

2019

HEALTHCARE OPERATIONS INNOVATION SUMMIT by Qventus

A Report from Our Inaugural
Thought Leadership Forum



Innovation Highlights from Leading Health Systems

Driving operational excellence is a significant and urgent priority for leaders who attended the inaugural Healthcare Operations Innovation Summit by Qventus. Held in Minneapolis, in partnership with M Health Fairview, the one-day gathering convened over 80 leaders from forward-thinking health systems and hospitals across the U.S.

The group first discussed common challenges and why the status quo is insufficient. But the main objective of the day was to highlight new approaches to optimizing patient flow that combine artificial intelligence, behavioral science, and data science.

The discussions focused not on theory but on practical applications — how health systems today are significantly reducing length of stay, easing the cognitive burden on frontline teams, and improving patient care.

As a capstone to the day, the group visited M Health Fairview's new state-of-the-art System Operations Center to see first-hand how this health system is transforming system-wide operations through the Qventus platform.

This report summarizes key takeaways from the event.



Mercy is transforming operational efficiency in emergency departments across the system.



NewYork-Presbyterian is automating discharge coordination and applying analytics-powered insights to drive targeted process improvements.



SCL Health Lutheran Medical Center is reducing length of stay through hospital-wide discharge orchestration.



M Health Fairview is unlocking operational efficiency through a state-of-the-art System Operations Center and in emergency, inpatient and perioperative settings across the system.

Lessons For Applying Data To Healthcare Operations

Qventus CEO and founder Mudit Garg opened the day by validating the shared challenge that healthcare leaders face today: operational improvement is the #1 strategic priority, according to a recent survey of healthcare executives by 4sight Health and Qventus.

Leaders overwhelmingly believe in the power of new technologies to improve operational effectiveness. But, as Garg pointed out, it takes more than just applying AI.



Six Lessons For Applying Data To Healthcare Operations

- 1. Past approaches are no longer sufficient.** Across the industry today, LOS reductions have plateaued because enterprise software tools, such as EMRs, have not been designed to support real-time operational decisions, and because lean performance improvement projects still rely on highly manual processes.
- 2. Applying AI is critical but complex in healthcare.** Digitized health systems -- rich with data from EMRs -- are now turning to AI and machine learning. But healthcare data still relies on human input, often needs to be understood in context, and exists in a highly dynamic work environment.
- 3. Behavior science is required to build new habit formation.** New insights alone are not enough. To build lasting habits that drive and sustain operational excellence, workflows require the combination of an intuitive prompt, a clear action, an appropriate reward, and meaningful investment.
- 4. A closed-loop system is required to drive operational transformation.** By combining AI, behavior science, and data science, a closed-loop system identifies issues retrospectively, in real-time and in the future; orchestrates actions for frontline teams; and manages accountability to ensure continuous improvement.
- 5. By activating this system, new insights unlock more improvements over time.** Rich operational data generated by the closed-loop system then gives leaders and teams unparalleled, quantified insight into new opportunities for operational improvement.
- 6. Operationalization requires elegant design for people, processes and technology.** New technology capabilities need to be designed to integrate with new workflows and people processes, so that teams can take full advantage of the new capabilities.

Panel: Delivering Strategic Value Through Operations

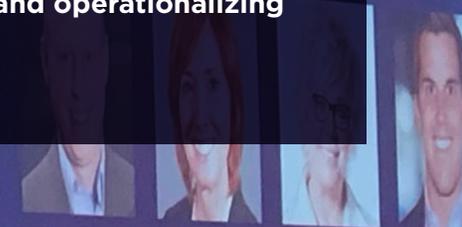
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“Getting operations right to address margin pressure needs to be priority number one. But we’re not going to get performance without liberating data and operationalizing it at scale.”

