Measuring what matters

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The journey so far....
Evidencing the nursing and midwifery contribution

To demonstrate the impact of nursing and midwifery on quality care and the patient experience?
Global context in healthcare

- Drive for effectiveness and efficiency with a focus on performance
- Reform and modernisation
- Emphasis on patient safety
- Encouraging patient and public involvement
- Refocus on the fundamentals and a desire to improve the patient experience
Measuring performance in nursing

- Refocus on the fundamentals and a desire to improve the patient experience
- The challenge of complexity within nursing practice

The article discusses the difficulty in measuring the impact of nursing interventions due to the complexity within nursing practice. It highlights the importance of refocusing on the fundamentals and improving patient experience, but also acknowledges the challenges posed by the complexity of their work.

Cancer tsar says ward sisters should be paid more

The Government's cancer tsar has said that ward sisters and charge nurses are not sufficiently "rewarded" and are moving into clinical specialist nurse positions as a result.

Mr Richards had earlier told Nursing Standard that more money and extra support are needed to keep ward sisters in post.

His view contrasts with that of the Royal College of Nursing, which argues that ward sisters should be paid up front to ensure they stay in post.
The nature of nursing

“Measuring the quality of nursing care is not easy. That is one of the main reasons why so little work has been done in this area to date … this is a complex area and many confounding factors exist that make it difficult to isolate and clearly identify the impact made by nurses”.

(NHS Quality Improvement Scotland, 2005, p.8)
Most frequently cited KPIs…

✓ Pressure ulcer incidence
✓ Failure to rescue
✓ Rates of health care associated infections (of varying types)
✓ Incidence of falls
✓ Medication errors
✓ Hand hygiene
✓ Nutritional status
✓ Incidence of complaints

(National Research Unit 2008)
How does the use of key performance indicators influence nursing and midwifery practice?

PhD student: Olivia Gray
Academic supervisors: Prof Tanya McCance and Dr Donna Brown.
Clinical collaborator: Christine Boomer

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Hitting the target but are we missing the point?
Developing KPIs for Nursing and Midwifery
Defining an indicator

• “A valid and reliable quantitative process or outcome measure” (Joint Commission for the Accreditation of Healthcare Organisations, 1993).

• “Indicators are measurable elements of practice for which there is evidence or consensus that they reflect quality” (Majeed et al, 2007)

• “Indicators are valid and reliable measures related to performance” (Oermann & Huber, 1999)

• An indicator is a signpost or a pointer (Spicker 2003)
For this study a KPI had to be...

- focused on the patient
- applied across the specialities i.e. core
- not necessarily outcome focused
- specific and measurable
The Consensus Approach

Stage 1

- Half day workshop (29 May 08)
- Further refinement and testing of KPIs against the criteria
- 38 KPIs

Stage 2

- Regional Consensus Conference (25 June 08)
- Top 8 ranked KPIs
Consensus Workshop

Visibility/Accessibility/Presence/Time (5)
Continuity of Care/Co-ordination and linking (2)
Communication/Advocacy (3)
Person-centred care (4)
Maintaining Safety/Feeling Safe (8)
Recognition, support and involvement of carers (3)
Fundamental Quality Care/Providing for Physical Needs (10)
Psychological Well-Being (2)
Building Partnerships & Relationships (1)

TOTAL NUMBER OF KPIs = 38
## Final top ranked KPIs

<table>
<thead>
<tr>
<th>1. Consistent delivery of nursing/midwifery care against identified need</th>
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<tbody>
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<td>2. Patient’s confidence in the knowledge and skills of the nurse/midwife</td>
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<td>7. Nurse/midwife’s support for patients to care for themselves, where appropriate</td>
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<td>8. Nurse/midwife’s understanding of what is important to the patient</td>
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The nature of the KPIs

The top 8 ranked KPIs....
➢ do not conform to the majority of other nursing metrics generally reported in the literature
➢ are strategically aligned to aspects integral to the patient experience
➢ have the potential to be integrated with other organisational agenda
➢ are person-centred in their orientation

