

## **Project Title**

Nursing Quality Indicator Dashboard

## **Project Lead and Members**

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## **Organisation(s) Involved**

KK Women's and Children's Hospital

## **Project Category**

Clinical Improvement, Information Technology, Quality Improvement

## **Keywords**

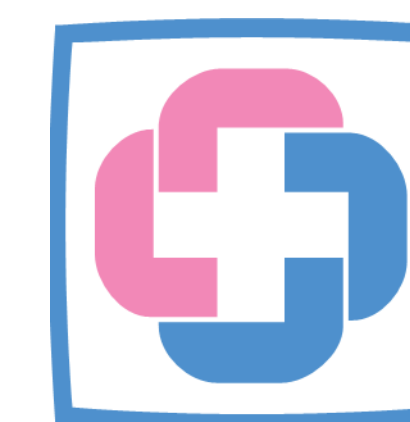
KK Women's and Children's Hospital, Clinical Improvement, Information Technology, Quality Improvement, Process Improvement, Quality Management, Communications, Clinical Performance, Nursing, Nursing Quality Indicator, National Database Nursing Quality Indicator, Zero Harm Target, Timely Feedback, Dashboard, Visibility, Systematic Data Organisation, Interactive Data Review, Microsoft Excel, , Statistical Tools, Run Charts, Control Charts, Pie Charts, Data Accessibility & Transparency

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# Nursing Quality Indicator

# Dashboard

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## Project Background

The establishment of a Nursing Quality Indicator (NQI) dashboard enables visibility, provides oversight, monitoring and reporting of key nursing clinical quality indicators at departmental and Divisional nursing levels. The key clinical quality indicators that we are monitoring (Right inserts) The NQI dashboard was implemented in July 2017.



## Objectives

- 1 To provide continuous feedback to help clinical and / or managerial staff to make decisions to improve clinical and managerial processes.
- 2 To allow staff to systematically review data and information to ensure that performance improvement process is effective, ongoing and results in the provision of quality care
- 3 To facilitate staff in gaining insight and understanding of nursing clinical quality indicators bench marked performance against International standards - the National Database Nursing Quality Indicators (NDNQI)

## Methodology

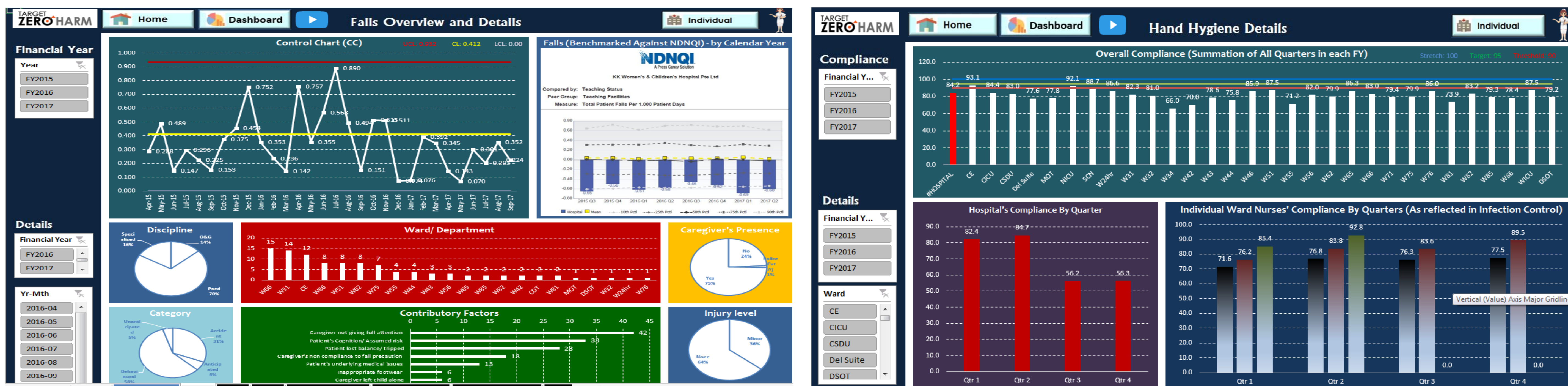
Designed using Microsoft Excel: created to be interactive for users to systematically review data and information.



Used statistical tools like run charts, control charts and pie charts to detect undesirable trends / abnormal variations.



Easy navigation for users; accessibility to retrospective information to take actions for process improvement



## Description of Intervention

### Organization of raw data

Consolidated 3 years which constituted the historical data to determine the limits set in both run and control charts.

### Conceptualization

Feedback gathered from end-users to decide on the indicators; improved on the aesthetics and user-friendliness of the dashboard.

### Accessibility to all Nurses

Worked with ISD to provide accessibility to all nurses using hospital desktops and Computers on Wheels (COW).

## Results

### BEFORE

1. Departmental staff receive their own clinical performance on hardcopies which they were not provided with overall Nursing Division's clinical performance.
2. Time and money spent printing the hardcopies; Distribution of information to all Nursing departments were time-consuming.
3. Information was updated at quarterly intervals, therefore there was delayed data reviewing and process improvement.

### AFTER

1. An **excellent communication tool** in providing **up-to-date** clinical quality information, including an overview of Nursing Division's clinical performance **regularly** to all levels of nurses.
2. All nursing staff are able to view the dashboard as and when needed at their **convenience**.
3. Because of its **in-depth analysis and transparency**, clinical and managerial staff could **understand the root causes and improve processes to prevent recurrences**.
4. From **quarterly to monthly** updating, trending abnormalities could be detected at the early stage for prompt remedial actions.

### 5. Est. Savings per year

Printing Cost \$272 to \$408

Time to print & distribute 4 to 6 hours

Time Updating 32 to 48hours

## Future... TARGET ZERO HARM

The NQI dashboard is widely used by nurses from all clinical units in since its implementation in Jul 2017. The transparency and accessibility of data in the dashboard provided ground nursing opportunities to improve processes. Should changes suggested brought forth a downward trend in errors, this visible platform would be a great encouragement to all nurses in the continuity of quality improvement. With all these implementations, Nursing Division strives to achieve target zero harm by 2022.

