Hospital IQ®

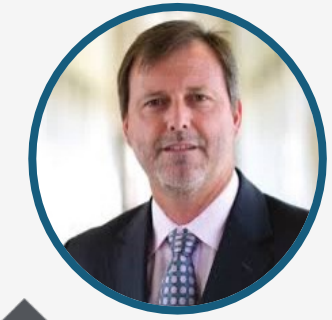
Looking Beyond Acuity

How Intelligent Automation can Improve Daily Staffing Practices

Teri Ridge, RN | Director, Clinical Solutions
Bryan Dickerson | Senior Director, Workforce Solutions

Presenters

Teri Ridge, RN
Director, Clinical Solutions



Bryan Dickerson
Sr. Director, Workforce Solutions

Today's Webinar

For years, nursing leaders have looked to acuity-based staffing as the solution to their staffing issues. While acuity can be a determinant in how staff is distributed, there are many other variables that need to be considered when developing an effective staffing plan each day. Variables such as critical ratio variances, unit workload, planned discharges, predicted census, staff availability, and constraints all play major roles in staffing decisions. As patient care needs are fluid and vary among hospitals, nursing units, and shifts, an enterprise-focused staffing approach is essential to increase access to available resources and effectively meet patients' ever-changing needs. This is where intelligent automation can help.

In today's webinar, you will learn:

- The benefits and limitations associated with acuity-based staffing
- How a more holistic, enterprise-focused approach to daily staffing can transform your daily staffing practices
- How hospitals across the country are improving patient care and staff satisfaction by better managing their most valuable resources

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Benefits of Acuity-Based Staffing

- **Quantitative**
- **Balanced Care**
- **Competency Based**
- **Patient Need Based**
- **Improved Outcomes**

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Acuity-Based Staffing Starts the Process

- Staffing is still tedious
- Represents one data point
- Not future focused
- Creates HPPD challenges
- Lacks holistic view

Hospital IQ

With the constant evolution of the healthcare industry, it's more important than ever to take a holistic approach in order to transform daily staffing practices in a meaningful and maintainable way.

Hospital IQ provides an immediate impact by synthesizing data across existing workforce management systems to improve daily resource management across health-systems to streamline:

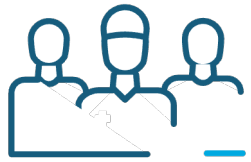
Staffing Needs

Charge Nurse

Staff Allocation

Staffing Office

Resource Deployment



Staffing Office

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The Staff Planning Continuum

How we work with your Workforce Management System

- **Frequency:** Monthly
- **Tools used:** WFM solutions

KRONOS · API HEALTHCARE · Cerner

- **Frequency:** Daily & Weekly
- **Current tools:** N/A - Manual

Streamlined by Hospital IQ

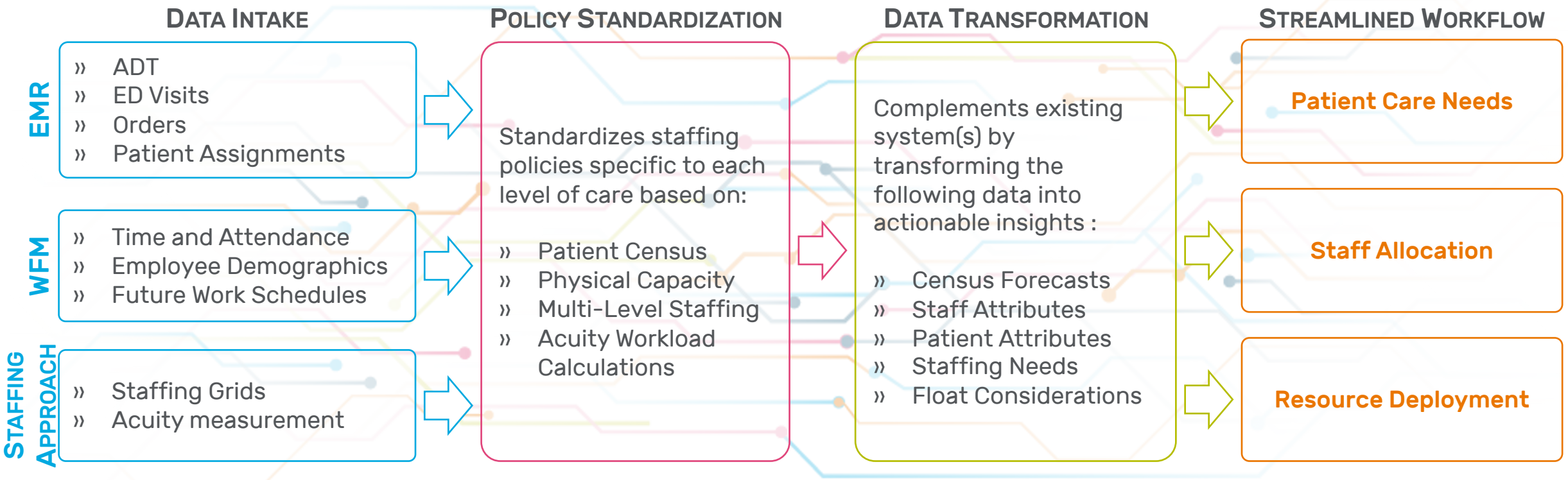
- **Frequency:** Daily
- **Tools used:** WFM solutions