Person-centred Practice Framework
(McCormack & McCance 2017)

**Working with patient’s beliefs and values**
KPI 6: Respect for patient’s preference and choice
KPI 8: Knowing what is important to the patient

**Engaging authentically**
KPI 5: Time spent with the patient

**Shared decision making**
KPI 4: Patient involvement in decisions made about his/her care

**Providing holistic care**
KPI 1: Consistent delivery of nursing care against identified need
KPI 7: Support of patients to care for themselves, where appropriate

**Feeling of well-being**
KPI 3: Patient’s sense of safety

**Professionally competent**
KPI 2: Patient’s confidence in the knowledge and skills of the nurse
Developing a measurement framework

Challenging traditional notions of evidence?
The nature of evidence

‘Evidence’ = ‘research’

- Hierarchy of evidence
  - RCTs and meta-analyses
  - Non-experimental and descriptive studies

Broader evidence base

- Multiple types of evidence to include:
  - Research
  - Clinician's experience
  - Patient experience
  - Local information/data
<table>
<thead>
<tr>
<th>KEY PERFORMANCE INDICATOR</th>
<th>ASKING PATIENTS</th>
<th>ASKING NURSES OR MIDWIVES</th>
<th>OBSERVING PRACTICE</th>
<th>REVIEWING DOCUMENTS/ DATA*</th>
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<tr>
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Patient Survey

- Provides data and all 8 KPI
- 8 questions using a four point likert scale
  - Always
  - Most of the time
  - Sometimes
  - Never
- Analysed using simple descriptive statistics
Patient Stories

- Patient stories have the potential to provide data relating to all 8 KPIs.
- Patient are involved in an interview to understand their care experience and to capture what is important to them (RCN, 2007).
- Open ended interview is is used with one broad question: ”Tell us about your experience of being cared for by this team”?
- Interviews are taped and transcribed.
- Analysed for frequency of negative and positive comments in relation to each of the 8 KPIs.
Observing practice

- Provides data for KPI 5: *Time spent by nurses/midwives with the patient.*
- Involves a 30 min period of observation focusing on visibility of nurses in identified patient areas.
- Calculated as % of time visible in the identified patient areas.
Reviewing the patient record/asking staff

- Provides data for
  - KPI 1: \textit{Consistent delivery of nursing care against identified need}
  - KPI 8: \textit{Nurse’s understanding of what is important to the patient}

- Review of records triangulated by asking staff
- Calculated in relation to consistency and inconsistency of responses.
Implementation studies

- KPI Project
- Paediatric International Nursing Study (PINS)
- Developing an assurance framework, NHS Lothian Scotland
- Piloting KPIs within a Chemotherapy Unit, SET and Macmillan Cancer
KPI Project

**Belfast HSC Trust, NI**
1. District Nursing Team
2. Speciality ward – dermatology
3. Acute general surgical ward – colorectal surgery

**South Eastern HSC Trust, NI**
1. Mental Health Inpatient Unit
2. Maternity Inpatient Unit
3. Paediatric Ward

**Mater University Hospital, Dublin, RoI**
1. Cancer inpatient unit
2. Orthopaedic Inpatient ward
3. Medical/Respiratory Inpatient ward
Paediatric International Nursing Study (PINS)

Collaboration between Ulster University (lead researcher Professor Tanya McCance) and University of Technology, Sydney (lead researcher Professor Val Wilson)
Participating Sites

Europe
• Hans Christian Andersen Children's Hospital, Odense, Denmark
• Temple Street Children's University Hospital, Dublin, Ireland
• Great Ormond Street Hospital, London, England, UK
• East Kent, England, UK
• Royal Belfast Hospital for Sick Children, Belfast, Northern Ireland UK
• South Eastern Trust, Northern Ireland UK

Australia
• Princess Margaret Hospital for Children, Perth
• Royal North Shore Hospital, NSW
• Hornsby Hospital, NSW
• Nepean Blue Mountains Local Health District, NSW
• The Women's and Children's Hospital, Adelaide
• The Sydney Children’s Hospital’s Network
### Implementation

A cycle of data collection ...

