ORIGINAL PRACTICE DEVELOPMENT AND RESEARCH

The impact of implementing person-centred nursing key performance indicators on the experience of care: a research evaluation

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ABSTRACT
Aim: To explore factors that influence the successful implementation of a set of person-centred nursing key performance indicators, and the impact of the evidence generated on person-centred practice across a range of services provided to sick children.
Design: An evaluation approach derived from the work of the Medical Research Council was used focusing on the feasibility and testing phase.
Methods: Twelve organisations across Australia and Europe participated. Data was collected between 2015 to 2016. Semi-structured interviews and focus groups were conducted with staff including: executive sponsors, managers, facilitators and clinical nursing staff. Data was analysed using thematic analysis. Adherence to the COREQ guidelines was considered in the conduct and reporting of this study.
Results: The results describe the impact of implementing the key performance indicators from the perspective of nurses operating at different levels within organisations. Six themes were uncovered including: credibility of the key performance indicators; uncovering the whole picture; embracing nursing; engaging in the process; connecting with others; and achieving healthful outcomes.
Conclusion: The findings from this study confirm an emerging relationship between the nature of evidence generated by the person-centred nursing KPIs and its use in practice, alongside the need to be facilitated to collect and understand the data and the context in which it is used.
Implications for practice: This study will be of interest to clinical nurses, educators, managers and facilitators of cultural change.

- The data generated through the implementation of the person-centred nursing KPIs evidences the global contribution of nursing across services provided to children and their families.
- Engaging staff at all levels in an organisation enhances implementation of evidence that is meaningful for nursing practice.
- The triangulated evidence generated by the person-centred nursing KPIs and accompanying measurement tools offers feedback to nurses and midwives that drive improvements in practice.

Keywords: Nursing, person-centredness, key performance indicators, quality improvement, evidence, and facilitation.

INTRODUCTION
Globally, the challenge of improving the patient experience in complex changeable healthcare environments, set against economic constraints, has received increasing scrutiny. Policy makers have called on healthcare organisations to establish universally applied transparent metrics and introduce

quality measures to identify the safe, effective and compassionate elements of nursing care (American Nurses Association, 1995; Department of Health, 2008; Health Information and Quality Authority, 2013; National Health Service (NHS), 2014). This paper reports the outcomes from an international study that implemented a set of person-centred nursing key performance indicators (KPIs) and related measurement framework in supporting the development of person-centred practice across a range of services provided to sick children.

BACKGROUND

Within nursing, universally recognised key performance indicators (KPIs) have been implemented globally. These metrics, however, are primarily aligned to organisational priorities focusing on patient safety and access targets (Varkey et al., 2007; Griffiths et al., 2008). Though commonly cited nursing metrics provide important information, such indicators do not necessarily measure what matters most to patients, families and nurses. This has resulted in a drive to identify alternative nursing metrics using consensus methodology that more accurately reflects the contribution of nursing (McCance et al., 2012; Sim et al., 2018; Murphy et al., 2019; Kock et al., 2020). Furthermore, KPIs cannot provide a means of problem-solving or improving quality of care *per se,* without analysis of the data that they produce and subsequent action . Despite, nurses and midwives being ideally placed to make a significant contribution in determining the extent to which KPIs are utilised in practice, policy makers and researchers continue to express concern in respect to the challenges that exist for healthcare professionals to effectively implement evidence into practice (Bucknall and Rossum, 2015; Van der Zijpp et al., 2016).

There is a need to involve staff in localised improvement initiatives (Haines and Warren, 2011), and to develop evidence-based metrics which can measure both nurse delivered outcomes and patient experience (Griffiths et al., 2008). Original research aimed to address this (McCance et al., 2012) resulting in the development of eight KPIs that were sensitive to the unique contribution of nursing, focusing on improving patient's experience of care. The eight KPIs (presented in Table 1) were novel and when considered in the context of the existing evidence base were different from the other metrics traditionally cited (e.g. incidence of pressure ulcers and incidence of medication errors), with an explicit focus on person-centredness. A measurement framework was developed to accompany the KPIs, and comprises 4 data collection methods: a patient survey; an observational tool; patient and family stories; and a review of the patient record undertaken in conjunction with nurse interviews (McCance et al., 2015).