KRONOS · API HEALTHCARE · Cerner

Hospital IQ complements your workforce management system to streamline the daily staffing process, giving your nursing leaders more time to focus on patient care

Company Confidential

How We Turn Data into Action



Company Confidential

Simplified Staffing Lifecycle

Streamlined daily collaboration between the Charge Nurses and the Staffing Office

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Why an Enterprise-Focused Approach is More Impactful

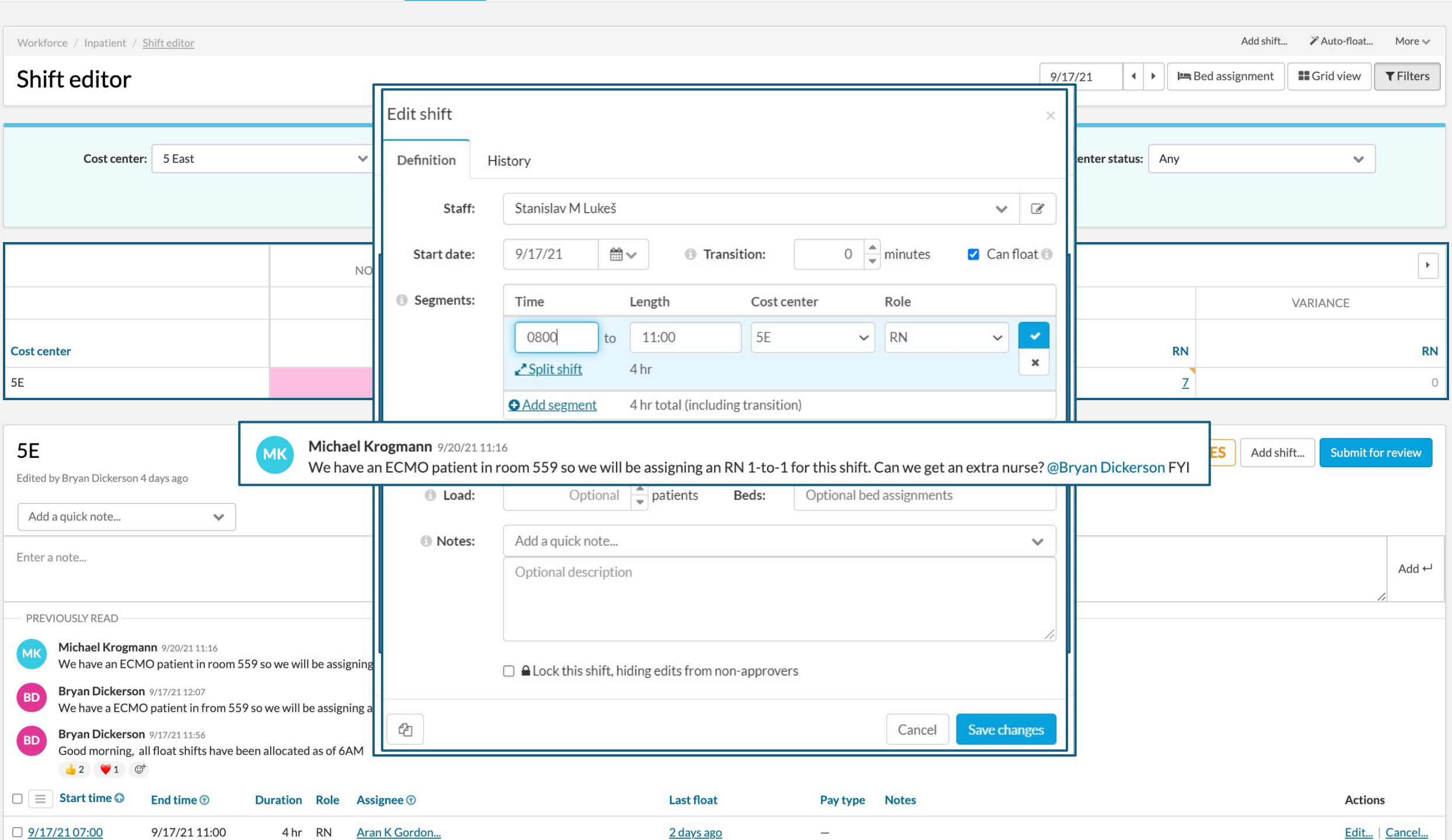
1. **Patient Care Needs**
2. **Staff Allocation**
3. **Resource Deployment**