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<th>1</th>
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<th>8</th>
<th>9</th>
<th>10</th>
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<tr>
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<td>Survey</td>
<td>Observation</td>
<td>Analysis</td>
<td>Feedback</td>
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</tbody>
</table>

- **Survey**: distributed to all patients on discharge (over 7 weeks)
- **Stories**: 3 family stories over 1 week and 3 patient stories over 1 week
- **Documentation**: review patient record in conjunction with asking staff about patient goals (10 reviews over 1 week)
- **Observation**: monitoring nursing presence in a specified bay over a 30 minute time period (3 over 1 week)
Overview of PINS

Cycle 1 data collection
- Informing practice change

Cycle 2 data collection
- Informing practice change

Cycle 3 data collection
- Informing practice change

Programme evaluation
Performance at unit/ward level

Example 1: Sample of data received by individual wards

KPI 8: Nurses’ understanding of what is important to the patient

Patient Satisfaction Survey
“Did you feel the nurses understood the things that were important to you during your time in hospital?”

- Always: 81%
- Most of the time: 17%
- No response: 2%

Chart Review
- Consistency between the records and what is reported by the Nurse: 10%
- Inconsistency between the records and what is reported by the Nurse: 90%
KPI 4: Patient’s involvement in decisions made about his/her nursing care

Patient Satisfaction Survey
“Did you feel the nurses involved you in the decisions made about your child’s care?”

<table>
<thead>
<tr>
<th>KPI 4: Feedback from stories with parents and children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Comments (n=3)</td>
</tr>
<tr>
<td>Negative Comments (n=3)</td>
</tr>
<tr>
<td>Example of Comments</td>
</tr>
<tr>
<td>“They will ask what we think and from our point of view as well we know X as well as anybody we actually will say we think something is wrong and they will follow it up” (Parent)</td>
</tr>
<tr>
<td>“It would be beneficial if they were handing over to hand over in the patient’s rooms so then the parent knows who their next nurse is immediately and secondly if there is anything the parents want to pass on to the next nurse it can happen there and then” (Parent)</td>
</tr>
</tbody>
</table>

- Always
- Most of the time

Paediatric International Nursing Study
KEY PERFORMANCE INDICATORS
KPI 5: Time spent by nurses with the patient

Patient Satisfaction Survey

“Did you feel that the nurses had enough time to give the care which your child needed?”

Unfortunately nurses have got lots of kids to look after on the ward ... it is just a bit hard if they are all so busy doing their other stuff that they have to do. (parent)
KPI 1: Consistent delivery of nursing care against identified need

**Patient Satisfaction Survey**
“Did you feel that the care your child needed was delivered each day regardless of which nurses were on duty?”

- **Always**: Cycle 1 (n=56) mean 3.73, Cycle 2 (n=58) mean 3.88, Cycle 3 (n=49) mean 3.92
- **Most of the Time**: Cycle 1 (n=56) mean 3.73, Cycle 2 (n=58) mean 3.88, Cycle 3 (n=49) mean 3.92
- **Sometimes**: Cycle 1 (n=56) mean 3.73, Cycle 2 (n=58) mean 3.88, Cycle 3 (n=49) mean 3.92

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**Consistency**
- **Cycle 1**: mean 2.4
- **Cycle 2**: mean 3.2
- **Cycle 3**: mean 3.0

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**Review of Patient Records / Asking Nursing Staff**

I think generally they do an awesome job, they really do and they’ve got a lot to deal with and it’s quite stressful...I couldn’t do it. (parent)
Performance at organisational level

Example: Comparison of six wards in one organisation

KPI 1: Consistent delivery of nursing care against identified need

Patient Satisfaction Survey
“Did you feel that the care your child needed was delivered each day regardless of which nurses were on duty?”

KPI 5: Time spent by nurses with the patient

Observations of Practice: Based on observations carried out at differing times of the day
Evaluating the use of key performance indicators to evidence the patient experience

Tanya McCance, Jack Hastings and Hilda Dowler

Aims and objectives. To test eight person-centred key performance indicators and the feasibility of an appropriate measurement framework as an approach to evidencing the patient experience.