Insert Table 1 here

The KPIs are considered a measure of person-centredness and are theoretically underpinned by the Person-centred Nursing Framework (McCormack and McCance, 2019). The Framework comprises four main domains: *nursing prerequisites which* focus on the attributes of the nurse *the care environment* which focuses on the context in which care is delivered; *person-centred nursing processes which* focus on delivering care through a range of activities and the person-centred nursing *outcomes* is a good care experience. The relationship between the four domains of the framework is indicated by the pictorial representation that being, to achieve the outcomes at the centre of the framework, the attributes of nurse must first be considered, as a prerequisite to managing the care environment, in order to provide effective care through the person-centred processes (McCormack and McCance, 2010). The eight KPIs are largely aligned to the person-centred processes as illustrated in Figure 1 below and are a valid indicator of the desired outcome from person-centred nursing, that is, a good care experience from the perspective of the the patient.

Insert Figure 1 here

The eight KPIs and accompanying measurement framework were initially tested in three organisations across the United Kingdom and Republic of Ireland (McCance et al., 2015). Findings revealed the value placed on the evidence generated from the implementation of the KPIs and reflected a strongly held belief that this approach was focused on measuring what matters most to patients, and indeed to nurses and midwives. This was linked to the nature of the evidence generated by the KPIs, which used multiple methods and privileged the patient voice. As a result there was high level of engagement in the processes and outcomes generated from the measurement framework and the recognition that this evidence drives changes in practice and informed the development of person-centred cultures. This paper reports the outcomes from an international study that further tested the person-centred nursing KPIs across a range of services provided to sick children (McCance and Wilson, 2015; McCance et al., 2016). Factors that influence the successful implementation of the person-centred nursing key performance indicators by nursing teams are explored, alongside the impact of the process on person-centred practice.

AIMS AND OBJECTIVES
The overarching aim of the study was to explore factors that influence the successful implementation of a set of person-centred nursing key performance indicators, and the impact of the evidence generated on person-centred practice across a range of services provided to sick children. This paper specifically focuses on the experience of implementing the KPIs and accompanying measurement framework from the perspective of key stakeholders, paying particular attention to the research objectives in Table 2.

Insert Table 2 here

METHODS
The study is part of a programme of research that focuses on the implementation of the person-centred nursing KPIs used to evidence and develop person-centred practice. The theoretical positioning of this work is underpinned by the Person-centred Nursing Framework (McCormack and McCance, 2019). An evaluation approach derived from the work of the Medical Research Council (2006) guides the research methodology for this programme of work. The guidance framework describes an approach to the development, evaluation and implementation of complex interventions to improve health. The framework presents four key phases from development through to implementation (see Table 3).

Insert Table 3 here

This specific study sits within the feasibility and testing phase and contributes significantly to the evidence generated from ongoing evaluation. Adherence to the SRQR (Standard for Reporting Qualitative Research) guidelines and COREQ (Consolidated criteria for Reporting Qualitative research) checklist was considered in the conduct of this study. This was a largely unfunded study, with one organisation securing funding for external facilitators, but for all other eleven organisations this contribution was in-kind.

Setting and Sample
The study involved a convenient sample of specialist children's hospitals (n=7) and paediatrics wards in general acute care hospitals (n=5) in Australia (six sites across three states) and Europe (six sites across four countries), totalling 12 organisations. This paper reports qualitative data, obtained through taped semi-structured interviews with: executive sponsors (n=11); managers (n=14); and facilitators (n=17). Focus groups were also conducted with over 60 clinical nursing staff across all sites (n=14). Whilst data saturation occurred before completion of the interviews/focus groups, it was important to provide the opportunity for all organisations to contribute.

Ethical Considerations

Ethical approval was sought and granted in line with research governance framework requirements across all jurisdictions, with the exception of the Hospital in Denmark, which did not require formal ethical clearance in line with their regulations. The ethical and governance approval process was led by Ulster University for the sites within United Kingdom (Ulster University Ethics Committee, REF: 13/0190 and Office of Research Ethics Committee Northern Ireland, REF 13/NI/0127) and in Australia through the Health Research and Ethics Committee in each state (New South Wales LNR/13/SCHN/82, South Australia HREC/13/WCHN/61 and in Western Australia 2013053EP). The ethical challenges in relation to the wider study has been covered in a previous paper (McCance and Wilson, 2015).

