Speakers

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Welcome
What have you read about the Framework?

- Have not had a chance yet
- Read the Practical Guide only
- Read the full 2013 Health Foundation Report
Using the Framework

- No action yet
- Planning for applying the Framework in a clinical setting
- Started to apply the Framework in a clinical setting
Chris Power

CPSI’s interest in the Measuring and Monitoring of Safety Framework
Overview of the framework and lessons learned from its implementation
The Measurement & Monitoring of Safety
CPSI Webinar January 2017

Charles Vincent
Professor of Psychology,
University of Oxford
The measurement and monitoring of safety

Drawing together academic evidence and practical experience to produce a framework for safety measurement and monitoring

Spotlight
April 2013
10% patients harmed, half judged preventable

An organisation with a memory

Report of an expert group on learning from adverse events in the NHS chaired by the Chief Medical Officer
UK National Reporting & Learning System

Hospital Episode Statistics: 11.8M hospital admissions in England 2004/5

---|---|---|---|---|---
523,875 | Acute/general hospital | 131,149 | 131,067 | 133,515 | 128,144

Figure 2: Reported incidents by type, April 2006 to March 2007

- Consent, communication, confidentiality: 28,596
- Disruptive, aggressive behaviour: 33,709
- Clinical assessment (including diagnosis, scans, tests, assessments): 35,316
- Documentation (including records, identification): 37,210
- Infrastructure (including staffing, facilities, environment): 42,476
- Medication: 59,852
- Access, admission, transfer, discharge (including missing patient): 62,660
- Treatment, procedure: 64,227
- Patient accident: 265,343
- All other incident types: 98,347

*Source: Data are based on the date the reported incident occurred, using data as at 4 July 2007.*
Sensitivity of routine system for reporting patient safety incidents in an NHS hospital: retrospective patient case note review
Ali Bah-Akhrari Sari, Trevor A Sheldon, Alison Cracknell, Alastair Turnbull

Abstract
Objective To evaluate the performance of a routine incident reporting system in identifying patient safety incidents.
Design Two stage retrospective review of patients’ case notes and analysis of data submitted to the routine incident reporting system on the same patients.
Setting A large NHS hospital in England.
Population 1006 hospital admissions between January and May 2004; surgery (n = 311), general medicine (n = 251), elderly care (n = 184), orthopaedics (n = 131), urology (n = 61), and three other specialties (n = 68).
Main outcome measures Proportion of admissions with at least one patient safety incident; proportion and type of patient safety incidents missed by routine incident reporting and case note review methods.
Results 324 patient safety incidents were identified in 290/1006 admissions (29.0%; 95% confidence interval 25.3% to 32.5%). 270 (83%) patient safety incidents were identified by case note review only, 21 (7%) by the routine reporting system only, and 33 (10%) by both methods. 110 admissions (10.9%; 9.0% to 12.8%) had at least one patient safety incident resulting in patient harm, all of which were detected by the case note review method.
Conclusion The routine incident reporting system may be poor at identifying patient safety incidents, particularly those resulting in harm. Structured case note review may have a useful role in surveillance of routine incident reporting and associated quality improvement programmes.

But incident reporting only detects 5% of harmful events
We do not know whether we are making progress or not.
Just tell me - are we safe?
Methods

- Reviews of research literature and reports from organisations:
  - Safety relevant industries
  - Conceptual approaches and models of systems safety
  - Measurement and monitoring in healthcare
  - The role of patients and families
- Interviews with senior staff in national organisations
- Case studies in healthcare organisations in the UK and USA across sectors
Safety in high risk industries

- **Lagging indicators**
  - Measures of events of incidents
  - Reactive measures safety performance
  - Lost time injuries, incident reporting, thoroughness of incident investigation

- **Leading indicators**
  - Precursors, events or measures that purportedly predict safety performance
  - Monitoring of key control systems or actions
  - Safety management system audits, safety cases, culture surveys and walk rounds
Safety in NHS

High Risk Industries

Models of Safety

?
The fundamental questions

- Has patient care been safe in the past?
- Are our clinical systems and processes reliable?
- Is care safe today?
- Will care be safe in the future?
- Are we responding and improving?
Has patient care been safe in the past?

Are we responding and improving?

Are our clinical systems and processes reliable?

Will care be safe in the future?

Is care safe today?
Past harm

- Integration and learning
- Reliability
- Anticipation and preparedness
- Sensitivity to operations
What do we mean by harm?

- Treatment specific harm
- Harm due to over treatment
- General harm from healthcare
- Harm due to failure to provide appropriate treatment
- Harm due to failed or inadequate diagnosis
- Psychological harm and feeling unsafe
- *Harm due to neglect and dehumanisation*
Adverse events in older people

- Errors, omissions
- Operative/procedural complications
- Hospital acquired infections
- Adverse drug events
Adverse events in older people

- Errors, omissions
- Operative/procedural complications
- Hospital acquired infections
- Adverse drug events

+ Falls
- Pressure sores
- Incontinence
- Functional ± mobility decline
- Delirium
- Depression
- Nutritional decline
- Dehydration

Adverse events affecting all age groups

The geriatric syndromes

Should be thought of as adverse events
- Preventable?
- Prolonged hospital stay
- Increased morbidity and mortality
Clinical information available in hospital outpatient clinics
Prescribing for hospital inpatient
Equipment availability in the operating theatre
Equipment available for inserting peripheral intravenous lines
## Missing & faulty equipment

