Leveraging Data to Drive Quality Patient Care: The Value of a Unit-Specific Nursing Performance Dashboard

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Background

- Performance data can be used to monitor and guide interventions aimed at improving the quality and safety of patient care

- To use performance data effectively, nurses need to understand how to interpret and utilize data in meaningful ways to guide practice

- One mechanism to provide feedback on patient outcomes, experiences, and processes of care is the use of **dashboards**

- In this context, one hospital developed a unit specific dashboard aligned with the implementation of the Registered Nurses Association of Ontario's Best Practice Guidelines
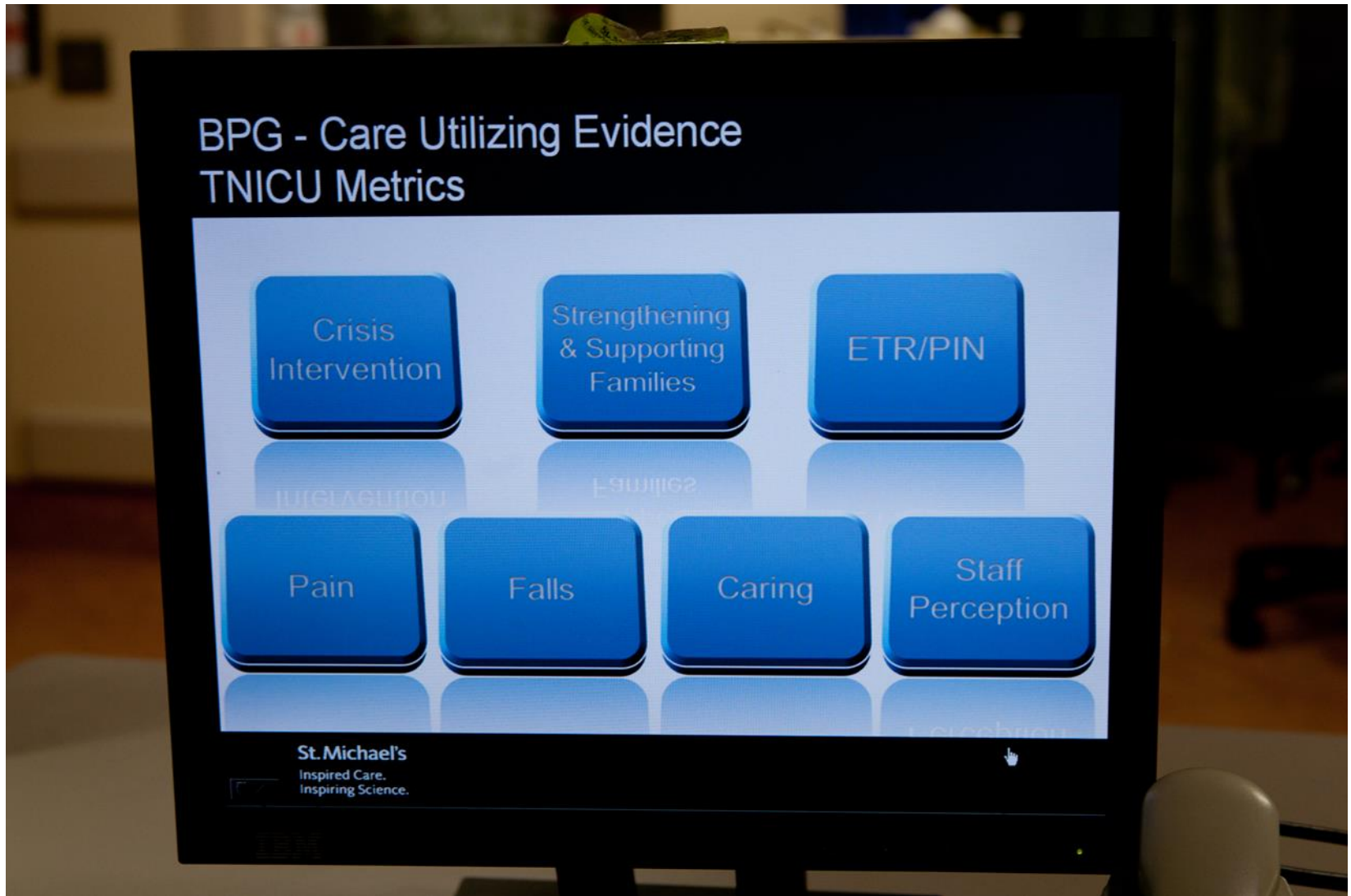
The Care Utilizing Evidence (CUE) Dashboard

- The **Care Utilizing Evidence (CUE) initiative** was a nurse- led audit and feedback initiative

- The **CUE dashboard** is an interactive computerized dashboard tool for displaying performance data for each unit's selected RNAO BPGs on smart boards and individual computers

- Data is updated every two to three months, or more frequently at the request of the unit manager