Data Collection

Data was collected between 2015 to 2016. Two highly experienced researchers collected the data after each site had generated at least two cycles of the key performance indicator data. Executive sponsors (ES), managers (M) and facilitators (F) were interviewed individually, but there were also a number of interviews conducted with facilitators and managers (FM) together. Focus groups (FG) comprised between 2-8 staff clinical staff and participants were invited via email to answer key questions such as:

- Tell me about your experience with PINS?
- What worked well for you?
- What do you think could improve the KPIs?

Interviews and focus groups lasted between 20-60 minutes, which were audio-taped, transcribed and de-identified in preparation for analysis.

Data Analysis

A thematic analysis of each of the four data set was undertaken individually by each of the researchers using the first three steps as outlined by Braun and Clarke (2006). This included becoming immersed in the data by reading and re-reading each transcript to get a sense of the overall picture, then generating preliminary codes highlighting interesting, meaningful and thought provoking aspects of the data. The next step involved interpreting the codes and combining them to establish connections between codes, sub themes and themes. At this stage the 4 data sets were combined, looking for similarities and differences between the sets and creating a thematic data map for discussion with the research team. At the reviewing stage consensus was established between the researchers, with very little differences in the shared analysis. The themes were refined, subthemes confirmed and quotes to support each of these were extracted and a data evidence file was created. This enabled the overall story to emerge from the shared perspectives of executive sponsors, managers, facilitators and clinical nursing staff.

Ensuring Rigour

Attention was given to suitable strategies aimed at enhancing the rigor of the findings using the seminal work by Lincoln and Guba (1985), which considers rigor in relation to credibility, transferability, dependability and conformability. The data collection and analysis processes were undertaken by the two senior researchers on the project team. Key strategies employed included peer debriefing within the project team, thick description to highlight contextual factors that would enable transferability and a clear audit trail in terms of data collection and analysis.

RESULTS

Six key themes emerged 1) the credibility of the KPIs 2) uncovering the whole picture 3) engaging in the process 4) embracing nursing 5) driving practice change and 6) achieving healthful outcomes The themes along with sub-themes are presented in Figure 2.

Please insert Figure 2 here

Credibility of the KPIs
Participants indicated a high level of positivity and support for the KPIs and the measurement framework. The KPIs were seen as credible and resonated with staff, who believed they were *measuring what matters*. The facilitators reinforced their value, with Amelia, commenting, *'I think they're on the money, if I can say that. I don't think there's any that's missing, or that there's too many'* (F4 p.6) and Sharon stating *'Quite simply, I love them'* (F5 p.5). The KPIs were not only measuring what matters, they had value in evidencing the *'caring aspect'* of practice. Barbara comments *'…if you can improve these eight KPIs you've done a great job for your patient ... this is about the caring aspect' (*M11 p.4). She also noted they were capturing data not generally collected: *'from my point of view, we weren't able to evidence it before. Like parent's satisfaction, very different'* (M11 p.7). Annalise went one step further saying *'… I think it has affirmed what perhaps we knew but were perhaps using the excuse of well hey we can't gather that data so we are just going to ignore I' (*M12 p.4).

A number of staff talked about the KPIs being *easy to use and understand* as Maree noted: *'When we started this project we had thought this was going to be very complex and what it really is for us is that this is not rocket science'* (FM6 p.6). This was supported by Hannah when she discussed the whole process: *'… the simplicity of it, it's not overly onerous, it's achievable, and you can have actions from it'* (F1 p.8). Clinical staff indicated that the reports were easy to interpret results and understand what this meant for their practice: *'the different ways it was shown in the pie graphs or the other graphs, and written out as well, so multiple ways of showing results, which was good to understand'* (FG5 p.7).

