in necessary meetings, responding to agency orders and assisting the agency in addressing complaints from the community during the construction as applicable?	N/A
Did the vendor adequately identify and promptly notify the agency of any issues or conditions that could affect the quality of work or result in delays, and did it adequately and promptly assist the agency in resolving problems?	YES

- When this procurement was conducted in 2019, prior to adoption of the system's Vendor Diversity Policy, this procurement was assigned a blanket M/WBE Goal of 30%
  - Analyzing the opportunity today, the goal would be set at 3%, with implementation services being the only subcontracted portion of work
  - The self-performed work is as follows
    - Self-performed:
      - Licenses
      - Maintenance
      - Professional services
- Lumeon was granted a total waiver in 2019 based on the following
  - The software is owned by Lumeon
  - Lumeon self-performs all services except hosting
  - The hosting is done through AWS for all of Lumeon's customers and is indivisible overhead
- A waiver in such circumstances is consistent with the business model exceptions under the vendor diversity policy, OP 100-10
- Diversity analysis was completed
  - 100% gender reported by all employees: 50% F/M leadership and 43/57% F/M employees
  - 42% race & ethnicity reported by all employees:
    - 70% leadership reported: 10% Asian, 60% White
    - 32% employees reported: 3.5% Asian, 3.5% Hispanic, 25% White

## **Corporate social responsibility (CSR) statement**

### **Corporate responsibility**

Lumeon recognises its corporate and social responsibilities towards clients, employees, shareholders, suppliers and other stakeholders. Lumeon is committed to making lasting real contributions to the local communities in which we operate. Lumeon is committed to being a good employer and reducing our carbon footprint and promoting environmental sustainability.

### **Workplace**

Lumeon provides equal opportunities both to job applicants and existing employees, recognising that our reputation depends on the wellbeing, effectiveness and skill base of our employees. Lumeon is committed to the equal treatment of all employees and promotes the prohibition of discrimination, in areas including equal pay, fair treatment and employment opportunities for a diverse workforce.

Lumeon offers flexible working arrangements where practicable to help employees achieve a good work/life balance.

Lumeon provides workplaces of a high standard for the benefit of our employees and clients, with equally high standards of adherence to health and safety requirements.

### **Environment**

Lumeon seeks to minimise the environmental impact of its activities.

Lumeon is committed to preventing pollution, minimising waste from its offices and workplaces and adopting good environmental management practices. Lumeon seeks to improve the efficiency of its use of resources by conducting activities and operations in line with current environmental legislation and best environmental practices. Lumeon's robust environmental management system is integrated into all business processes.

Lumeon runs environmental awareness training for its employees and works with suppliers that share our own high environmental standards.

### **Community**

Lumeon strives to be a good citizen wherever we operate, recognising our responsibility to work in partnership with local communities. We also go beyond this in terms of volunteering at community events, supporting local and national charities and knowledge sharing with our society as a whole.

# Request to Increase NTE

- Existing approvals allow for an NTE of \$3,842,760.
- The Office of Ambulatory Care & Population Health is seeking Information Technology Committee approval to increase the NTE for the Lumeon contract by \$4,710,240 for the duration of the contract.

- Updated total contract value is \$8,553,000 (2019-2024)

Projected Spend Through FY 24			
Use Cases	Communication Costs	Development Costs*	Total Costs
Ambulatory care appointment reminders	\$ 6,552,420	\$ 121,580	\$ 6,674,000
Additional use cases	\$ 633,000	\$ 130,000	\$ 763,000
Future use cases (15% of known use case projected costs)			\$ 1,116,000

\*majority spent at initial launch of services

- We will near the approved NTE before the end of calendar year 2022 due to the expansion of ambulatory care patient appointment reminders to all ambulatory services and additional demand since the initial NTE approval.
- Increased demand for Lumeon's automated patient communication services will efficiently and effectively improve care and patient experience.

# Enterprise Information Technology Update

## June 13, 2022 Committee Update

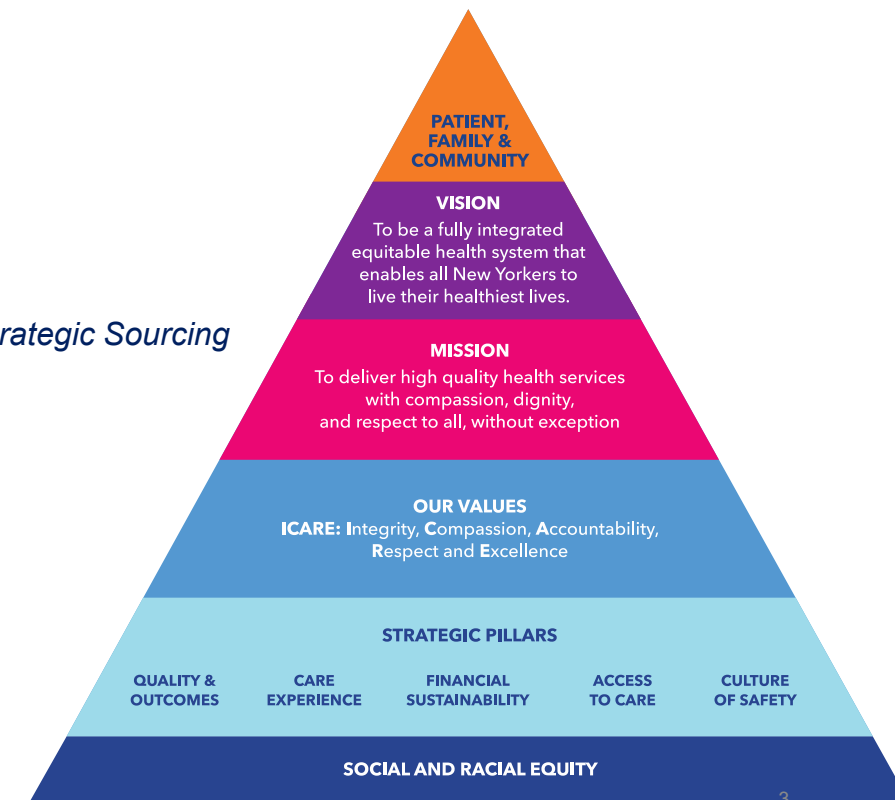
Kim Keziah Mendez, Senior Vice President- Corporate Chief Information Officer

