Venous Thromboembolism (VTE) Prevention
Measuring For Success

Lillian George, Medication Safety and Quality
Clinical Excellence Commission
Objectives

• Why do we need data?
• Making measurement fun
• Focus on the ‘Family of Measures’
• Discuss what measures are currently available for use in NSW
• Provide an overview of the Quality Improvement Data System (QIDS)
• Learn about measuring for success at St Vincent’s Hospital
• Brainstorming session
“Without data you’re just another person with an opinion”

W. Edwards Deming
Why do we need data?

- Define the problem
- Define what improvement is
- Defining measures
- Assess impact
- Demonstrating success / further gaps
Making Measurement ‘Fun’

• Measurement for judgement vs measurement for learning/improving

Reward/ recognise exemplar teams/units
Senior management/ Executive communicates improvement as exciting challenge for the hospital/unit
Measurement for improvement separated from measurement for accreditation purposes
Constant visual feedback
Celebrate success
Set attainable goals
Incorporate into daily work rather than extra task
## Family of Measures

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Process</th>
<th>Balancing</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does the implemented system impact patients, staff, other stakeholders or the community?</td>
<td>Are the parts/steps of the implemented system performing as planned? Are we on track in our efforts to make improvement?</td>
<td>Are the changes designed to improve one part of the system causing new problems in other parts of the system?</td>
</tr>
</tbody>
</table>

Content adapted from IHI, Science of Improvement: Establishing Measures, [http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementEstablishingMeasures.aspx](http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementEstablishingMeasures.aspx)
Family of Measures

**Outcome**
- How does the implemented system impact patients, staff, other stakeholders or the community?

**Process**
- Are the parts/steps of the implemented system performing as planned? Are we on track in our efforts to make improvement?

**Balancing**
- Are the changes designed to improve one part of the system causing new problems in other parts of the system?

- VTE rate/1,000 separations
- % VTE risk assessments completed on admission
- Anticoagulant-related major bleeds/1,000 separations
Available VTE Data –
What Do We Have to Work With?

Outcome  Process  Balancing
Available VTE Data

**Outcome**

VTE Rate/1,000 separations

**Potential Sources**

1) HIE Coded Data via:
   - CEC Quality Improvement Data System (QIDS)
   - MoH Service Measure
   - MoH Purchasing Adjustor
   - Hospital Acquired Complications (HAC)
   - Activity Based Management (ABM) Portal

2) Incidents: RCAs or IIMS Reports

3) Radiology Reports: +ve Doppler, VQ Scans, CT Scans, Pulmonary Angiograms

4) Medicare Benefits Schedule (MBS)
Available VTE Data

**Process**

- Rate of VTE Risk Assessment Completion
- Rate of Appropriate Prescribing of VTE Prophylaxis

**Potential Sources**

1) Manual audits: CEC Quality Audit Reporting System (QARS) – state audit vs locally adapted
2) NIMC Audits of VTE Section
3) Quality Use of Medicines Indicators
4) Reports from eMR2 +/- eMEDS
Available VTE Data

- Rate of Bleeding
- Readmission Rates
- Financial Costs/Savings

Potential Sources

1) ABM Portal
2) Incidents: RCAs or IIMS Reports
3) HAC
IHI Mantra

“What can you do by next Tuesday?”
The Quality Improvement Data System (QIDS)
Measuring for Success at St Vincent’s Hospital
Activity - Worksheet
For further information:

CEC-stopclots@health.nsw.gov.au

Overview

September 2017

Ann Callaway, Project Officer, Data Management
Clinical Excellence Commission
Introduction

Objectives
User Management
Dashboards
Reports
Accuracy and Limitations of Data
Future Developments
Questions
Data Governance

Privacy and confidentiality obligations:

• NSW Health Code of Conduct
• Privacy and Personal Information Act 1998 (PPIP Act)
• Health Records and Information Privacy Act 2002 (HRIP Act)
• Privacy Manual for Health Information
• Electronic Information Security Policy 2008 PD2013_033
Data for Improvement

Objectives:

• Access available to all levels of organisation
• Easy to customise data reports
• Export function in various formats for use in reports and to assist further analysis
• Data in shared view for Improvement Projects
  – Outcome (HIE)
  – Incident (IIMS)
  – Process (QARS)
• Used with a range of additional tools for Improvement Collaboratives
User Management

Currently:

- NSW Health access via intranet using StaffLink login
  https://qids.cec.health.nsw.gov.au
  - Via CGU
  - User role
  - User location

In development:

- Access via internet to authorised users (Collaboratives)
Landing Dashboard

Top toolbar
- Managing the dashboard and your profile

Left side menu bar
- Move to other pages
About Dashboards

Pre-set Dashboards
• A pre-determined group of reports set up in a dashboard

Customised Dashboards
• Add any reports to your dashboard from the Reports List

My Report List
You can add these reports to your customised dashboard.

Search for reports

- HAC Reports
- IIMS Reports
- Mortality Reports
- Leading Better Value Care
- Pressure Injury Reports
- VTE Reports
Navigate to Reports

Select a dashboard

All reports in the dashboard will be displayed
About Reports

Use the report toolbar at the top right of each report to set up, customise, download and refresh your reports

- Build your report by filter selection
- Edit Chart – title and display
- View and export data table
- About
  - Report description
  - Data source
- Download your report
  - Select format
Reports Features

- Compare NSW, LHD, Facility and Peer Group
- Drilldown by clicking on a category in vertical bar chart
- Turn off data by clicking on category in legend
- Use mouse to select area in chart to zoom
Data in shared view: FALLS

<table>
<thead>
<tr>
<th>Report No.</th>
<th>51</th>
<th>52</th>
<th>53</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Source</td>
<td>HIE</td>
<td>HIE</td>
<td>IIMS</td>
</tr>
<tr>
<td>Definition</td>
<td>HAC</td>
<td>All Falls</td>
<td>All Falls</td>
</tr>
</tbody>
</table>

### NSW Falls

<table>
<thead>
<tr>
<th>Report No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>HIE Falls With Serious Injury By Location (HAC)</td>
</tr>
<tr>
<td>52</td>
<td>HIE Falls By Location</td>
</tr>
<tr>
<td>53</td>
<td>IIMS Falls By Location</td>
</tr>
</tbody>
</table>

![Bar charts showing comparisons between NSW and other regions for different categories of falls.](chart.png)
Accuracy and Limitations of Data

• Definitions
• Timing of download from source data
• Data is constantly being updated, therefore changing (esp. last 3 mths)
• Note changes in coding practices over time

“All data should be treated with caution”
• The data is indicative
• Undertake local validation
• Be aware of low volume data
Future Development

- Additional Reports
- Source data access
- Improvement Projects
Acknowledgement

CEC Database Development team

• Jun Bai, Senior Manager
• Steven Fang, Senior Data Analyst
• David Zhang, Computer Programmer
• Ashley Chen, Computer Programmer
• Roy Yang, Computer Programmer
• Michal Stoj, Computer Programmer
• Poppy Sindhusake, Biostatistician
• Ann Callaway, Project Officer
Thank you

Questions

For further information:
www.cec.health.nsw.gov.au