

# Building a High Reliability Organization with the Digital Quality Board: Integrating Data and Engagement for Sustainable QI

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## Background

**Huddles** provide a platform to actively engage teams in quality and safety, review unit performance and collaborate on important organizational priorities. Huddles are supported by **huddle boards** that help focus the conversation, visualize important information and provide a venue for staff engagement and input.

In 2019, William Osler Health System (Osler) a 1012 beds five site community hospital launched the iHuddle Board and iHuddle process in a phased approach to standardize the way in-patient and out-patient units conduct their huddles via a 55' touchscreen. The iHuddle Board is a visual management tool to facilitate huddles with leaders, physicians, staff and patients.

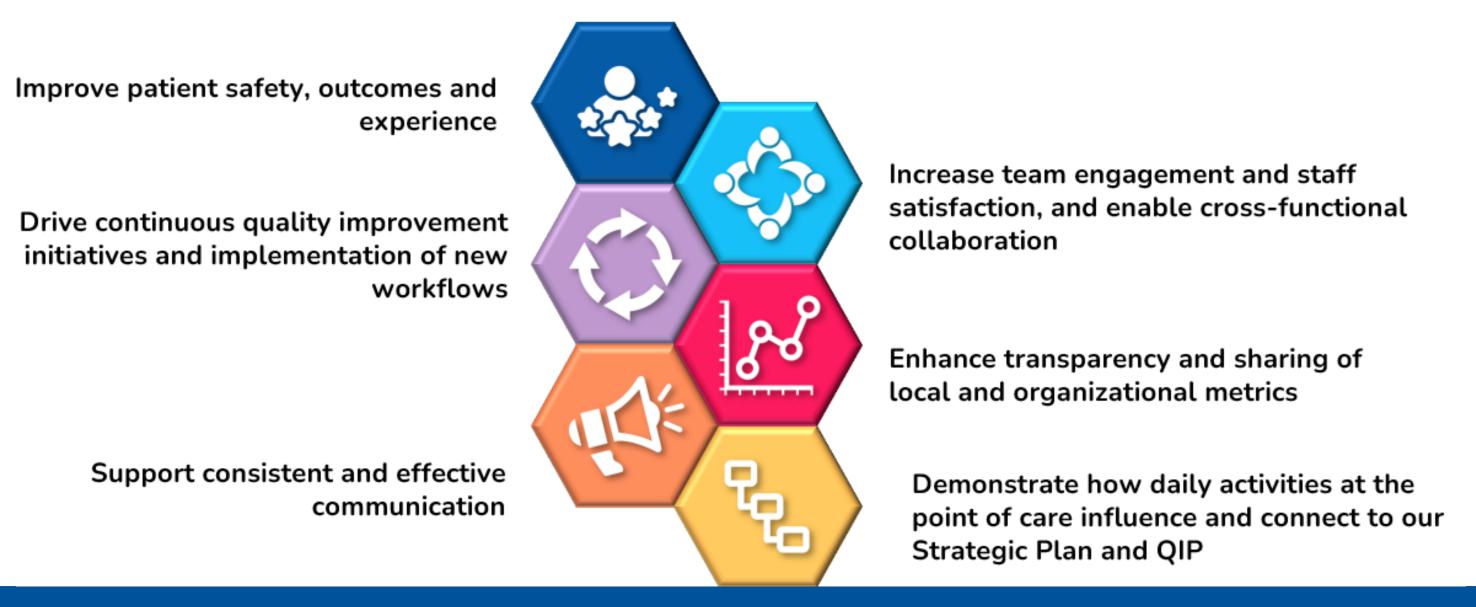
#### **Drivers for Change**

- Staff wanted greater leadership visibility on units and more organizational updates
- Huddles and huddle boards lacked consistency and standardization across the organization
- Leaders wanted an opportunity to link staff, physicians, volunteers, patients and families in real-time with the work occurring to support the strategic plan

Grounded in the principles of high reliability—such as preoccupation with failure, deference to expertise, and sensitivity to operations—the iHuddle Board supports real-time awareness, data-informed decision-making, and collective accountability for safety and quality (Weick & Sutcliffe, 2015).