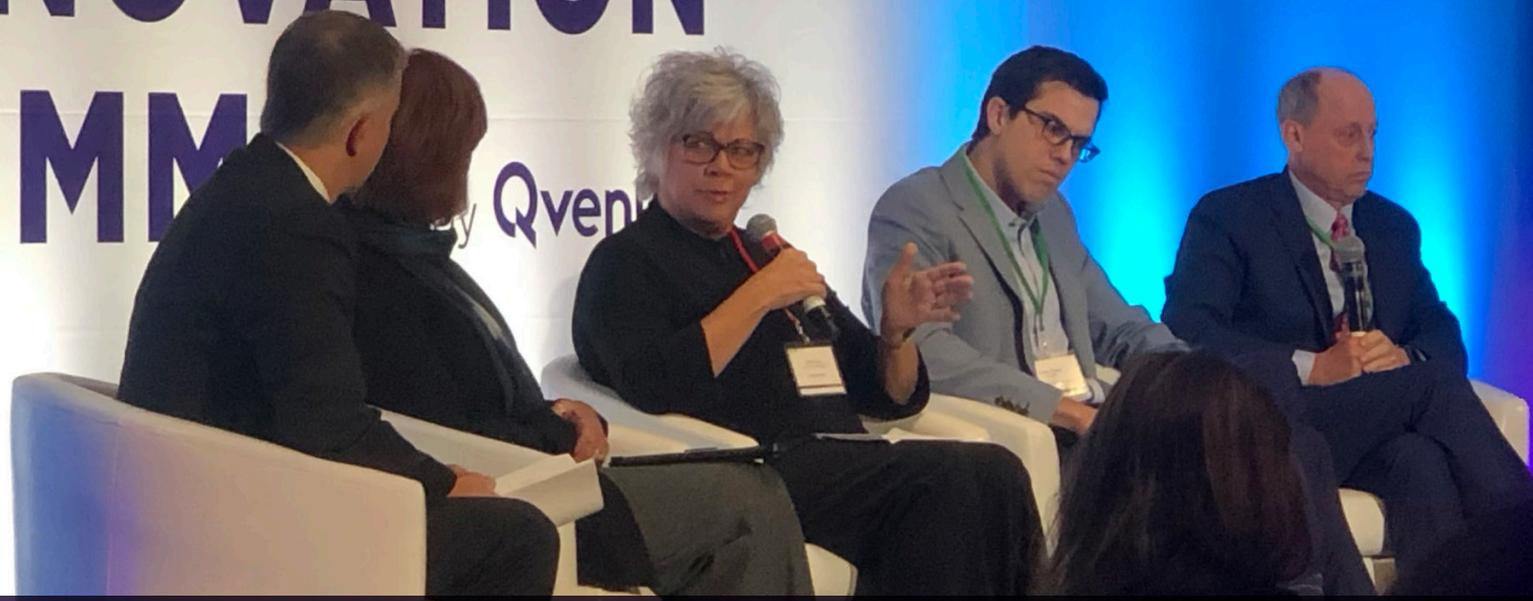
— David Johnson, 4sight Health, CEO

Delivering Strategic Value Through Operations



David Johnson 4sight Health CEO	JoAnn Lazarus MSN, RN, CEN, FAEN, Philips Blue Jay Consulting Principal, Global Practice Lead, Emergency Services	Kim Post DNP, MBA, RN, NEA-BC HonorHealth Executive Vice President, Chief Operations Officer	Kyle Gibler MD, MBA McKinsey & Company Associate Partner
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Qventus



Greg Schneider
MBA
Qventus
Chief Marketing Officer

JoAnn Lazarus
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Philips Blue Jay Consulting
Principal, Global Practice Lead,
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Kim Post
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HonorHealth
CEO-Hospitals and
Chief Clinical Officer

Kyle Gibler
MD, MBA
McKinsey & Company
Associate Partner

David Johnson
4sight Health
CEO

The Strategic Value Of Operations

Thought leaders from McKinsey, HonorHealth, Philips Blue Jay Consulting, and 4sight Health offered additional perspectives on the urgency behind driving operational excellence:

- Patients increasingly expect a highly-efficient, connected healthcare experience, because their expectations are constantly being shaped by other consumer experiences.
- To gain a competitive edge in the war for talent, leaders need to improve the environment for frontline teams and reduce the burden of operational decisions.
- Ultimately, outcomes matter, and driving operational excellence with new technology requires expertise that is very different from implementing an EMR.