Overview:

Charge nurses have the insights and tools to expedite daily schedule validation allowing them more time to focus on *patient care needs*. These include:

- Daily variances
- Surge indicator
- Shift modifications
- Notes and @mentions
- Schedule submission

Company Confidential


Workforce / Inpatient / Shift editor
Add shift...
Auto-float...
More
Shift editor
9/17/21
Bed assignment
Grid view
Filters
Cost center: 5 East
enter status: Any
Edit shift
Definition
History
Staff: Stanislav M Lukeš
Start date: 9/17/21
Transition: 0 minutes
Can float
Segments:
Time
Length
Cost center
Role
0800 to 11:00
5E
RN
Split shift
4 hr
Add segment
4 hr total (including transition)
MK
Michael Krogmann 9/20/21 11:16
We have an ECMO patient in room 559 so we will be assigning an RN 1-to-1 for this shift. Can we get an extra nurse? @Bryan Dickerson FYI
Load: Optional patients
Beds: Optional bed assignments
Notes: Add a quick note...
Optional description
Lock this shift, hiding edits from non-approvers
Cancel
Save changes
Cost center
5E
NO
VARIANCE
RN
RN
7
0
5E
Edited by Bryan Dickerson 4 days ago
Add a quick note...
Enter a note...
Add shift...
Submit for review
Add
PREVIOUSLY READ
Michael Krogmann 9/20/21 11:16
We have an ECMO patient in room 559 so we will be assigning
Bryan Dickerson 9/17/21 12:07
We have a ECMO patient in from 559 so we will be assigning a
Bryan Dickerson 9/17/21 11:56
Good morning, all float shifts have been allocated as of 6AM
Start time
End time
Duration
Role
Assignee
Last float
Pay type
Notes
Actions
9/17/21 07:00
9/17/21 11:00
4 hr
RN
Aran K Gordon...
2 days ago
–
Edit... | Cancel...

Why an Enterprise-Focused Approach is More Impactful

1. **Patient Care Needs**
2. **Staff Allocation**
3. **Resource Deployment**

Overview:

The staffing office and house supervisor are equipped with the daily situational awareness and capabilities to *strategically allocate staff* based on each unit's individual needs resulting in improved patient outcomes. This includes:

- Unit-specific considerations (Census, acuity, orders)
- Available float resources
- Auto-float
- Role reallocation

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Workforce plan

- "Scheduled shifts" data last updated 10 minutes ago

9/17/21 | Shift editor | Filters

Show changes only
Auto-float...

Cost center: 14 items | **Roles:** RN | **Start time:** 07:00 | **Interval:** 4 hr | **Aggregation:** Maximum | **Data source:** Optimal staff

Compare to: Scheduled shifts + tracked changes | **Pay type:** Any | **Level:** Level 2 | Float pools | All intervals | Critical issues | Patient ratios | Orientee shifts | In/out

5E

TRACKING CHANGES

- **Anna S Jacobsen** RN (-2) 07:00–18:59 (12.5 hr)
- **Aran K Gordon** RN (-1) 07:00–11:00 (4 hr)
- **Arnór Á Sturluson** RN (-142) 07:00–18:59 (12.5 hr) Light duty
- **Chigozie C Ikemefuna** RN (-69) 07:00–14:59 (8.5 hr) No COVID work, Light duty
- **Indira E Shervashidze** RN (-10,829) 07:00–14:59 (8.5 hr) No COVID work
- **Onuoha K Onwughara** RN (-112) 07:00–18:59 (12.5 hr)
- **Stanislav M Lukeš** RN (-3) 07:00–11:00 (4 hr)
- **Xiong H Yin** RN (-3) 07:00–11:00 (4 hr)