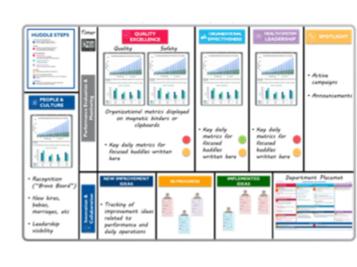
#### Goals for iHuddle Board and iHuddle Process

Co-design and implement a transformative, standardized huddle process and board across all clinical inpatient and outpatient areas to:



# PDSA Implementation Journey

The iHuddle Board was developed through a multiyear, PDSA-driven strategy that incorporated continuous feedback from staff, leaders, and patients. This approach standardized metrics and workflows across units, strengthened system reliability, and embedded the iHuddle process into Osler's core operations through strong leadership commitment to safety, accountability, and data-driven improvement. Osler's iHuddle Board journey as seen below started with manager based white boards



- Engaged with clinical managers and directors to understand needs, inform content and initial layout of the boards
- Co-developed Huddle steps and script with pilot managers
- Validated initial metrics with clinical managers and directors

# Fall – Winter 2019

 Piloted new Huddle process and whiteboard solution at each site Collected feedback from managers and staff to inform next phase of project where the huddle board was digitized to the iHuddle Board

### Intervention

#### The iHuddle Dashboard Weekly/Monthly Metrics Highlights historic performance for the unit on **Daily Metrics** larger-dot metrics related to our BSC and QIP Local metrics (either live or from previous day) that are Spotlight: metrics, aligned under our Strategic Directions important for the team to review on a daily basis. and connected to strategic & unit-level communication Conducive to improvement and contribute to larger tool for organizationa monthly metrics and initiative success. campaigns and priorities that are People & Culture: relevant to the Drives staff staff at the point engagement and of care. interaction. Staff and leaders can add things like: Unit content New staff uploaded by Research Rounds - Improving Hemostasis After Elective Cardioc Catheterization Recognition Managers Celebrations Staff announcements Engageme Action plan N.MH INTEN Patient Safety

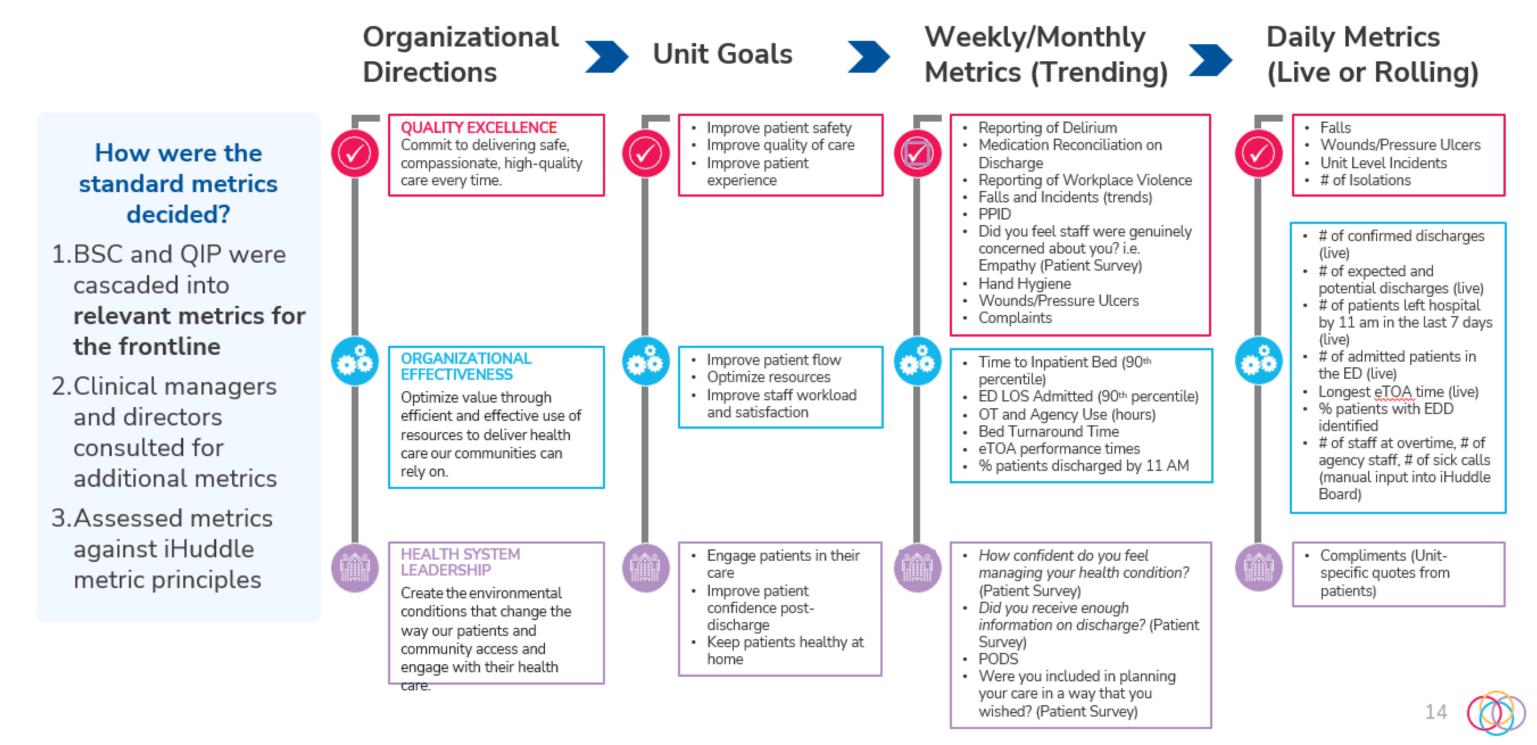
## Standardizing iHuddle Board process for High Reliability