# EITS Update Agenda

- Introductions
- EITS Targeted June 2022 Updates
  - 2022 EITS Goals
  - Clinical Informatics
    - MyChart : Activation , utilization and support
    - Remote Radiology Program
  - Clinical Applications
    - Willow, Wisdom, Epic Upgrade
  - Data Center Migration
  - Continuous Quality Improvement
    - Top 10 new Epic features for caregivers
    - Print Management Services
    - Everbridge Care Converge
- Q & A

# NYC H + H Information Technology 2022 Goals

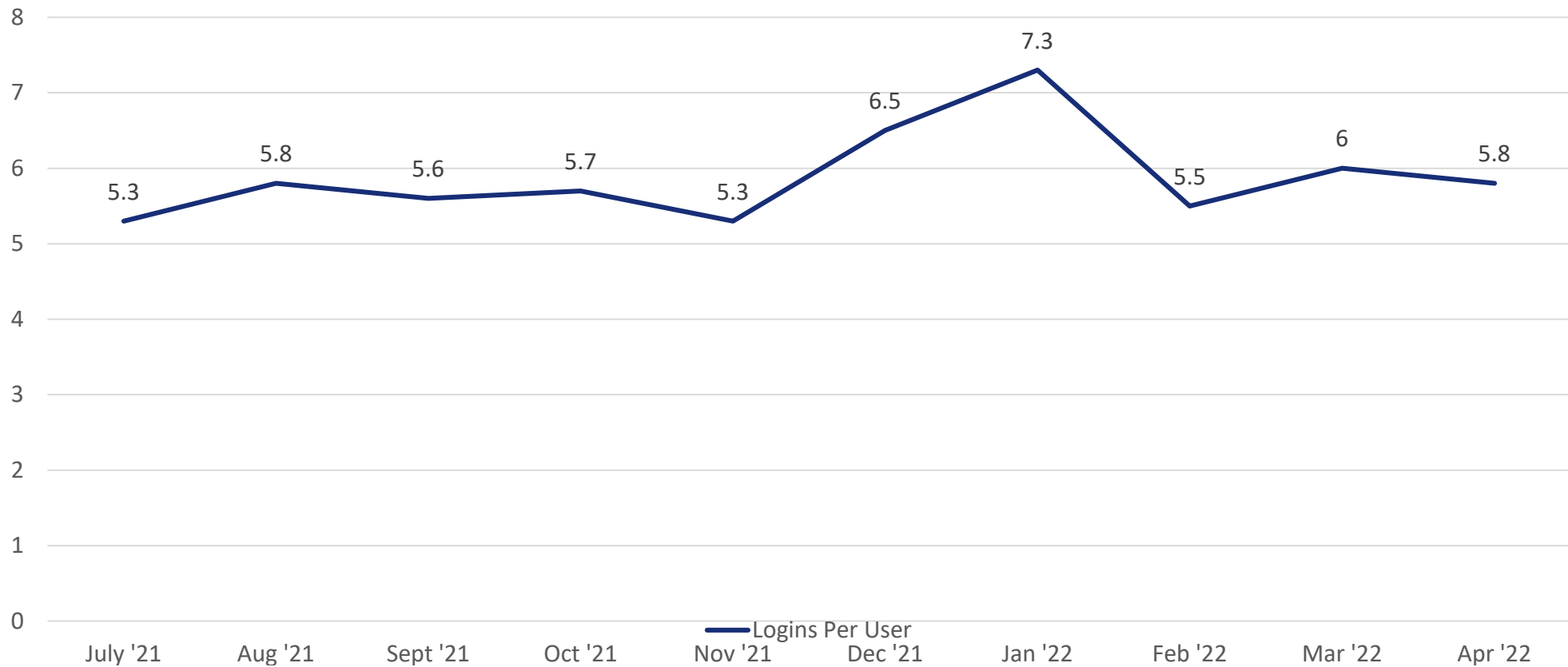
- **Data Management (Quality & Outcomes)**
  - Data and Analytics (DnA) ongoing developments: website, Platform , Enterprise Data Warehouse, Archiving, etc.
  - UMPI
  - Data Conversion best practice guidelines
- **Infrastructure Enhancement (Financial Sustainability/ Quality & Outcomes)**
  - Data Center migration
  - Epic Hyperdrive transition planning
  - Telecommunication – improve experience & device tracking
  - CMDB Sustainable Structure with auditing & Qtrly ecosystem updates
- **Accelerated Digital Transformation ( Quality & Outcomes/ Access to Care)**
  - Telehealth Optimization
  - Remote Radiology Program in partnership with Quality & M & PA
  - Biomedical device asset tracking, security risk assessment and system standardization with *Strategic Sourcing*
- **H2O Effective Use (Care Experience/ Quality & Outcomes / Social & Racial Equity)**
  - MyChart Optimization
  - Leveraging Epic to support social & racial equity in care
  - Expansion & enhancement of Epic Modules
  - Application Learning Team Optimization
  - Downtime & Business Continuity Access (BCA) enhancement
- **CQI (Quality & Outcomes)**
  - Security & Risk Assessment / Mitigation best practices
  - Portfolio Management & Application Rationalization
  - Enterprise Resource Planning (ERP) Governance & Prioritization Structure
  - Establish Service Management Office (SMO)