Uncovering the Whole Picture
A strong message in the data was the value staff placed on the different components of the measurement framework in creating or uncovering the whole picture of clinical practice. This was achieved by *different sources coming together* and was reflected by Annalise who states: *'I think it has to be a multi-faceted approach to gather this data and I think for me it has vindicated and validated that actually we cannot just do one sort of data collection…' (*M12 p.2). This is a strong indicator of the value that different types of data hold for staff whereby clinical staff suggested *'I guess they all look at different aspects, really .One is documentation, and a visual one, and there's interviews – yeah, so they all kind of bring (together) different areas, in a way. I guess they all come together'* (FG9 p.4)

The data generated from the KPIs was referred to by Daisy, as '***the living evidence'*** (FM6 p.7). Key to this evidence was the value the patient's voice held for people as Carla indicates: *'... patients' stories were really useful, because it's that real patient voice…stories speak volumes, and I sense that the staff were quite sensitive to, you know…the patients' stories*' (F2 p.6). Leah suggested that for staff it *'triggered their minds a little bit more… changed a lot of the girls' practice' (*M7 p.6), whilst Ashleigh said *'it's the comments that give you the meat, in a way. How you can actually improve'* (M2 p.3). It therefore appeared that although all data had value the patient stories had more power in connecting to staff and leading to improvements in care.

Embracing Nursing
The implementation of the KPI's across all clinical sites resulted in staff feeling that they supported nursing practice and embraced the value of nursing. There was a clear sense that being involved in the project and having the opportunity to use the KPIs was *a positive experience* as highlighted by clinical teams: '*I think we're also very lucky just to be part of it...I think it's opened our eyes a lot to what's important, and I think that's been beneficial' (*FG1 p.*20).* This is further supported by Ashleigh: *'I think it's been very valuable for all of us to be involved in this. It's a wonderful opportunity… I think it's been great for our staff, and ultimately our families as well. I think it's been very positive'* (M2 p.7). Ashleigh

makes the point that the positive experience goes beyond the staff and contributes to improved care. Similarly, Lyndal has seen *'some real transformations within individual people and teams'* and feels *'really positive and encouraged by what that's achieving'* (ES2 p1).

A key process of this study was the way in which the collated data was fed back to staff. In the early stages of **receiving feedback** Sharon indicated that staff *'were defensive'* (F5 p.5). Judy, a manager, also noted that staff were 'reactive' in the beginning, however, she noted: *'one of the biggest changes that I've seen…we had discussions…' (*FM2 p.11). This was a move beyond reactiveness to one where the data was embraced as a positive mechanism to generate discussion amongst staff about nursing practice. Clinicians also noted that '*positive feedback is naturally going to make you more inclined to keep doing things, because…yeah, it's encouraging feedback…it's really good to get a positive as well, because sometimes you only see and hear the negative*' (FG1 p.14), which Lyndal described as *'the transformational aspect of it'* (ES2 p1).

Key to the feedback process was creating the **opportunity to celebrate** the positive aspects of nursing practice. Amelia commented: *'you see it on their face when it's presented. They like hearing not just that they did a good job (but) specifically what they did well'* (F4 p.4). Feedback was specific about their practice giving rise to further improvement and created an opportunity for celebration as Margaret stated: *'It's not just looking at what we could do better, but looking at how well we are doing as well, and moving forward and celebrating what people had done well'* (M13 p.6). Julianne summed this up by saying *'I think it put the sparkle back into nursing'* (M14 p4).

Engaging in the Process
It was clear that pivotal to the success of this research, which was largely unfunded, was the level of engagement in the process of undertaking the study evidenced by no attrition across the 20 international sites. Engagement was supported through different **approaches to facilitation**, such as securing external facilitation support and identifying champions at local level to support the process. External facilitation supported the work in a number of sites, and as Leah a nurse manager indicated: *'it's great to have that support from an external source who is involved with research on a regular basis'* (M7 p.6). There was also at times a tension between getting the facilitation help *'prompting staff and reminding them about our action plan…'* and the potential that this led to a sense that *'staff aren't really that involved because it's ongoing'* (M1 p.4). External facilitators were aware of this as Amelia states: *'Well, it's theirs. It's not actually ours. We support and enable, but it does belong to them, and that's what we try to deliver more that second time' (*F4 p.6). The shift from relying on external facilitation support to it being a collaborative approach was thought by Diana to *'need a lead champion in each ward'* (F6 p.5). Having internal champions helped support the process and engaged staff in the discussion around the nature of the data and what needed to be done to achieve outcomes. Hannah explains the role of the champions: *'when I think back to the first and the second one* (cycle)…*we needed a champion…just even set up the PINS board, and then to challenge behaviour that maybe was in conflict with what the ward was trying to achieve. You know, that sort of thing. So, yeah, I think it's vital' (F1 p.7)*