<table>
<thead>
<tr>
<th>Site</th>
<th>Total operations studied</th>
<th>Number of operations with equipment problems</th>
<th>Percentage operations with one or more equipment problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>258</td>
<td>50</td>
<td>19%</td>
</tr>
<tr>
<td>D</td>
<td>67</td>
<td>25</td>
<td>37%</td>
</tr>
<tr>
<td>F</td>
<td>165</td>
<td>19</td>
<td>12%</td>
</tr>
<tr>
<td>Total</td>
<td>490</td>
<td>94</td>
<td>19%</td>
</tr>
</tbody>
</table>
‘We always need a colposcope with that list and time and time again it isn’t there or it’s broken or it isn’t back or nobody knows where it is’

Surgeon 3 Organisation A
Sensitivity to operations

- Clinicians monitor their patients, watching for subtle signs of deterioration or improvement,
- Leaders monitor their teams for signs of discord, fatigue or lapses in standards.
- Managers have to be alert to the impact of staff shortages, equipment breakdowns, sudden increases in patient flow and other problems.
Soft intelligence

- Safety walk-rounds
- Using designated patient safety officers
- Operational meetings, handovers and ward rounds
- Briefings and debriefings
- Day to day conversations
- And above all …. the patient voice
Experts are constantly thinking ahead

- Pre-mission planning for fighter pilots often takes longer than the mission.
- Each part of the route is analysed for possible threats, whether from hostile aircraft, personal factors, weather or technical breakdown.
- During the flight pilots devoted over 90% of available time to anticipation.
- Typically they developed a ‘tree’ of events that might occur over the course of the flight.

Amalberti & Deblon, 1992
Anticipation and Preparedness: Will care be safe in the future?

- WHO Surgery Checklist
- Risk assessments
  - (falls, pressure ulcers, self harm)
- Risk registers
- Safety culture assessments
- Safety cases

- Bringing available information in the organisation to anticipate safety in the future
Integration & learning. Are we responding and improving?
"Most Health care organisations at present have very little capacity to analyse, monitor, or learn from safety and quality information. This gap is costly and should be closed and that early warning signals can be valued and should be maintained and heeded" (Berwick, 2013, p26)
Great Ormond St: team level

- Number of days since the last serious incident (SI)
  - narrative, lessons learnt and recommendations
- Central venous line, MRSA (MSSA) infection rates
- Hand hygiene compliance rate
- WHO Surgical Safety Checklist compliance rate per clinical unit
- Common themes identified in executive walk-rounds
- Medication errors
- Top three risks from the clinical unit’s risk register.
Online reports portal with 80 quality and patient safety metrics

Use of electronic records and data provided by care provider as part of clinical workflow

Web-enabled reporting and SPC charts on demand including:

- Centres for Medicare and Medicaid Services (CMS)
- The Joint Commission core measures,
- Quality Forum (NQF) etc. Intermountain captures patient harm from existing
Response & Evolution
Global impact of the report

Since report published:

Downloads 24,600

Hard copies 12,200

36,800 interactions globally
Changes in thinking & culture

- Rigid thinking
- Low awareness
- Blame culture
- Reactive thinking
- Disparate thinking

- Holistic view
- Increased awareness
- Increased ownership
- Proactive thinking
- Changed conversations
- Common language
- See safety through patients’ eyes
‘Deceptive simplicity’

‘I thought it was a simple framework, I thought it looked easy. I didn’t think we’d have 18 months of work to do with it. Turns out I was pretty naïve. I found it really difficult…. We gave it so much thought and discussion, went round and round’

Safety manager, Site F
A framework for the measurement and monitoring of safety

Has patient care been safe in the past?

Are our clinical systems and processes reliable?

Are we responding and improving?

Will care be safe in the future? Possible approaches for achieving

Past harm

Integration and learning

Safety measurement and monitoring

Reliability

Anticipation and preparedness

Sensitivity to operations

Is care safe today?

Source: Vincent C, Burnett S, Carthey J. *The measurement and monitoring of safety*. The Health Foundation, 2013
A framework for the measurement and monitoring of safety

Has patient care been safe in the past?
Ways to monitor harm include:
• mortality statistics (including HSMR and SHMI)
• record review (including case note review and the Global Trigger Tool)
• staff reporting (including incident report and ‘never events’)
• routine databases.

Are our clinical systems and processes reliable?
Ways to monitor reliability include:
• percentage of all inpatient admissions screened for MRSA
• percentage compliance with all elements of the pressure ulcer care bundle.

Is care safe today?
Ways to monitor sensitivity to operations include:
• safety walk-rounds
• using designated patient safety officers
• meetings, handovers and ward rounds
• day-to-day conversations
• staffing levels
• patient interviews to identify threats to safety.

Are we responding and improving?
Sources of information to learn from include:
• automated information management systems highlighting key data at a clinical unit level (e.g. medication errors and hand hygiene compliance rates)
• at a board level, using dashboards and reports with indicators, set alongside financial and access targets.

Will care be safe in the future?
Possible approaches for achieving anticipation and preparedness include:
• risk registers
• safety culture analysis and safety climate analysis
• safety training rates
• sickness absence rates
• frequency of sharps injuries per month
• human reliability analysis (e.g. FMEA)
• safety cases.

Source: Vincent C, Burnett S, Carthey J. The measurement and monitoring of safety. The Health Foundation, 2013
Are we safe? What can we learn about safety today?
Dr. Ross Baker

How the framework can be used within the Canadian Healthcare Context
Questions and Answers
Poll

What do you think?
Learn more, access Call Recording and CPSI Contacts

To learn more about the framework
http://www.patientsafetyinstitute.ca/en/toolsResources/Measure-Patient-Safety/Pages/default.aspx

To access the recording of the call (available in about 5-7 days)

To learn more about SHIFT to Safety
http://www.patientsafetyinstitute.ca/en/About/Programs/shift-to-safety/Pages/provider.aspx

CPSI contacts

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