# H2O Effective Use Care Experience

MyChart Logins Per User



# Enterprise Remote Radiology Initiative

## Project Scope and Background

- Converting current Tele-Radiology coverage model to H+H in-house Radiology coverage model enterprise-wide
- M & PA, EITS & facility partnership
- Key EITS steps
  - Process Purchase Order
  - Receive the Equipment
  - Imaged and configured the equipment
  - Distributed to Business

## Timeline, Equipment & Resource Support

- Phase 1: Go-live Jacobi/NCB 10 computers – In progress
- Phase II: Go-live Enterprise-wide on remaining workstations anticipated July 2022
- 71 computers: 60 general radiology workstations & 11 mammography radiology workstations
- Phase II Go Live will be in alignment with additional EITS PACs support

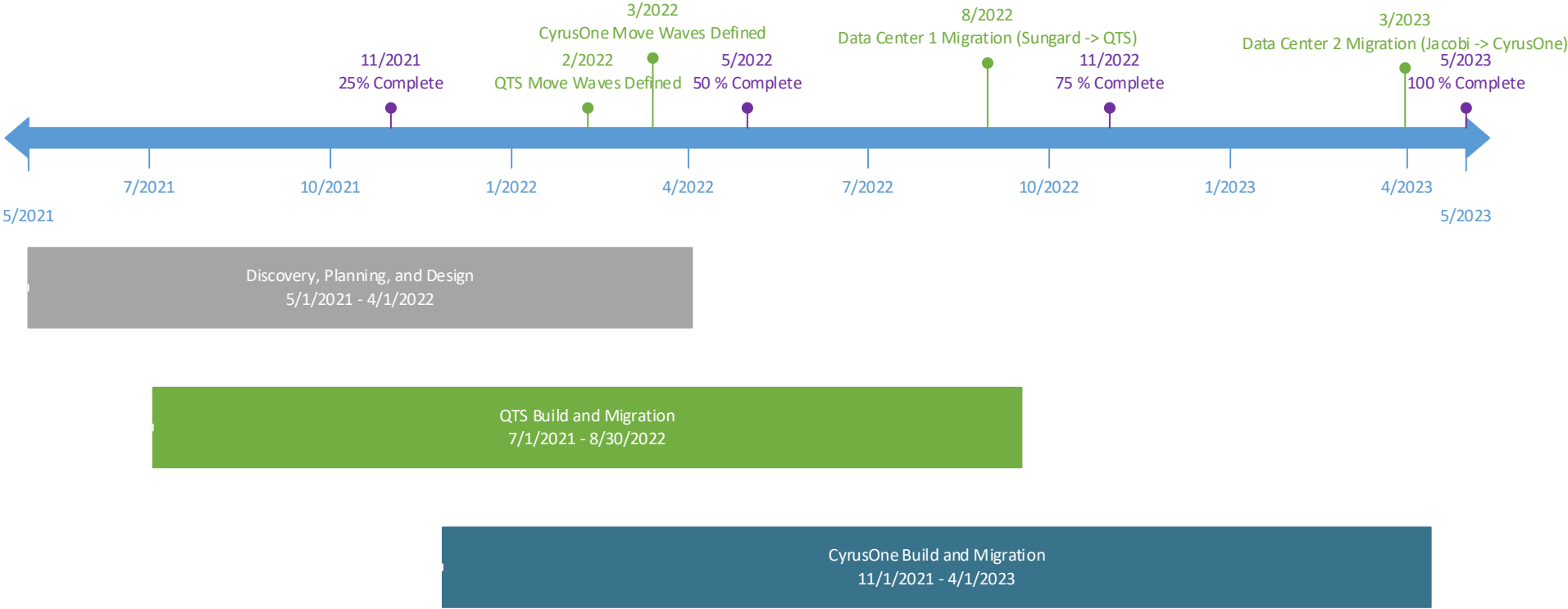
## Clinical Applications Update

- Willow Ambulatory Retail Pharmacy Module went live at Kings and Lincoln on Saturday May 7.
  - Few system issues found, and all quickly resolved.
  - Command center closed on Wednesday May 26.
  - Virtual At The Elbow (VATE) continued through June 3.
  - Next go live on August 6.
- MyAM Addiction Management software live at all sites
  - Final go live June 6 at Kings.
  - Provides users updated functionality and reporting capabilities.
  - Replaced AMS legacy system, remediating security issues.
- Wisdom Dental
  - Initial go live scheduled for July 1.