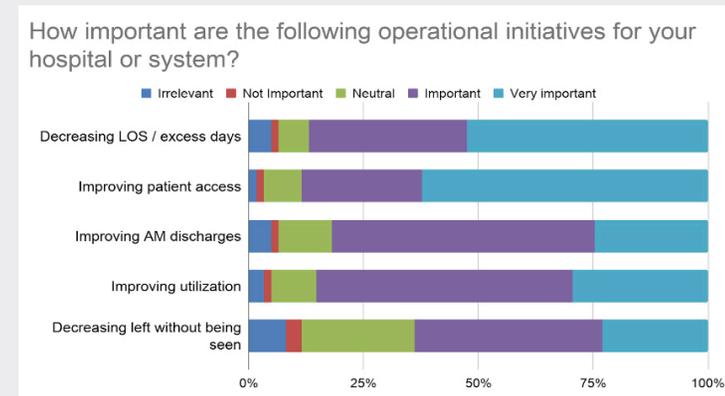
“It’s imperative for every organization to drive down the cost of care through operational reliability. We don’t have time to continue to rely on incremental improvements and slow-to-evolve EMR systems. Other industries have made dramatic operational improvements through automation, and the most competitive health systems today are embracing automation for patient flow.”

— Mudit Garg, MBA, Qventus, Founder, CEO

Operational improvement is the #1 strategic priority for health systems



Need for operational improvement focused on LOS and related areas



Panel: Operational Innovations in Emergency Departments

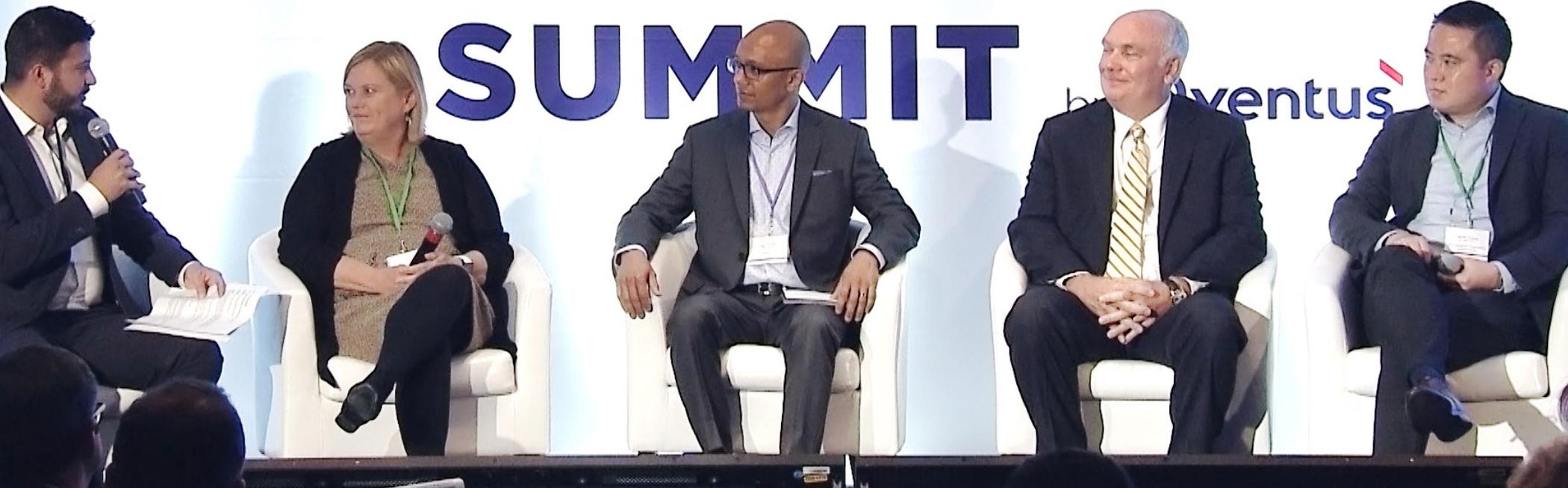
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“ED operations haven’t changed for decades. But now, there’s a new paradigm for highly reliable teamwork. Every process should not only be better for patients but also easier for people doing the work. The idea of simplicity, elegance, and using technology to move our patients along is the future of healthcare.”