## 1. Standardizing Cascading Metrics

Innovation & Collaboration

Venue for staff to provide feedback and

track their own improvement ideas



## 2. Standardizing iHuddle Steps & Narrative

#### 6 Huddle Steps:

- Welcome & Acknowledgement
- 2. Safety
- 3. Review Daily Metrics
- Review One Monthly Metric
- 5. Corporate & Unit Spotlight
- 6. Idea Review

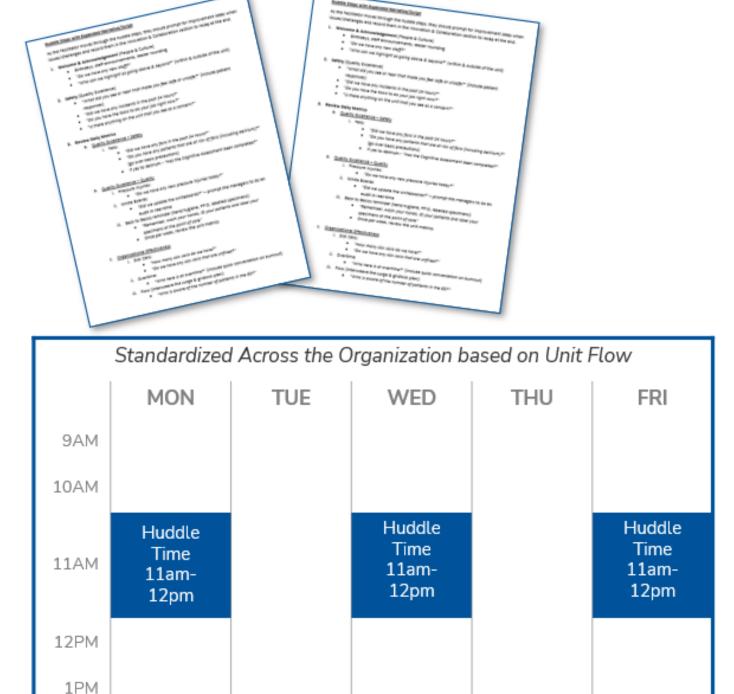
#### Running the Huddles

- ✓ Meetings are short and focused (10-15 minutes) with a clean and consistent agenda
- ✓ Huddles take place directly in front of the Board
- ✓ Conversation is on actionable items, especially quality and patient safety
- ✓ Issues and ideas should follow a clear and closed loop escalation process