## Data Center Migration May 2022 (Financial Sustainability & Quality)

- Enterprise Data Center Migration : Project Timeline 5/2021-5/2023
- As of May 31,2022, overall project progress remains on target at 50% completion.
- Enterprise Data Center Migration remains on target. Key accomplishments include:
  - Completed the first 6 of 19 move waves
    - 600 Servers migrated covering close to 200 applications
  - Ensemble Non-Production environment has been migrated and failover testing has been completed
  - Epic Microsoft SQL Database Cluster is 50% migrated
    - Disaster Recovery environment is already synchronizing between QTS and Jacobi data centers
  - Epic Application Disaster Recovery Environment is being moved to QTS and will be implemented and tested during June
    - Epic will be live at QTS after July 13 maintenance

# Data Center Migration Update



# EITS Continuous Quality Improvement

- Epic – Top 10 New Features to Support Caregivers
- Management Print Services
- Everbridge Care Converge

## Top 10 New Epic Features that Support Caregivers

- Admit Order
- Virtual Express Care
- Medical Student Notes
- Advanced Care Planning
- Getting the Dose Right
- In-patient Timeline
- Discharge Checklist
- Fewer and More Useful Alerts
- Order Set Updates
- Voice Dictation

## Admit Order

Admit to Inpatient order updated to provide decision support when choosing a patient class, service and level of care.

**Roles Affected:** Ordering Providers.

Admit to Inpatient
✓ Accept
✗ Cancel

Patient Class:

Service:

Level of Care:

Primary Diagnosis:

Expected length of stay:

Bed Type:

Additional bed request comments:

Inpatient Attending Provider (if known):

Inpatient Care Team (if known):

Appropriate choices will appear based on what is selected.

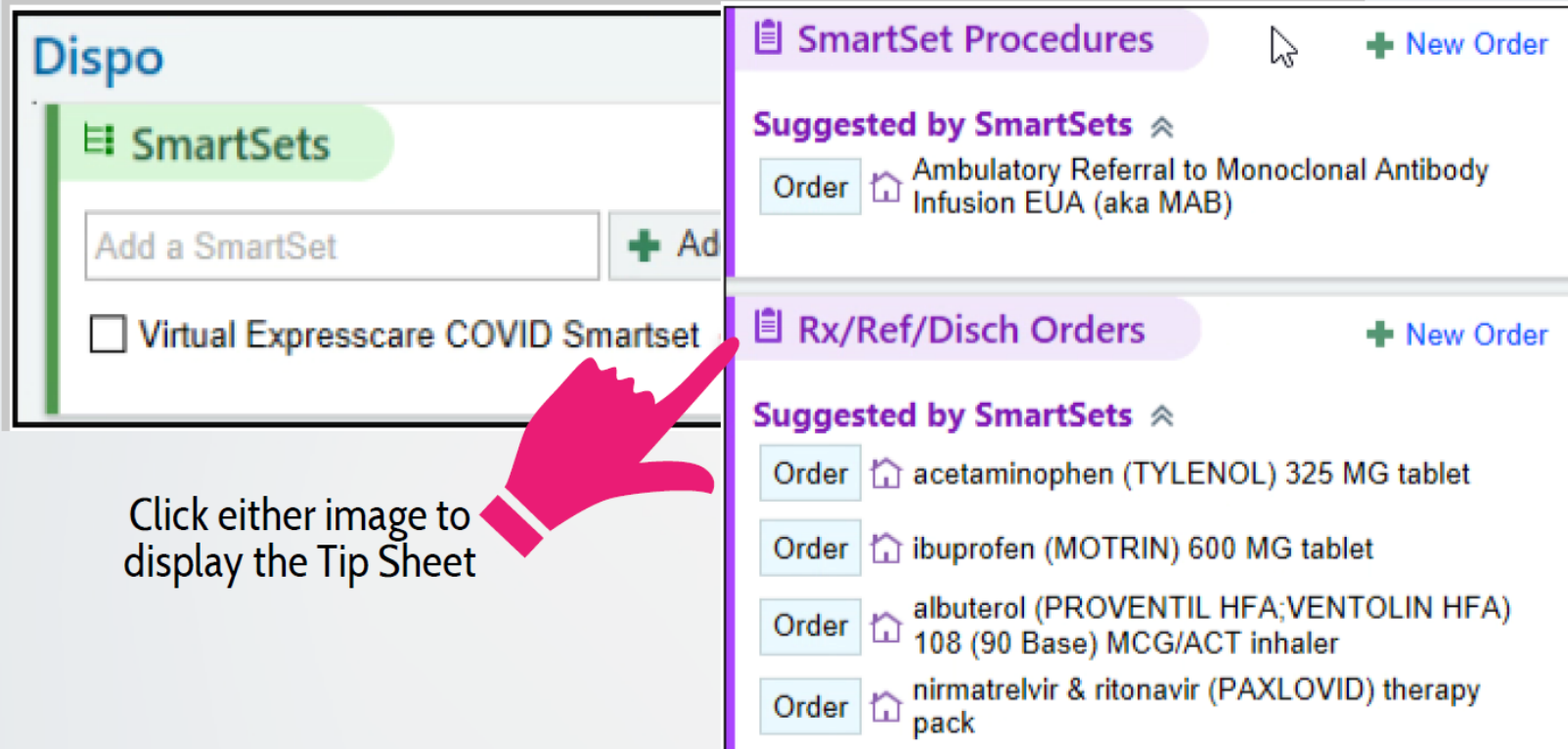




## Virtual Express Care

The virtual ExpressCare providers will now have a COVID-19 smartset available in the disposition activity to simplify ordering discharge medications, referral orders, and patient instructions for COVID and monoclonal cases.