The Care Utilizing Evidence (CUE) Dashboard

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Methodology

- Qualitative study

- Interviews with frontline nurses and managers across the hospital
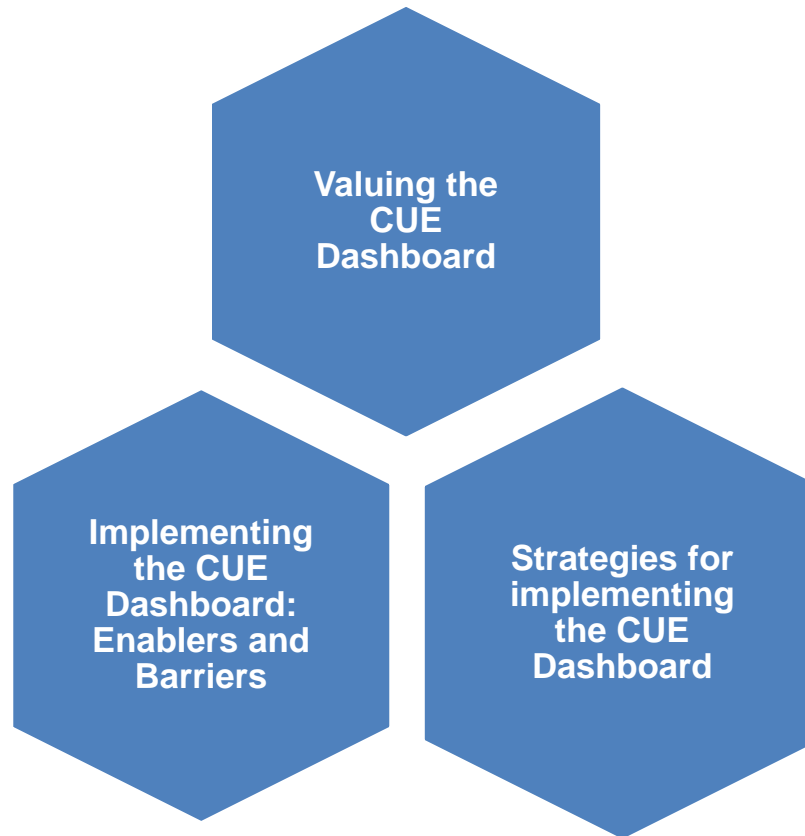
- Directed content analysis approach

Results

- **56 interviews**
  - 51 front-line nurses
  - 5 unit managers

- **Six hospital units**
  - Outpatient mobility
  - Emergency department
  - General internal medicine
  - General surgery
  - Coronary care unit
  - Respirology

Themes

Valuing the CUE Dashboard

Implementing the CUE Dashboard: Enablers and Barriers

Strategies for implementing the CUE Dashboard

Valuing the CUE Dashboard

Seeing the Impact

- *I think it's a great tool to have because when you see that data you can say it really is impacting our practice and patient experience.*" (Outpatient Mobility Nurse)

Keeping on Track

- *"The staff like to see the results of their work and what a great idea to get their work highlighted and embedded on the unit that they can have rich discussions. It gives us a visual cue how well we're actually doing with some of our measurement."* (Manager)

Identifying Care Improvements

- *"When you look at all the data you can see exactly where you are and what you need to work on so that you can improve your practice, prevent these barriers or make things easier for practice, then patients could be more satisfied. It's a good tool to let us have the awareness of how we're doing and what can we do to increase patients' safety outcomes and to maximize patient potential."* (General Internal Medicine Nurse)

Implementing the CUE Dashboard

Learning in a Supportive Work Environment

- *The educator did go over the purpose and the benefits of having the dashboard. We're updated also by our manager at meeting times." (General Internal Medicine Nurse)*

- *"You have to balance all of these things in terms of feeding that information back so people get it in a way that they're going to understand and are able to make a difference. If it's too much then nothing makes sense and no one can connect the dots. You have to be careful that you're really clearly connecting the dots to the end outcome." (Manager)*

Finding Time Amidst Clinical Care Priorities

- *"If you're really busy with patients, it's not going to be your priority "oh I've got to look at the dashboard." You've got patient needs to meet that take priority."* (Respirology Nurse)

- *"As a nurse leader I've got to be careful that I'm not distracting my nurses from the task at hand and to me there's that balance so we put things in place where it's being pushed to them but that's distracting them from the care. So how do you fit that in? I just haven't reconciled where to fit things like the CUE dashboard in that context." (Manager)*

Strategies for Implementing the CUE Dashboard

Looking and learning from data collectively

- *So to just to open it up on your own and read the results on your own is fine, but its having those discussions about the numbers and what we can do better, what we did great, etcetera is what I think looking in the future would be more beneficial… to have actual little staff meetings to talk about the CUE dashboards specifically, so I think maybe that's a good approach, just finding time every month to look at it, might be a good way of doing it.* (Manager)

Having timely and relevant data in your face

- *Originally when it was first updated I would have shown staff that but after they've seen it a couple of times, it's kind of irrelevant, because the data has been up for about six months, like it hasn't been changed. when I have information and data, like when the dashboard is updated, I'll be inclined to use it. I'll be inclined to get the nurses to look at it. Right now I would feel no encouragement to go look at the dashboard because the information is not up to date* (Outpatient Mobility Nurse)

- *If it's actually in your face you would actually more easily click on it. So I think making it more accessible actually increase staff member's eagerness to look at it. It should be more visible* (General Internal Medicine Nurse)

Study Implications

- Nurse leaders ought to invest in creating and sustaining the use of performance dashboards as part of ongoing quality improvement efforts, including forecasting and acting on potential challenges

- Supportive culture from formal/informal leadership and from unit staff are key to the success of dashboard implementation

- Engage end users (frontline staff) in the development and planning stages to tailor the dashboard in a way to help ensure its success and sustainability

- Further research needs to be done to examine the effect of using performance dashboards that employ mixed methods approaches.

Reflecting on Study Findings

- Do these key themes resonate with you?

- What themes do not resonate?

- What are your key learnings from the study findings?

- How could you use the key findings to inform your daily practice?

Questions

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