#### **Accompanying Script**

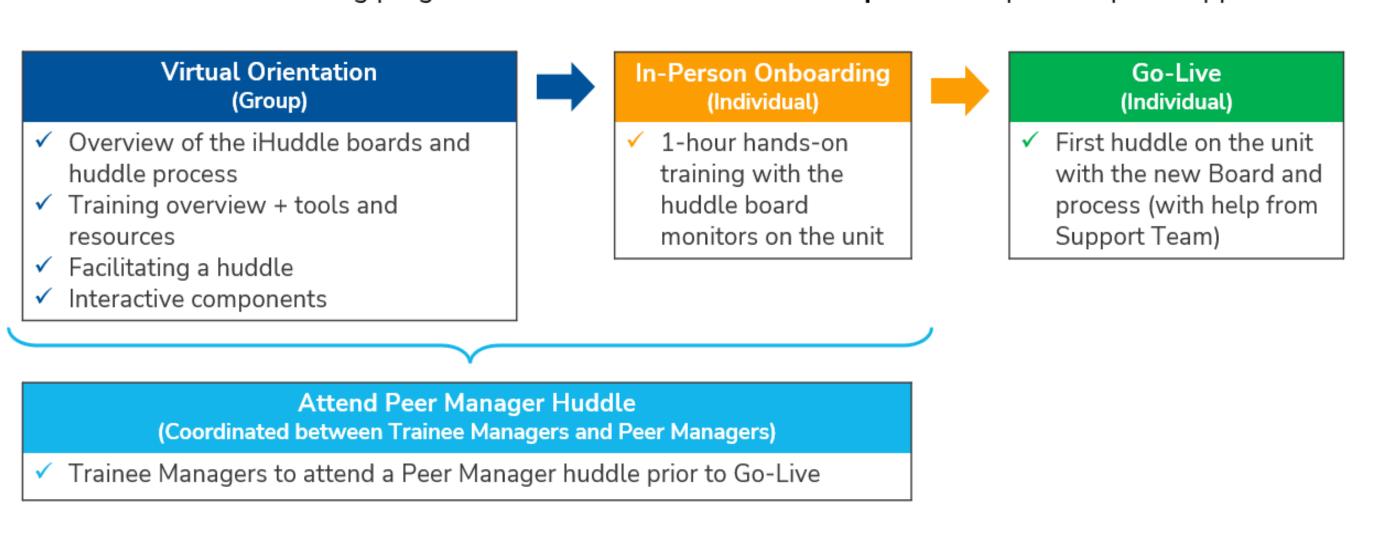
Tracks when huddles are run

stay within 10-15 minutes



## 3. Create a Consistent Training Program

The iHuddle board training program consists of 3 scheduled touchpoints and peer-to-peer support



After completing the training program, Trainee Managers become Peer Managers and provide support to the next cohort of Trainee Managers for shared learning.

#### Results

Metric iHudde Boards	Total
iHuddle Boards Installed (inpatient and outpatients)	86
Total Huddles Completed	13,936
# Items in Corporate Spotlight	351
# Items in Unit Spotlight	2,864
# Implemented Ideas	481
Total Ideas	1296

Table 1 - Process Metrics of iHuddle Board and iHuddle process from November 2020 – September 2025

## Conclusions

The implementation of the iHuddle Board and standardized huddle process has strengthened communication, collaboration, and alignment across clinical inpatient and outpatient teams. By integrating real-time data visualization and structured workflows, the initiative enhanced staff engagement, improved situational awareness, and supported data-driven quality improvement. The process was built through a multiyear, PDSA-driven strategy that strengthened digital tools based on user input, standardized metrics and workflows, and secured leadership commitment to embedding the process as a core element of Osler's high reliability framework. Ongoing measurement and continuous feedback loops have contributed to sustained adoption, reinforcing Osler's journey toward becoming a high reliability organization committed to patient safety and quality excellence.

## Acknowledgments

We acknowledge the valuable contributions and support of Osler's Information, Intelligence & Technical Innovation (IITI) team in the development of the iHuddle Board app and dashboard.

### References:

- 1. Veazie, S., Peterson, K., & Bourne, D. (2019). Evidence Brief: Implementation of High Reliability Organization Principles. Department of Veterans Affairs (US). https://www.ncbi.nlm.nih.gov/books/NBK542883/
- 2. Weick, K. E., & Sutcliffe, K. M. (2015). Managing the Unexpected: Sustained Performance in a Complex World (3rd ed.). Wiley.