**Roles affected:** Virtual ExpressCare Providers; MD, PA & NP



The screenshot shows a software interface for 'Dispo' (Disposition). On the left, under the 'SmartSets' section, there is a text input field labeled 'Add a SmartSet' and a green '+ Add' button. Below this is a checkbox labeled 'Virtual Expresscare COVID Smartset'. A pink hand icon is pointing to this checkbox. On the right, there are two panels. The top panel is titled 'SmartSet Procedures' and has a '+ New Order' button. It lists 'Suggested by SmartSets' with one item: 'Ambulatory Referral to Monoclonal Antibody Infusion EUA (aka MAB)'. The bottom panel is titled 'Rx/Ref/Disch Orders' and also has a '+ New Order' button. It lists 'Suggested by SmartSets' with four items: 'acetaminophen (TYLENOL) 325 MG tablet', 'ibuprofen (MOTRIN) 600 MG tablet', 'albuterol (PROVENTIL HFA; VENTOLIN HFA) 108 (90 Base) MCG/ACT inhaler', and 'nirmatrelvir & ritonavir (PAXLOVID) therapy pack'. Each item has an 'Order' button and a house icon.

Click either image to display the Tip Sheet

## Medical Student Notes

An appropriate attestation note automatically populates when an attending attests a billable note initiated by a medical student and edited by a resident/fellow.

**Roles affected:** Inpatient providers; MD, PA & NP

Click the image to display the Tip Sheet

Attest Note

Attest in Encounter

My Note

Note Details

Date of Service: 4/21/2022 1218

Service: Medicine IP

Summary: Med student-Resident-Attending

Resident Go Physician, MD

Resident

Medicine IP

Progress Notes

Cosign Needed

Attestation automatically populates.

★

B

+

abc

↶

?

+

Insert SmartText

↷

↶

↷

≡

↺

↻

📎

The resident/fellow was present with the medical student who participated in the documentation of this note. I personally performed the physical exam and medical decision making. I have reviewed and agree with all of the medical student and resident/fellow documentation including the history, exam, medical decision making and findings, with the addition and/or exception of items documented below.

## Advanced Care Planning

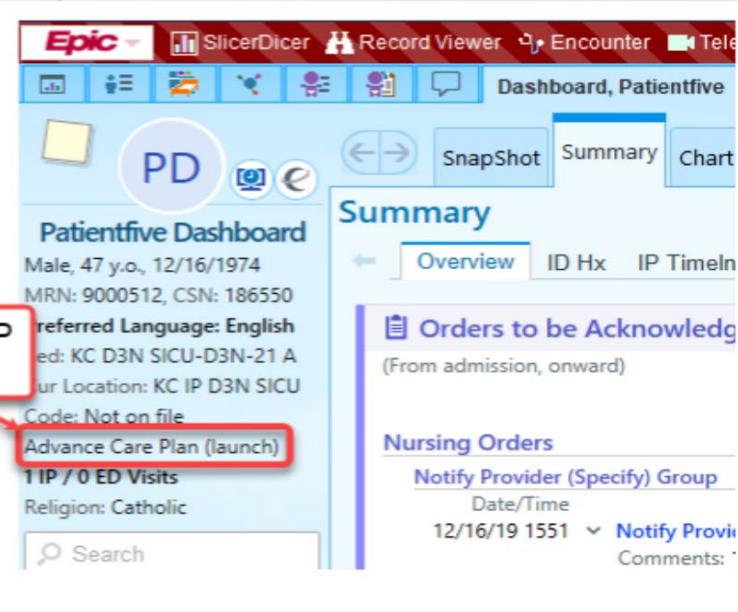
Implementing Advance Care Plan navigator launch option from the storyboard.

**Roles affected:** Providers,  
Nurses, and Social Workers

Click the image for the  
Tip Sheet



Click to launch ACP  
navigator



Capacity Instruction was added to guide provider to use **.CAPACITYNOTE** smartphrase when you choose Incapacitated or Needs review in Patient Capacity section.

## Getting the Dose Right

**Description:** H+H High Value Council recommends lowest dose for High-risk medications for older adults. Geriatric (age 65 or older) rule-based ordering in H2O now available for select High-risk medications. On order entry, Provider will see the lowest dose defaulted for this population. This applies to select facilities based on Cluster Randomization.

**Roles impacted:** In-patient providers; MD, PA & NP

### Without Geriatric context:

traZODone (DESYREL) tablet

Reference Links: 1. Micromedex 2. Black Box Warning

Dose:  mg 25 mg 50 mg 100 mg

Route: Oral

Frequency: Nightly TID BID Nightly Nightly PRN

For: 30 Doses Hours Days

Starting: 12/23/2021 Today Tomorrow

First Dose: Include Now As Scheduled Show Additional Options

First Dose: Today 2100 Last Dose: Fri 1/21/22 2100 Number of doses: 30

Scheduled Times: 12/23/21 2100 12/24/21 2100 12/25/21 2100

Only 3 days of scheduled times are shown.