Julianne spoke about the need to **develop a collaborative approach** as the work progressed *'to involve people more internally'* **(**M14 p.2) as a way to gain traction with the work. There was also an element of providing opportunities for staff on the ward *'enabling them and showing them how to do the observations of practice, how to undertake these small little activities themselves to evaluate their practice… trying to get staff involved that second time, and hopefully this third time, they can lead this and do it'* (F4 p.3). This was linked to staff taking ownership of the study, if it was going to have any chance of longer term success: *'they're wanting to drive it, but maybe needed the leadership and support of how to drive it'* **(**F1 p.2). This was not always achieved as this clinician discusses: *'So the ward needs to own it to be able to take it forward .. to embrace it and to say, right let's do this and*

make changes…I think my feeling is that we don't own it at the minute, that's where we are' (FG11 p.7).

There was acknowledgement that the process needed **embedding in practice:** *'the concept is not really embedded'* **(**FM7 p5), but whilst the implementation *'worked incredibly well'* there was a need *'to see it embedded'* FM5 p.3. This was linked to the time it took to build momentum. While initially *'it took a little while to get the ball rolling'* as time progressed and staff got to the second cycle *'it was just done. It was so much more smooth (sic) in the process'* (FM1 p.1). To support the process of embedding it in practice, one participant suggested that: *'the principles could be embedded into, so things like appraisal, supervision, you know, different strands of work and research'* (FM7 p5) and that it could be embedded *'as business as usual'* (ES3 p4).

Driving Changes in Practice

It was clear that the data generated from the KPIs was driving change and provided useful information to think about what needed to be considered to improve the care experience: *'the KPIs really pinpoint to what area you need to improve on… they were very specific and it was very easy to pinpoint to what you needed to improve'* (FG14 p.1). The process itself also helped to drive change and supported staff to **engage in quality improvement**: *'it was something they'd wanted to do for a long time...simple little changes make that journey better'* (F5 p.9/11). The process also raised staff **awareness about espoused practice**: 'we weren't actually doing bedside clinical handover in its full capacity and expectation' (FM1 p.16), and despite it being noted that *'there was a lot of resistance about involving the parents'*, when staff had the evidence from the KPIs they *'were a lot more receptive to it (the change)'* (FM1 p.16). There was acknowledgement from managers such as Annalise *'you see the evidence of that on the wards, I think that's great, you know we've changed things' (*M12 p.4) and Trish *'the other thing I'm very, very proud of is the information booklet, that was one of our action plans from the first cycle…we took nothing to do with the development of that…staff…completely owned it.'* (FM5 p.1)

Achieving Healthful Outcomes

It was evident from the data that staff, facilitators, managers and executive sponsors who participated in the PINS study viewed the work as making a significant contribution to outcomes for staff and patients. In driving the change and getting involved in the PINS process it was noted that there were opportunities to **engage in workplace learning**. Bianca stated *'I think it's been a good learning curve for staff members who would not necessarily have been involved with quality improvement projects beforehand, so I think that's been a really positive thing'* **(**M7 p.7). Clinical staff suggested *'we can also use what we've learnt about data collection and what's important to families'* (FG1 p.16). Sharon supported this saying *'I really do believe that a lot of learning's gone on from my perspective, as well as from the ward staff'* (F5 p.7). There was a sense of learning about the process, about data collection and then learning in and from practice at all levels.

Improving teamwork was identified by Carla as an outcome of engaging in the work: *'just that collaboration with as many people as possible. The whole teamwork thing is important'* **(**F2 p.7). Jillian noted that '*it brought out teamwork, it brought out mateship (sic) within the workplace*' **(**M5 p.2). This supported the idea that undertaking work like the PINS study can have outcomes that go beyond the project itself. It offers an opportunity for staff to work together on something that is shared, meaningful and establishes a sense of supporting one another. This notion was supported in a broader context: *'It's almost a change in culture, as well, from an individual person doing a job to a team effort, whereas you don't feel like you're all alone'* (FG9 p.3).