5W

NO CHANGES

- **Barbora Z Hroníková** RN (-3) 07:00–18:29 (12 hr) PTO
- **Diego M Sousa** RN (-34) 07:00–14:59 (8.5 hr)
- **Giovana M Barbosa** RN (-77) 08:00–19:29 (12 hr) Vacation
- **Ilias U Guirguis** RN (-5,306) 07:00–18:59 (12.5 hr)

Cost center	Notes	NOW	FRI, 9/17 07:00–11:00						FRI, 9/17 11:00–15:00						FRI, 9/17 15:00–19:00						FRI, 9/17 19:00–
			OPTIMAL				TRACKED CHANGES	VARIANCE	OPTIMAL				TRACKED CHANGES	VARIANCE	OPTIMAL				TRACKED CHANGES	VARIANCE	OPTIMAL				TR CH
		Current census													Census	In	Out	RN	RN	RN	Census	In	Out	RN	
5E	2	35 of 30													30	3	3	5	6	+1	31	1	1	5	
5W	2	24 of 45													24	5	2	4	6	+2	24	0	3	4	
ED Admit Boarding Downtown	2	0													3	9	10	1	0	-1	3	7	7	1	
7E	2	30 of 40													22	0	0	4	6	+2	24	2	0	4	
7W	2	36 of 38													34	4	3	5	7	+2	36	2	0	6	
8E	2	36 of 37													35	6	5	5	1 7	+2	34	1	1	5	
8W	2	32 of 33	32	0	0	5	6	+1	32	1	6	5	6	+1	29	4	3	5	5	0	29	1	0	5	
9W	2	37 of 38	37	0	0	6	8	+2	37	0	3	6	8	+2	34	1	2	5	6	+1	34	2	1	5	
CARDIAC ICU MED	2	15 of 31	14	0	0	8	9	+1	16	2	2	9	8	-1	15	1	2	8	8	0	13	1	3	7	
CARDIAC ICU SURG	2	16 of 18	16	0	0	7	1 5	-2	16	0	2	7	1 8	+1	16	2	1	8	1 7	-1	16	1	0	8	
Float Pool	2	–	–	–	–	–	3	+3	–	–	–	–	2	+2	–	–	–	–	3	+3	–	–	–	–	
ICU	2	16 of 40	16	2	0	8	9	+1	16	1	2	8	8	0	16	3	4	8	8	0	16	2	0	8	
NORTH ICU	2	8 of 10	8	0	0	4	3	-1	8	0	1	4	3	-1	7	1	0	4	3	-1	8	1	2	4	
Regional Float Pool	2	–	–	–	–	–	0	0	–	–	–	–	0	0	–	–	–	–	0	0	–	–	–	–	
Total		285	277	9	7	63	76	+13	279	19	44	64	77	+13	256	39	35	62	72	+10	260	21	18	62	

CARDIAC ICU SURG for RNs at 9/17/21 07:00–11:00

LOC:

GRID:

TOTAL: 7 total staff required

Show changes only
Auto-float...
5E

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tio, rounded to the

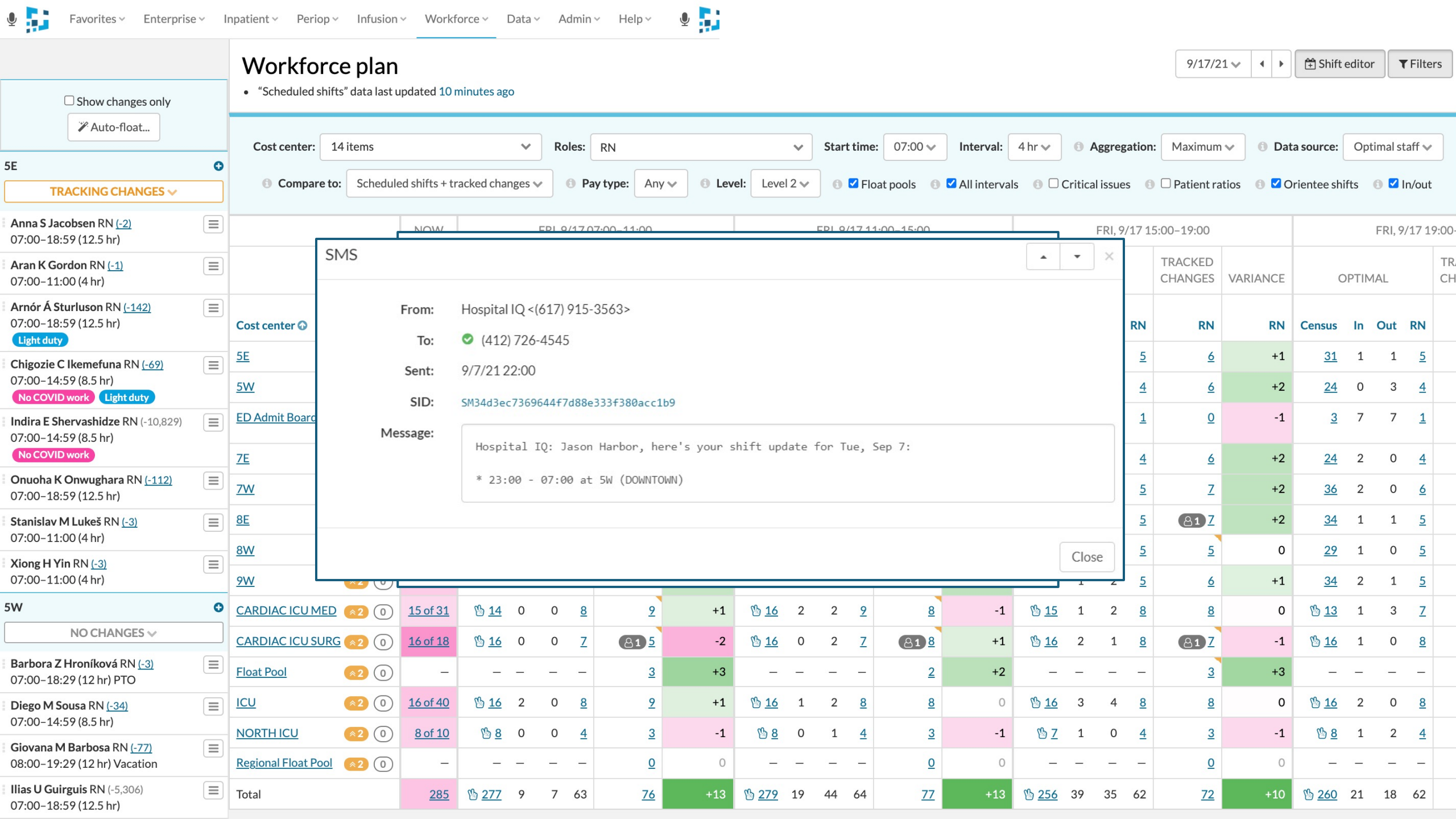
Why an Enterprise-Focused Approach is More Impactful

1. **Patient Care Needs**
2. **Staff Allocation**
3. **Resource Deployment**

Overview:

System-wide transparency allows for improved collaboration and proactive resource sharing between charge nurses and the staffing office, resulting in quick alignment and resolution to staffing issues. This is made possible by:

- Daily/weekly variances
- Built-in communication & alert capabilities



Favorites Enterprise Inpatient Periop Infusion Workforce Data Admin Help

Workforce plan

- "Scheduled shifts" data last updated 10 minutes ago

9/17/21 | Shift editor | Filters

Show changes only

Auto-float...

5E

TRACKING CHANGES

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Cost center: 14 items | Roles: RN | Start time: 07:00 | Interval: 4 hr | Aggregation: Maximum | Data source: Optimal staff

Compare to: Scheduled shifts + tracked changes | Pay type: Any | Level: Level 2 | Float pools | All intervals | Critical issues | Patient ratios | Orientee shifts | In/out

SMS

From: Hospital IQ <(617) 915-3563>

To: (412) 726-4545

Sent: 9/7/21 22:00

SID: SM34d3ec7369644f7d88e333f380acc1b9

Message:

```
Hospital IQ: Jason Harbor, here's your shift update for Tue, Sep 7:

* 23:00 - 07:00 at 5W (DOWNTOWN)
```