— Karen Murrell, MD, MBA, FACEP, TeamHealth, Vice President, Process Improvement



Ryan Starks
MBA
Qventus
Director, Product Marketing

Karen Murrell
MD, MBA, FACEP
TeamHealth
Vice President, Process Improvement

Raj Chand
MD, FACEP
Virginia Emergency
Medicine Associates
President

Jeff Reames
MD, MBA, FACEP
Mercy
Vice President, Emergency Services

Jamie Chang
MD, MBA, FACEP
CHA Hollywood Presbyterian
Medical Center
Chief Clinical Operations Officer

Panel: Operational Innovations in Inpatient

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Operational Innovations and Best Practices Inpatient



Tanya Mighty
MSN, BSN, RN
NewYork-Presbyterian Weill
Cornell Medical Center
Care Coordination Manager

Karyn Baum
MD, MSED, MHA
M Health Fairview
Vice President, System
Clinical Operations, Professor
of Medicine

Jill McCormick
MHA
Lutheran Medical Center
Director, Performance
Improvement

Beth Fuller
DNP, RN, CEN, CCRN, CFRN
Philips Blue Jay Consulting
Principal

Qventus

“You can’t do process improvement well without having real-time data that’s actionable and moves you forward. With real-time data, leaders have transparency at their fingertips — you can’t hide the fact that there are 14 patients up with an EDD of today but discharge barriers remain. It makes it easier for leaders to hold teams accountable and work together to drive performance.”

— Beth Fuller DNP, RN, CEN, CCRN, CFRN Philips Blue Jay Consulting

Tiffany Chen
M.Eng.
Qventus
Director, Product Marketing

Tanya Mighty
MSN, BSN, RN
NewYork-Presbyterian
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Care Coordination Manager

Beth Fuller
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Karyn Baum
MD, MSED, MHA
M Health Fairview
Vice President, System Clinical
Operations, Professor of Medicine

Jill McCormick
MHA
Lutheran Medical Center
Director, Performance Improvement

Intelligent Operations In Practice

With the grounding in the strategic case for operational efficiency, the discussion then turned to how leading health systems are putting intelligent operations into practice today.



At Mercy, the fifth largest health system in the US, Vice President of Emergency Services, Jeff Reames, MD, MBA, FACEP, described how leadership needed a system to drive reliability and efficiency across their EDs.

With Qventus' prediction model to anticipate crowding events and prompt a "virtual huddle" at least 2 hours before they occur, Reames shared that far fewer crowding events occur; and when crowding events do happen, the model predicts them at least 2 hours ahead of time.

In addition, Mercy uses analytics to identify lab tests where there was sufficient unexplained variation to target for change efforts.

Using real-time relative performance feedback tools with providers, Mercy reduced unnecessary lab utilization by over \$3.5 million.

[Watch the Mercy ED case study video](#)



SCL Health Lutheran Medical Center began their lean journey in 2013 and made meaningful improvements in LOS, but leadership knew that continued LOS reductions could not continue to rely on the heroic efforts of frontline teams alone. That's where Qventus came in.

Jill McCormick, MHSA, Director of Performance Improvement at SCL Lutheran, described how the Qventus platform enables real-time orchestration with ancillaries, such as physical therapy (PT), where Qventus triggers an automation process, and PT teams can re-prioritize patients in real-time and without dozens of phone calls.

With Qventus, SCL Lutheran has reduced LOS by 0.2-0.8 day across units and is on-track to save \$2M in the first year alone.