It was evident across all the sites in the study that this work created something really positive for all who participated, this links to the theme on embracing nursing. Diana, speaking about the staff, states:

*'they're so proud that they did it…were able to prove how good they are… it worked really as a **staff morale booster**'* (F6 p.6). These thoughts were echoed by a clinical team in another country: *'it definitely boosted our staff morale on the ward, to get better comments from parents'* (FG3 p.7). Kristy, in talking about her team, said: *'I think people are quite chuffed that we're part of that. So that's been quite good for kind of morale to see that gosh yes, this is quite a big deal'* (M10 p.7).

DISCUSSION

This study set out to explore factors that influence nursing teams to successfully implement eight person-centred KPIs and an accompanying measurement framework. The findings reported from PINS were confirmatory and validated key findings from the original study that tested the utility and feasibly of the KPIs as an approach to evidencing the patient experience (McCance et al., 2015). Key findings that were reinforced included: the credibility of the KPIs in measuring what matters and also in the ability to uncover the whole picture through the use of multiple data sources; the high level of engagement in the process aligned to the ability to use the data to improve practice and evidencing the positive contribution of nursing; and the positive experience of engaging in the process. Similar findings were also reflected in the implementation of the KPIs within a community nursing context (McCance et al., 2020).

Generating robust evidence is insufficient to effect change in practice. Supporting the generation and implementation of evidence in clinical practice requires input from a facilitator (Dogherty et al., 2010). It is acknowledged that the engagement of executive sponsors, managers, facilitators and staff within this study ensured continuity and momentum. However, there were various models of support implemented across the participating sites and the effectiveness of these are reflected in the findings, which focus on how participants engaged in the process. The findings suggest that working with facilitators to gather and analyse data and implement changes following feedback and benchmarking activities, offers a good mechanism for implementing change into clinical environments. Working with a key facilitator who was responsible for co-ordinating the activities, initiating and supporting the cycles of work at a unit level and keep nursing teams motivated was considered an important factor for success. This is consistent with a scoping review undertaken by Cranley et al. (2017) who identified nine different types of facilitator roles, concluding that the 'facilitation has become an important aspect of implementing research into practice, and has potential to be an effective innovation' (p 13). In exploring issues of facilitation with participants it was clear that having 'that one clinical person, able to lead', and who holds respect to 'bring the staff with her,' was as important to managers as it was to clinical nurses. This supports the notion that the key facilitator is required to draw upon their professional, personal and leadership skills if implementing change is to be successful. This reflects the importance of the role of facilitation (by whom and how) in implementing evidence into practice as described within the PARiHS framework (Kitson et al., 2008; Harvey and Kitson, 2015a). Furthermore, in a re-conceptualisation of the constructs of the PARIHS framework, Harvey and Kitson (2015b) have developed the integrated-PARIHS (i-PARIHS). The i-PARIHS places importance on the notion of one or more facilitators acting as the active component in guiding individuals and teams through complex contextual and change processes. Harvey and Kitson (2015b) identify the 'key facilitator' as the change agent who is generally internal (insider) to the organisation with the central role of co-ordinating activities, initiating work at a local level and generally keeping things going, which reflects the findings from this study.

Schein (2010) argues that the strength of cultural data only becomes relevant when the members of the organisation feel they have something to gain from it. Therefore, in using the person-centred nursing KPIs and measurement framework, it was important that staff view themselves as having some ownership of the data and subsequent actions arising out of it. Working collaboratively they became fully immersed in the problem-solving process resulting in the data becoming a joint responsibility. Viewing the data this was most evident for those working in units with an insider/insider

facilitator. It is interesting to note that some areas who started with an insider/outsider facilitator defaulted to having an internal champion due to the pressures of competing demands in their roles. Balancing the positive aspects of understanding the organisational culture against the challenges of working in individual ward micro-cultures offered a challenge for insider/outsider facilitators (Coghlan 2019). Some facilitators external to the wards discussed the challenge of gaining access to wards and there being lack of ownership, as nursing staff considered the work they were doing was a 'directive thing' driven by facilitators. This was reiterated by clinical nurses who commented that they felt they did not own the work because a facilitator was brought in from outside and it was considered their job. However, insider/insider facilitators also experienced challenges when they did not show strong leadership: for example, 'in cycle one we had a leader who was not present in cycle two. This was more difficult'. This reflects the findings of a recent qualitative study conducted by Baloh et al. (2018), who similarly identified leadership and buy-in as important internal facilitation activities when implementing evidence-based interventions in hospitals. They concluded that understanding the types of facilitation activities and their distinguishing characteristics can support managers in implementing evidence. The findings from this study would suggests that whoever is nominated to be a key facilitator, there is a requirement for them to communicate effectively and possess the ability to support colleagues in implementation work, if healthy workplace cultures are to be built.