Close

Cost center	NOW	FRI, 9/17 07:00–11:00						FRI, 9/17 11:00–15:00						FRI, 9/17 15:00–19:00						FRI, 9/17 19:00-			
																		TRACKED CHANGES	VARIANCE	OPTIMAL			
																	RN	RN	RN	Census	In	Out	RN
5E																	5	6	+1	31	1	1	5
5W																	4	6	+2	24	0	3	4
ED Admit Board																	1	0	-1	3	7	7	1
7E																	4	6	+2	24	2	0	4
7W																	5	7	+2	36	2	0	6
8E																	5	1 7	+2	34	1	1	5
8W																	5	5	0	29	1	0	5
9W	2 0														1	2	5	6	+1	34	2	1	5
CARDIAC ICU MED	2 0	15 of 31	14	0	0	8	9	+1	16	2	2	9	8	-1	15	1	2	8	8	0	13	1	3	7
CARDIAC ICU SURG	2 0	16 of 18	16	0	0	7	1 5	-2	16	0	2	7	1 8	+1	16	2	1	8	1 7	-1	16	1	0	8
Float Pool	2 0	–	–	–	–	–	3	+3	–	–	–	–	2	+2	–	–	–	–	3	+3	–	–	–	–
ICU	2 0	16 of 40	16	2	0	8	9	+1	16	1	2	8	8	0	16	3	4	8	8	0	16	2	0	8
NORTH ICU	2 0	8 of 10	8	0	0	4	3	-1	8	0	1	4	3	-1	7	1	0	4	3	-1	8	1	2	4
Regional Float Pool	2 0	–	–	–	–	–	0	0	–	–	–	–	0	0	–	–	–	–	0	0	–	–	–	–
Total		285	277	9	7	63	76	+13	279	19	44	64	77	+13	256	39	35	62	72	+10	260	21	18	62

Future Planning

7-Day Schedule Management

UNIT LEADER

Create/Execute Unit-level Plans

Identifies staffing variances across the hospital for the next 7 days as well as required and available resources by using:

- Census forecast
- Last float indicator
- Qualifications
- Limitations

UNIT LEADER STAFFING OFFICE

Create System-wide plans

Uses weekly huddle to discuss recommendations, adjustments, and mitigation options. Adjust staff as needed by utilizing:

- Staff transfer
- Float pool
- Split shifts
- Overtime/premium pay

STAFFING OFFICE

Activate and Communicate Plans

Aligns changes with house supervisor prior to deploying staff and communicating changes, factoring in mitigation strategies such as:

- Premium pay
- Surge level
- Reallocating staff

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Favorites | Enterprise | Inpatient | Periop | Infusion | Workforce | Data | Admin

Workforce plan

- "Scheduled shifts" data last updated 32 minutes ago

9/17/21

Show changes only

Auto-float...

5E

TRACKING CHANGES

Anna S Jacobsen RN (-1)
07:00–18:59 (12.5 hr)

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Light duty

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No COVID work | Light duty

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07:00–11:00 (4 hr)
Modified 2 days ago by Caitlin Wagner with cost center changed from 5E to 8E
Auto-floated Float

Xiong H Yin RN (-6)
07:00–11:00 (4 hr)

5W

NO CHANGES

Barbora Z Hroníková RN (0)

Stanislav M Lukeš RN (-6)
07:00–11:00 (4 hr)
Modified 2 days ago by Caitlin Wagner with cost center changed from 5E to 8E
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			OPTIMAL				TRACKED CHANGES	VARIANCE	OPTIMAL				TRACKED CHANGES	VARIANCE	OPTIMAL				TRACKED CHANGES	VARIANCE
Cost center	Notes	Current census	Census	In	Out	RN	RN	RN	Census	In	Out	RN	RN	RN	Census	In	Out	RN	RN	RN
5E	⇈2 3	35 of 30	35	0	0	5	7	+2	35	1	6	5	6	+1	30	3	3	5	6	+1
5W															24	5	2	4	7	+3
ED Adr															3	10	10	1	0	-1
7E															22	0	0	4	6	+2
7W															34	4	3	5	7	+2
8E															35	6	5	5	1 7	+2
															29	4	3	5	5	0
			37	0	0	6	8	+2	37	0	3	6	9	+3	34	1	2	5	6	+1
			14	0	0	8	9	+1	16	2	2	9	8	-1	15	1	2	8	8	0
			16	0	0	7	1 5	-2	16	0	2	7	1 8	+1	16	2	1	8	1 7	-1
Float Pool	⇈2 0	–	–	–	–	–	2	+2	–	–	–	–	1	+1	–	–	–	–	2	+2
ICU	⇈2 0	16 of 40	16	2	0	8	9	+1	16	1	2	8	8	0	16	3	4	8	8	0
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Regional Float Pool	⇈2 0	–	–	–	–	–	0	0	–	–	–	–	0	0	–	–	–	–	0	0
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8W	⇈2 0	30 of 33	32	0	0	5	6	+1
	2 0	37 of 38	37	0	0	6	8	+2