### With Geriatric context:

traZODone (DESYREL) tablet 25 mg

Reference Links: 1. Micromedex 2. Black Box Warning

Dose: 25 mg 25 mg 50 mg 100 mg

Route: Oral

Frequency: Nightly PRN TID BID Nightly Nightly PRN

For: 30 Doses Hours Days

Starting: 2/1/2022 Today Tomorrow At: 1313 Show Additional Options

First Dose: Today 1313 Last Dose: Thu 2/3/22 1313 Number of doses: 30

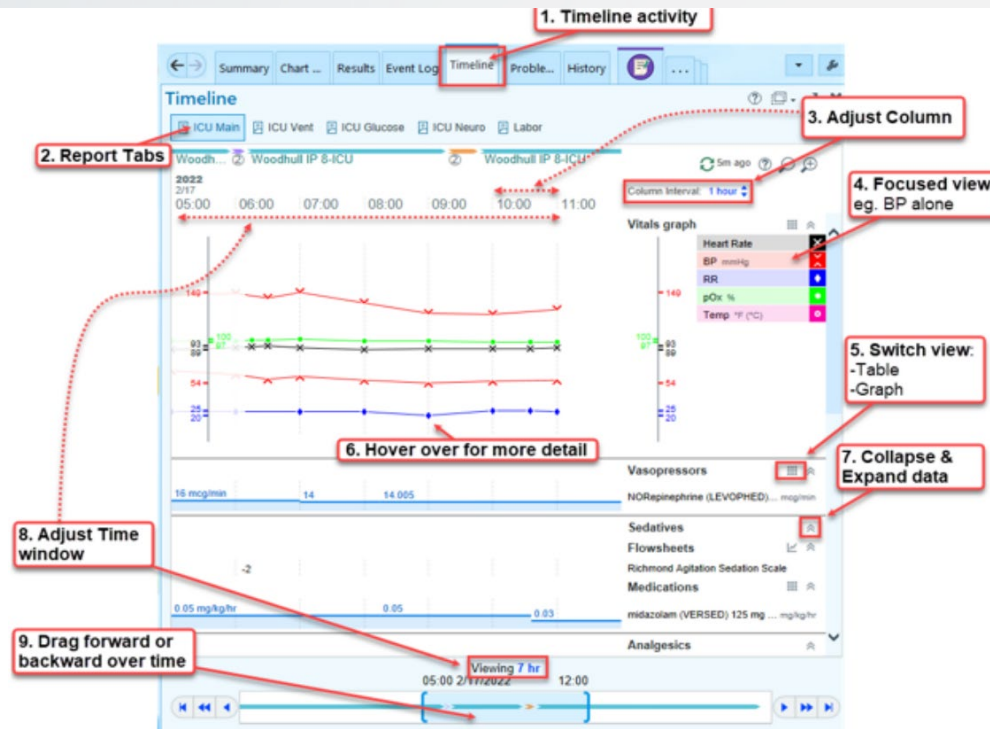
Scheduled Times: 2/1/22 1313 2/2/22 1313 2/3/22 1313

Only 3 days of scheduled times are shown.

## In-Patient Timeline

**Description:** Implementing Timeline activity to help clinicians visualize trends and recognize events in everyday patient care in the most recent hospital encounter.

**Roles impacted:** Inpatient Providers





# Discharge Checklist

## In-patient Discharge Checklist

**Description:** Document all information needed for patient discharge directly from the Discharge Checklist via the Patient List columns.

**Roles impacted:** Providers, Nurses, Social Workers/Case Managers

Click the  
image for  
the Tip  
Sheet



Discharge Checklist 3 Patients Refreshed just now

Unit/Room	Patient	MRN	LOS	Exp Disch Date	Foley	1:1 Order	Centr Line	Disch Educ	Discharge Disposition	Discharge Transport Mode	PRI Complete	Facility Referral	Home Care Arranged	Shelter Package	Post-Discharge Pre-Authorizat	Discharge Med Rec Complete	COVID Vaccine Status	01 Nc
BE 20E-20E25 A	Test, J (40 y.o. M)	2092	566														None	
BE 20E-20E50 A	Test, J (22 y.o. F)	1772	572														None	
BE 20E-20E51 A	Test, J (40 y.o. F)	2091	566														None	

**Discharge Disposition Checklist - All Flowsheets**

**Jctwo Test** Male, 40 years, 1/8/1982  
MRN: 2092 Room: 20E25  
Bed: 20E25 A

Time taken: 2/28/2022 1220 More ☒ Show Row Info ☒ Show Last Filed Value ☒ Show All Choices

Discharge Disposition Checklist - All Discharge Columns

Disposition

Home Without Services Home With Services Acute - BH Acute - LTAC Acute - Other Hospital

Acute - Rehab NH - LTC NH - SAR NH - SNF Shelter Supportive Housing Other

Planned Discharge Transportation Mode

None Ambulance Ambulette Family arr... Livery Public transit other

PRI completed

Yes No

Document in this row to communicate the completion of the PRI to the Social Work staff.