Background. The value of measuring the quality of patient care is undisputed in the international literature, however, the type of measures that can be used to generate data that is meaningful for practice continues to be debated. This paper offers a different perspective to the ‘measurement’ of the nursing and midwifery contribution to the patient experience.

Design. Fourth generation evaluation was the methodological approach used to evaluate the implementation of the key performance indicators and measurement framework across three participating organisations involving nine practice settings.

Methods. Data were collected by repeated use of claims, concerns and issues with staff working across nine participating sites ($n = 18$) and the senior executives from the three partner organisations ($n = 12$). Data were collected during the facilitated sessions with stakeholders and analysed in conjunction with the data generated from the measurement framework.

Results. The data reveal the inherent value placed on the evidence generated from

Measuring what matters

• The measurement framework represents a dynamic approach to measurement, focusing on measuring what matters.
• Considered innovative as it is distinctly different from other approaches used within the context of measuring performance.
• Moving the focus from other metrics
• The use of multiple methods and the ability to triangulate data was viewed very positively.
• The approaches to data collection privileged the patient’s voice and was considered as a means of evidencing the patient experience.

“..there is always something really powerful about hearing from the patients or the parents” (2A)
Driving practice change

• The data drives practice change and reflects the benefits of triangulating sources of evidence.
• The evidence generated by the measurement framework is meaningful to practice.
• The patient stories are consistently highlighted as very rich data that often drives the changes in practice.
• The data enabled teams to consider actions/measures which could be implemented at a local and/or organisational level to improve the patient experience and facilitate continuous quality improvement.

“.. if we’re going to be creating a culture to support nurses to critically think and to explore and to be innovative, we need some way of focusing on the positive aspects of nursing, and getting feedback about the extent to which nurses achieve things. So I think the PINS for me is a good way to focus quality and safety, include the patient and the child, if the child’s old enough to be included, and the staff in critical conversations about best practice
Improving the patient experience

Over 50 improvement initiatives to date:

• Bedside handover
• Communication between staff and families
• Orientating families to the ward environment
• Documentation
• Parent education

Engaging staff

• High level of engagement from the outset originating from a genuine connectedness with the KPIs, which were considered fundamental to nursing and midwifery practice.
• Engagement was linked to sense of ownership of the process
• Impact of different models to support the process
• Influence on the culture
  o Development of a positive can-do culture
  o Created different sorts of conversations

“When we were first starting to do the measurements and feeding back to staff, I saw some real transformations within individual people and teams... it was really exciting, and I find it a really powerful study to talk about in other forums... and when I start talking about the PINS study, I feel really positive and encouraged by what that’s achieving”
Articulating and demonstrating the positive contribution of nursing and midwifery

“It puts the sparkle back into nursing”

• The KPIs enabled a refocusing on the fundamentals of nursing
• The evidence generated about practice did not already exist
• The ability to evidence exemplary practice.
• Opportunity to celebrate.

“...it’s great to see something that’s positively focused around nursing, and not those hard KPI’s which, at the end of the day, don’t really mean a lot to nursing, because they’re generally only there to monitor poor performance or poor practice or poor outcomes for patients.
Seeing the future potential

• Transferability to other settings.
• Managing implementation within existing resources.
• Embedding processes in everyday practice.

“We plan to roll it out, … because our children in the hospital they move from one department to another a lot here, the families can feel that the values are quite different in the other wards. ... So I think we have talked a lot about the values and this is the evidence I use for that.
Looking to the future..

iMPAKT Study
Implementing and Measuring Person-centredness using an APP for Knowledge Transfer
‘Pooh ’ Wisdom!

“Knowledge and cleverness tend to concern themselves with the wrong sorts of things, and a mind confused by knowledge and cleverness, and abstract ideas tends to go chasing off after things that don’t matter, or that don’t even exist, instead of seeing, appreciating, and making use of what is right in front of it”.

(The Tao of Pooh and the Te of Piglet, 2002)
Thank you for listening