[Read the MedCity News article on SCL Lutheran's discharge planning innovations](#)



NewYork-Presbyterian Cornell had implemented multidisciplinary discharge rounds, but they were not consistent across units, and follow-up on discharge barriers remained a manual, burdensome process.

Tanya Mighty, MSN, BSN, RN, Care Coordination Manager at Weill Cornell, described how the new rounds with Qventus have "flipped the script" and empowered all members of the team in discharge planning discussions.

After launching Qventus in 2017, NewYork-Presbyterian has reduced LOS by 0.5 day, which equates to 35 additional beds — that translates to one entire unit of new capacity created without any new capital expenses.

[Watch the webinar on how NYP is using AI to reduce LOS](#)

Applying Innovation to Transform Health Systems

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by **Qventus**



“My goal is to have 35,000 people coming in everyday feeling equipped to be able to drive improvement, to make us a little bit better, and to be able to translate our goals around quality and safety and customer service into terms that they can move and effect at any level of the organization. Because we have to be about our people.”

— James Hereford, M Health Fairview, President and CEO

James Hereford
M Health Fairview
President and CEO

Transforming System-Wide Operations

As a case study for transformation at scale, James Hereford, President & CEO of M Health Fairview, outlined his vision for a health system that combines “autonomation” — a lean concept that means providing people with better information at the right time — and artificial intelligence.

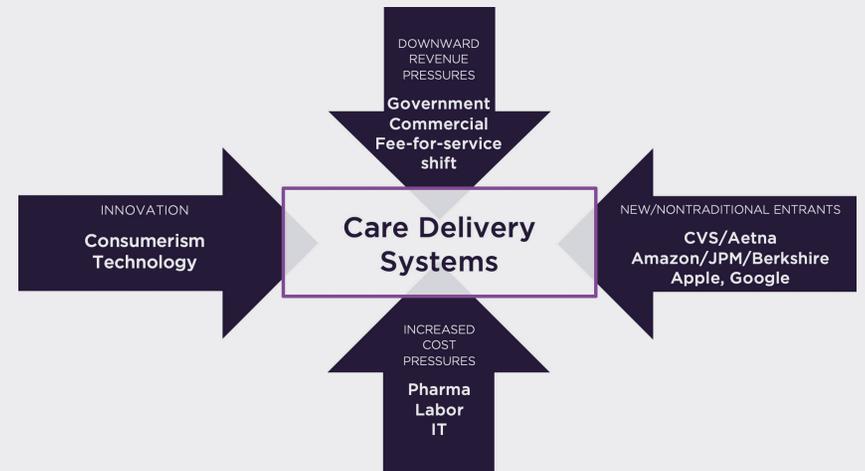
Hereford outlined the forces that M Health Fairview and nearly every health system today face — downward revenue pressures, increased cost pressures, new innovations in consumer technology, and new non-traditional, disruptive entrants into healthcare. M Health Fairview’s goal is to own the complexity of healthcare for patients.

Hereford then challenged delegates to join him in reimagining how health systems operate and to invest in people and new solutions to move the industry.

Raghu Pillai, CBRM, Vice President, of Digital and Strategic Business Partnerships at M Health Fairview, then described the need for a proven technology partner that could also bring the change management expertise required for driving operational impact. Pillai further reinforced the message from first-hand experience that new technology capabilities require design with new people processes and workflows.

Other M Health Fairview leaders, including Sameer Badlani, MD, FACP, Chief Information Officer, and Mary Jo Huppert, BSM, RN CCM LBC, System Director for Inpatient Care Management, Operations Center, and Bed Placement emphasized the importance of leading with people and processes, and shared that the battle of patient flow is won by getting frontline teams to take action and driving results.

The forces upon care delivery systems today



The M Health Fairview Health Transformation Center



Panel: Lessons for Leading System-wide Transformation

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“We needed a partner who has the credibility of understanding operational challenges and a track record of driving impact. That’s why we partnered with Qventus.”