Digital Transformation Achieved: Enterprise staffing

Providing safe and high-quality patient care by taking a more holistic approach to staffing

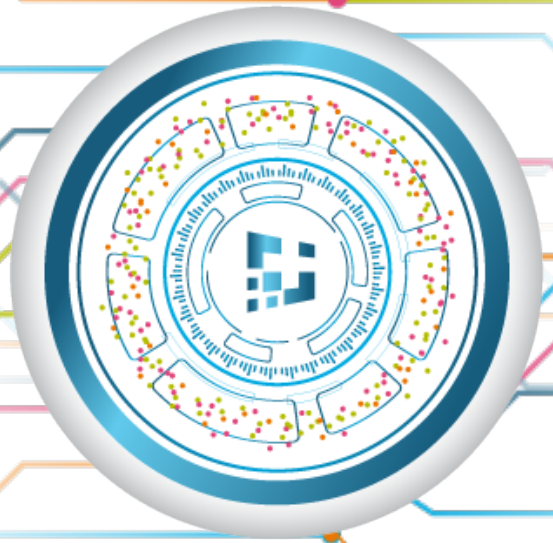
Current State

Unit-focused
Nursing leaders focus on solving issues for individual units.

Fragmented
Minimal visibility and accountability exists on staffing decisions.

Siloed
Nursing leaders protect resources within their individual units.

Reactive
Nursing leaders are constantly making last minute adjustments.



Future State

Enterprise-Focused
The right nurse is in the right place at the right time. *Every time.*

Transparent
Awareness and accountability exists across disparate nursing teams.

Collaborative
Nursing leaders resolve daily staffing issues and openly share resources.

Proactive
Nursing leaders collaborate on future issues to ease the burden on daily operations.

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Client Impact Examples

Health First

29% reduction in core floating outside of primary cost centers

45 minute improvement in communicating the daily staffing plan

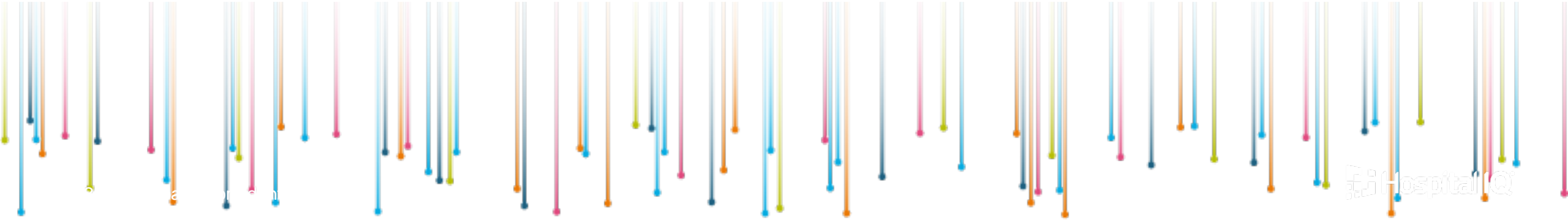
500+ calls eliminated monthly to deploy staff

MERCYONE℠

50% reduction in the utilization of premium pay-based shifts

80+ hours given back weekly to the staffing office for proactive planning

10+ hours given back weekly to each nursing leader to focus on patient care



Conclusion

Key Variables & Outcomes of Enterprise-Focused Staffing

STAFF

Enables strategic staffing decisions that account for the well-being of both patients and staff.

PATIENT

Improves patient outcomes by allocating staff based on individual patient needs.

ENTERPRISE

Proactively resolves staffing issues through system-wide collaboration and transparency.

"When you dedicate time and focus to innovation, it is returned tenfold. Just the efficiencies and improvement of your workflow will be worth the time."

-- Market Director of Nursing at the large health system in the Midwest

Company Confidential

Hospital IQ

Q&A

Visit us at **hospiq.com**