Measuring and Benchmarking Key Performance Indicators: A Paediatric International Nursing Study (PINS)

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This research is undertaken as a part of an International Community of Practice for Person Centred Research
“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)
How can we demonstrate the impact of nursing and midwifery practice on quality care and the patient experience?
Evidencing person-centred practice

* Project 1: Identifying key performance indicators for nursing and midwifery

* Project 2: Evaluating the use of key performance indicators to evidence the patient experience

* Project 3: 10,000 Voices – Experience of Nursing Care

* Project 4: Engaging patients and their families in practice change and innovation through the PINS study
<table>
<thead>
<tr>
<th>Key Performance Indicators</th>
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<tr>
<td>1. Consistent delivery of nursing/midwifery care against identified need</td>
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<td>2. Patient’s confidence in the knowledge and skills of the nurse/midwife</td>
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<td>3. Patient’s sense of safety whilst under the care of the nurse/midwife</td>
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<td>4. Patient involvement in decisions made about his/her nursing/midwifery care</td>
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<td>5. Time spent by nurses/midwives with the patient</td>
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<td>6. Respect from the nurse/midwife for patient’s preference and choice</td>
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<td>7. Nurse’s/midwife’s support for patients to care for themselves where appropriate</td>
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<td>8. Nurse’s/midwife’s understanding of what is important to the patient</td>
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(McCance et al 2012)
The 8 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 agendas
- are person-centred in their orientation
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

Professionally competent
KPI 2: Patient’s confidence in the knowledge and skills of the nurse

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

Person-Centred Practice Framework (McCormack & McCance 2016)
To explore the utility of a set of unique nursing KPIs and related measurement framework in supporting the development of person-centred practice across a range of services provided to sick children.
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 (2 wards)
* Royal Belfast Hospital for Sick Children, Belfast, Northern Ireland UK
* South Eastern Trust, Northern Ireland UK

Australia
* Princess Margaret Hospital for Children, Perth (6 wards)
* 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 (3 wards)
The project is being delivered through stages:

- **Stage 1:** Develop the framework for measurement *(workshops in Belfast & Sydney)*
- **Stage 2:** Implementation of the KPIs and measurement framework *(cycle 1)*
- **Stage 3:** Supporting practice change and innovation
- **Stage 4:** Implementation of the measurement framework *(cycle 2)* followed by supporting practice change
- **Stage 5:** Evaluation of the implementation process
- **Stage 6:** Implementation of measurement framework *(cycle 3)*
- **Stage 7:** Hypothesis generation and preparation of final research report
A cycle of data collection ...

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The story so far
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?”

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)
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 3: Patient’s sense of safety
Patient Satisfaction Survey
“Did you feel your child was safe whilst under the care of the nurses?”

Patient's sense of safety

Cycle 1:
Paed Hosp mean 96.77
Gen Hosp mean 97.92

Cycle 2:
Paed Hosp mean 97.48
Gen Hosp mean 97.15
## International benchmarking

<table>
<thead>
<tr>
<th>KPI 1</th>
<th>KPI 2</th>
<th>KPI 3</th>
<th>KPI 4</th>
<th>KPI 5</th>
<th>KPI 6</th>
<th>KPI 7</th>
<th>KPI 8a</th>
<th>KPI 8b</th>
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<tr>
<td><strong>Paediatric Hospitals</strong></td>
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<td>95.02</td>
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<td><strong>General Hospitals</strong></td>
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<td>95.56</td>
<td>96.30</td>
<td>95.43</td>
<td>96.00</td>
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International benchmarking - Trends

Cycle 2 Paediatric Hospital
Cycle 2 General Hospital
Cycle 2 Overall
Focus of QI initiatives

Over 60 improvement initiatives to date:

- Bedside handover
- Communication between staff and families
- Orientating families to the ward environment
- Documentation
- Parent education
Improving practice
Example: Practice changes based on data

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>
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<th>Always</th>
<th>Most of the time</th>
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<td>33%</td>
<td>67%</td>
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KPI 4: Feedback from stories with parents and children

<table>
<thead>
<tr>
<th>Positive Comments (n=3)</th>
<th>Negative Comments (n=3)</th>
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<td>Example of Comments</td>
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<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>
<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>
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Action Plan
To implement bedside handover and evaluate this through the Bedside Handover Audit Programme.
Working within an international collaboration

- Securing initial engagement and maintaining momentum
- Addressing research governance and ethical issues
- Maximising connections across international sites for the purpose of shared learning
- Providing a supportive infrastructure and obtaining funding

- Funding to date = $346,153 plus in-kind funding
- 65% of sites have completed the study
- 15% are writing their final report
- 20% undertaking the final data collection cycle

Realist Evaluation of PINS
What works? For whom? In what circumstances?

* Triangulation of Data Sources e.g. benchmarking data, QI projects, other KPIs e.g. medication incident data
* Looking at the process and outcomes from differing perspectives e.g. executive sponsors, internal and external facilitators, nurse managers, clinical nurses
* Analysis of data from different perspectives e.g. researchers, external facilitators and internal facilitators
* Methods of analysis used to answer different research questions
Novelty of the project

- Measuring the impact of nursing on the experience of patients and their families
- Involving nurses in evaluating and making changes to their own practice as a result of engaging with the research process
- Implementing processes that support the use of evidence to inform practice and knowledge translation in action
- Developing capacity in research through engagement of local facilitators
- Creating active research collaborations that can influence the local, national and international healthcare agenda.
iMPAKT Study
Implementing and Measuring Person-centredness using an APP for Knowledge Transfer (UK/AUSTRALIA)
McCance, Wilson, Boomer, Brown et al 2016-17

Expanding the program –
Townsville HSC, Tressilian, Dundee NHS.....
‘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)


