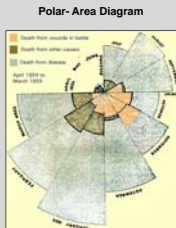


Background and Significance

Nursing quality improvement dates back to Florence Nightingale as she understood that real improvement must be based on real data.

She developed the **polar-area diagram** to dramatize the needless deaths caused by unsanitary conditions and the need for reform. With her analysis, Nightingale revolutionized the idea that social phenomena could be objectively measured and subjected to mathematical analysis. She was an innovator in the collection, tabulation, interpretation, and graphical display of descriptive statistics.



Nurses today require the same knowledge and skill. By bringing current, unit level data to the bedside staff, organizations empower nurses to alter their practice and improve patient outcomes through the use of relevant data. Despite leaps in technology since Nightingale's innovations, delivering meaningful and useful data for bedside nurses to change practice remains a challenge.



Nursing Dashboards are a means of meeting this challenge. Dashboards are an essential tool in the delivery of current nurse-sensitive indicator data to the unit level. These tools allow units to compare, in a meaningful method, their specific quality indicators against benchmark data from national databases, published standards, or trend their own data over time.



Purpose

Dashboards:

- Are a systematic means for translating and displaying information as a means to drive performance excellence.
- Provide warning lights that drive unit specific quality initiatives.
- Gauges can be customizable to serve different clinical units representing different indicators.
- Once established they can be maintained with staff nurse participation.
- Increase the vested interest in quality improvement at the unit level.

Reasons for implementing dashboards at University Hospital was the need to improve communication and dissemination of quality indicators. The process for the exchange of information was in place, but the ability to get the information into the hands of the bedside nurses was hampered by a **lack of**:

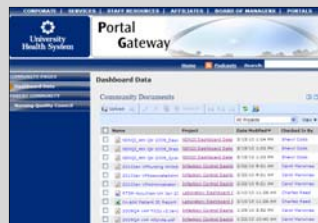
- Central repository of unit quality data
- Computer skills
- Easy to use dashboard program



Method

The first barrier overcome was the establishment of a central repository for Nursing quality data. A repository for the data was created and placed on the Nursing Portal located on the hospital's intranet.

- Allowed for easy access to data
- Saves time from having to access multiple sites to obtain needed information
- Contributed to a culture of transparency

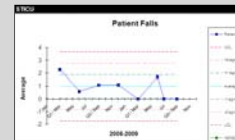


Method

The second barrier was overcome with the purchase of an easy to use dashboard program. The program provided a means of displaying unit specific quality data in an easy to read format.



- Data is displayed on a color coded dashboard that can be printed, posted or viewed online
- Graphs are automatically updated as data is entered



Discussion

Types of dashboards:

- Simple Excel spreadsheet of quality indicators in graph form are an easy way to begin to display quality data
- Data mining software programs can be used to measure individual indicators
- Custom dashboard applications may be easier to use requiring fewer computer skills and less training

Barriers to implementation of dashboards:

- Computer skills
- Ability to collect data
- RN availability to work on dashboard
- Resistance from CNDs and staff RNs to commit to the process
- Multiple computer systems
- Culture of non-transparency

Conclusion

- Quality dashboards can be a cost-effective method for bringing relevant data to the bedside to help create a quality-conscious nursing environment.
- After implementing the dashboards, there was a:
 - 52% increase in staff knowledge of dashboards
 - 30% increase in units posting quality data
 - 26% increase in the discussion of quality data
 - 20% increase in staff knowledge about specific measures
- Staff nurse involvement in quality improvement is attainable if the information and resources are available.
- Displaying unit quality dashboards increases staff knowledge of the dashboards and condense multiple quality indicators into easy-to-read format allowing staff to see the big picture while being able to drill down on specific measures.
- Dashboards are an effective means for benchmarking your own practice against national standards or monitoring trends over time.

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