Facility Referral Sent

Sent Accepted N/A

Home Care Arranged

Referred Accepted N/A

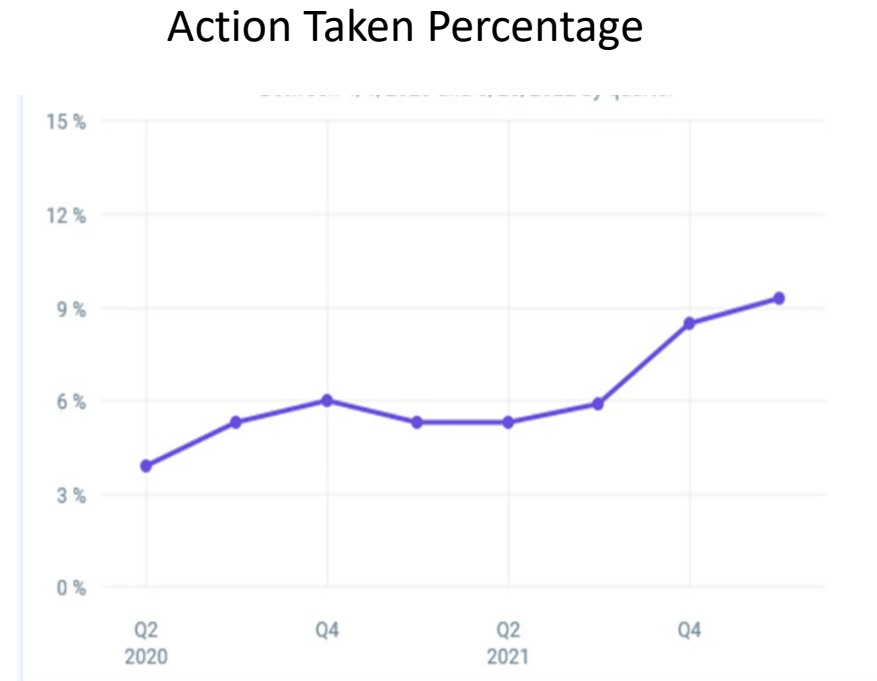
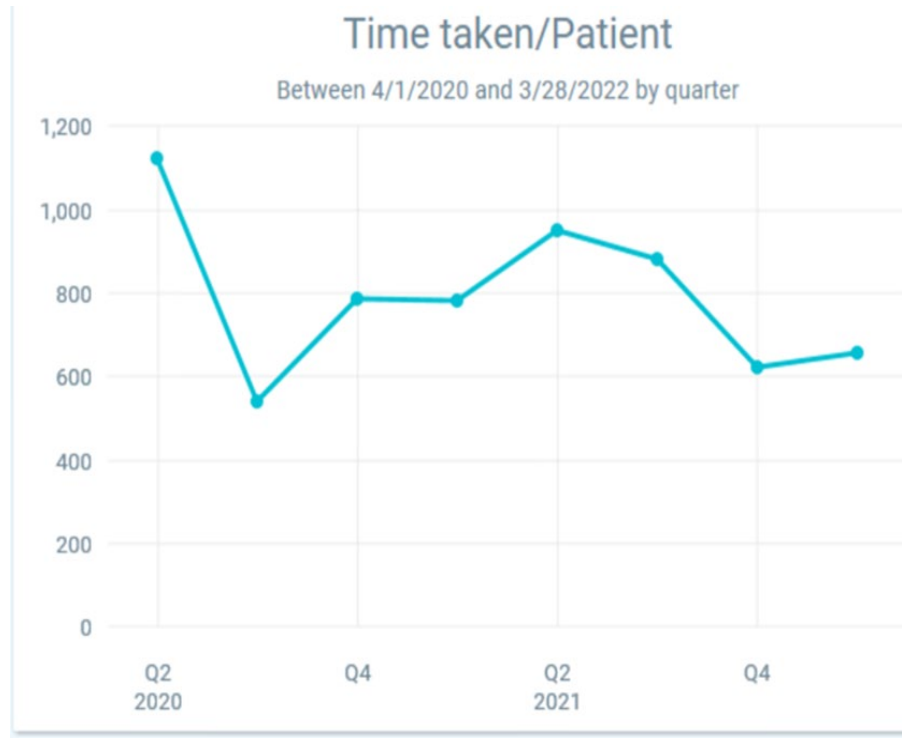
Shelter Package