— Sameer Badlani, MD, FACP M Health Fairview, Chief Information Officer



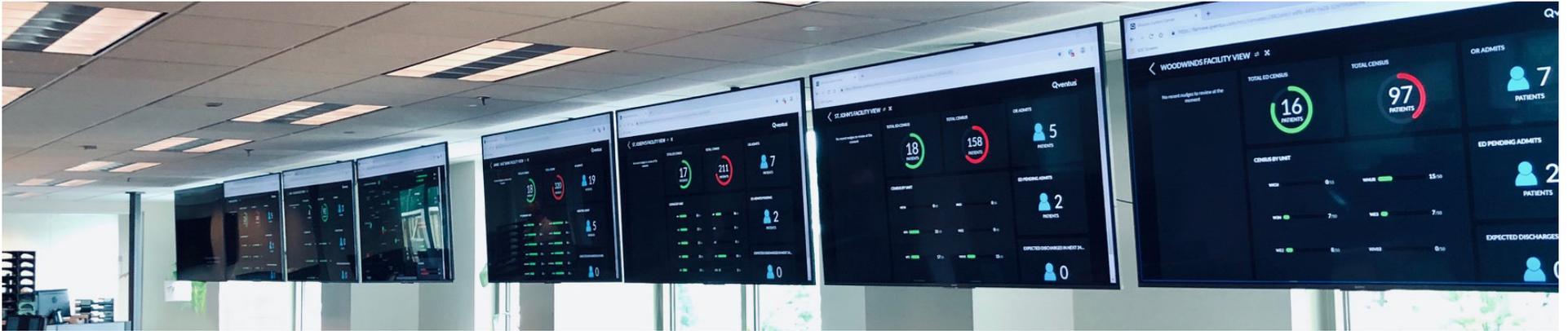
Michael Mucha
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Vice President of Delivery

Mary Jo Huppert
BSN, RN CCM LBC
M Health Fairview
System Director Inpatient Care
Management, Operations Center &
Bed Placement

Raghu Pillai
CBRM
M Health Fairview
Vice President, Digital &
Strategic Business
Partnerships

Sameer Badlani
MD, FACP
M Health Fairview
Chief Information Officer

Site Visit: M Health Fairview System Operations Center



Delegates then traveled to M Health Fairview's cutting-edge new System Operations Center to meet leaders and frontline teams and see first-hand how the system works.

The System Operations Center leaders walked delegates through a sample of use cases on how the system works today, and how they plan to expand its use in the near future. These included:

- Use of the situational awareness visual system to facilitate system flow huddles
- Proactive management of next-day morning discharges across facilities
- Predictions for likely admits that require transfer and virtual coordination for transfer



Summit Speakers & Panelists



Rahul Agarwal
MBBS, MBA, MHSA

Qventus
Head Of Clinical
Operations



Sameer Badlani
MD, FACP

M Health Fairview
Chief Information Officer



Karyn Baum
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Vice President, System
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Professor of Medicine



Raj Chand
MD, FACEP

Virginia Emergency
Medicine Associates
President



Jamie Chang
MD, MBA, FACEP

CHA Hollywood
Presbyterian
Medical Center
Chief Clinical
Operations Officer



Beth Fuller
DNP, RN, CEN,

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Kyle Gibler
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Lindsay Giese
MHA

M Health Fairview
Health Transformation
Center Program Manager



James Hereford

M Health Fairview
President and CEO



David Johnson

4sight Health
CEO



JoAnn Lazarus
MSN, RN, CEN, FAEN

Philips Blue Jay
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Principal, Global Practice

Summit Speakers & Panelists (continued)



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Tanya Mighty
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Jeff Mounzer
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Vice President, Process
Improvement



Raghu Pillai
CBRM
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Vice President, Digital &
Strategic Business
Partnerships



Kim Post
DNP, MBA, RN,
NEA-BC
HonorHealth
CEO-Hospitals and Chief
Clinical Officer



Jeff Reames
MD, MBA, FACEP
Mercy Health System
Vice President of
Emergency Services



Greg Schneider
MBA
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Chief Marketing Officer

Request A Demo

To request an invite for
2020 please email:
sales@qventus.com