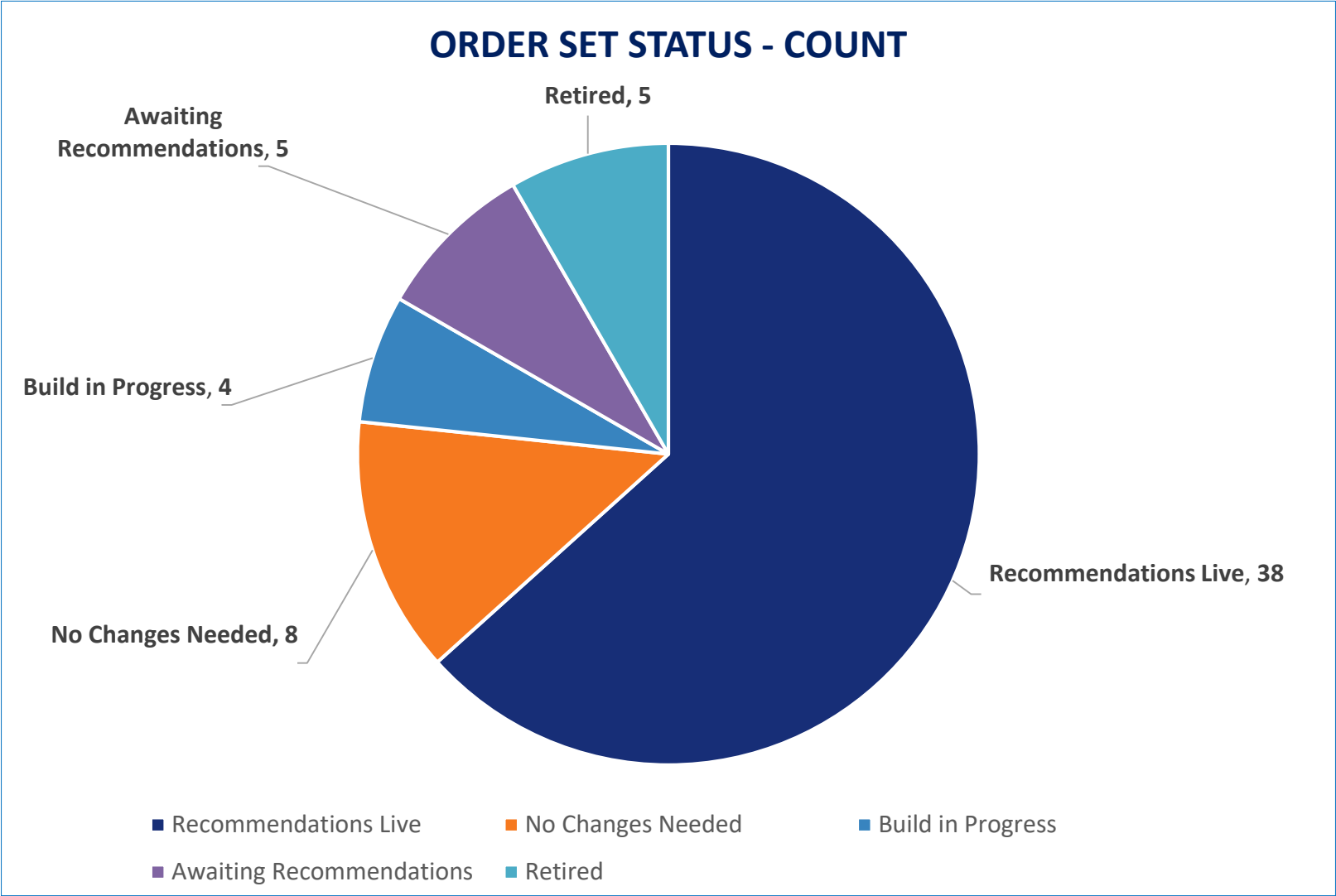
Submitted Hold N/A

Pre-Authorization for Post-Discharge Services Obtained

Submitted Obtained Not applicable (patient does not require pre-auth)

## Fewer and More Useful Alerts







Voice Dictation

Month	Hours
Jan2021	80.36
Feb2021	94.44
Mar2021	157.35
Apr2021	187.89
May2021	194.16
Jun2021	200.38
Jul2021	216.66
Aug2021	220.01
Sep2021	194.53
Oct2021	274.68
Nov2021	307.37
Dec2021	366.45
Jan2022	371.68
Feb2022	387.27
Mar2022	476.63
Apr2022	498.93



## MPS Initiatives reduce carbon footprint

Secure Print	Printer Transfers	Unprint Campaign	Production Print
<p><b>TECHNOLOGY</b></p> <ul style="list-style-type: none"> <li>- Create the ability for us to transfer single function printers</li> <li>- Keep documents secure</li> <li>- Allow for rules-based printing</li> <li>- Encourage users to “Think before you print”</li> <li>- Secure Print is ideal for admin areas that have the flexibility to use a multifunctional device instead of a single function printer.</li> </ul>	<p><b>OPTIMIZATION</b></p> <ul style="list-style-type: none"> <li>- Lower the amount of powered single function printers in non-clinical areas</li> <li>- Recycle/transfer printers internally from administrative to clinical areas</li> <li>- Reinforce rules-based printing by directing users to print to lower powered, low CPI, highly secure MFD’s.</li> <li>- MPS recycles and refill toner bottles.</li> <li>- Clinical areas have a requirement for single function printers.</li> </ul>	<p><b>USER BEHAVIOR</b></p> <ul style="list-style-type: none"> <li>- Provide tips to keep information accessible, secure and eco-friendly</li> <li>- Help users to develop workflows to keep information in a digital format, behind our firewall and only printed when absolutely necessary</li> <li>- Use continuous awareness campaigns incl. videos, tip sheets, best practices, and other awareness strategies</li> <li>- Education drives user behavior toward less reliance on printing.</li> </ul>	<p><b>CONSOLIDATION</b></p> <ul style="list-style-type: none"> <li>- Reduce # of print centers from 11 to 8; final to 5.</li> <li>- Reduce high-volume, power intensive machines from 45 to 33.</li> <li>- Leverage existing transportation services and routes</li> <li>- Manage and filter requests to limit waste</li> <li>- 8x cost savings vs vendors.</li> </ul>

## SUSTAINABILITY

### Reducing Carbon Footprint



**Unprint.**  
Keep your information  
accessible, secure,  
and eco-friendly.

## Mission

- To use the Everbridge Mass Notification application in a unique way to optimize Cardiology (STEMI) patient flow such as admissions, transfers, with team collaboration for critical care.
- Enable daily collaboration and curbside consults.
- To enhance Clinical Team structure and efficiency.

## Key Features

- Real time communication across multiple devices/contacts (H+H and FDNY).
- Secure voice, text, image capabilities enable clinicians to connect all members of a patient's care team through a single platform.
- Utilized by the Jacobi team led by Dr. Sokol since May 2021.
- Notification templates/On-Call scheduling for 168 nurses, techs, Assistant PA's and Physicians for both STEMI and ECMO Utilization.

## Patient Outcomes

- Eliminated multiple paths of failure by being able to use any hospital phone or Everbridge App and activate Everbridge allowing for increased communication between multiple clinical disciplinary teams.
- Increased awareness of Stemi team workflow and practices leading to timely and effective communication.
- 'Time is Muscle' meeting Door to Balloon time in order to secure best patient outcomes.
- We now have the ability to show Live screen share of patient clinical information in real-time mode vital to decision making such as EKG, Lab values, and other pertinent clinical content while in transit.

# Thank You!