Finally, the study findings highlight the impact of implementing the KPIs on the experience for staff. Participants described how engaging in the process provided opportunities for workplace learning, created a sense of improved teamworking and boosted staff morale. These outcomes are reflective of effective person-centred cultures and are in line with the expected outcomes described in the Person-centred Nursing Framework i.e. a good care experience (McCormack and McCance, 2019). The experience of good care reflects the evaluation that a patient, or indeed a nurse, places on her or his care experience and reflects a workplace that enables human flourishing. This is a key factor in how healthcare is experienced and McCormack and McCance (2017) would argue that the extent to which the environment supports and maintains person-centred principles is critical to the development of person-centred practice. Furthermore, McCormack et al. (2021) describe a healthful culture, the key outcome of person-centred practice, as one in which staff are supported and enabled to maximise their potential in line with their values. This reflects the impact of implementing the person-centred nursing KPIs as evidenced by the findings from this study.

Limitations of the study

This was a large international study with multiple sites across Europe and Australia, the challenges of which have previously been reported (Wilson and McCance, 2015). A key limitation, however, of working across the international landscape was the challenge of monitoring consistency in the implementation process across sites. Furthermore, as in many studies that have an action orientated component, the turnover of staff is always problematic particularly in terms of maintaining momentum. However it must be noted that all 20 units completed the study.

IMPLICATIONS FOR PRACTICE

This study reaffirms the important of generating evidence for practice that is meaningful for nursing teams as opposed to collection of multiple sources of routine organisational data. It challenges organisations to consider what evidence is generated through KPIs and other metrics and its impact on improving nursing practice. The evidence generated from the KPIs provides a stimulus to drive improvements in practice that contribute to the development of person-centred cultures. Furthermore, having the ability to generate data that evidences the contribution of nursing creates a positive work environment that encourages a culture of celebrating success. The challenge to effective implementation, however, is the engagement of staff at all levels in an organisation from clinical staff through to executive nurse leaders. Investment in this process, however, does have the potential to impact on the care experience for both patients and their families and staff.

CONCLUSION

Using evidence to implement change is a multi-layered and complex process in the reality of clinical practice (Greenhalgh and Wieringa, 2011; Brown and McCormack, 2016). Researchers argue this is because debate relating to what constitutes evidence and the ways in which micro, meso and macro levels of context affect practice, influence healthcare professionals on an individual, team and organisational level (Ferlie, et al., 2009; Brown and McCormack, 2011; Harvey and Kitson, 2015a). The findings from this study reaffirm the value of the evidence generated by the person-centred nursing KPIs and the ease with which they can be implemented within practice. There is also a clear relationship emerging between the nature of evidence generated and its use in practice, alongside the need to be assisted (or facilitated) to collect and understand the data and the context in which it is used. This reflects the interplay between the elements of evidence (research, clinical, patient, local evidence), context (culture, leadership, evaluation) and facilitation (by whom and how) (Kitson et al., 2008; Harvey and Kitson, 2015a), within the PARiHS framework, that are considered key determinants to successful implementation of evidence in practice. Most importantly, however, implementing the KPIs and accompanying measurement framework is a process that leads to positive outcomes for staff, and creates conditions for the development of effective person centred cultures.

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Table 1: The Person-centred nursing key performance indicators (McCance et al 2012)

KPI 1:   Consistent delivery of nursing care against identified need

KPI 2:   Patient's confidence in the knowledge and skills of the nurse

KPI 3:   Patient's sense of safety whilst under the care of the nurse

KPI 4:   Patient involvement in decisions made about his/her nursing care

KPI 5: Time spent by nurses with the patient

KPI 6: Respect from the nurse for patient's preference and choice

KPI 7: Nurse's support for patients to care for themselves where appropriate

KPI 8: Nurse's understanding of what is important to the patient and their family

Table 2: Research Objectives

1. to explore staff's views on using the KPIs as a focus for quality improvement

2. to establish views of key stakeholders on the appropriateness and relevancy of the

   evidence generated from the KPIs as a measure of the quality of service provision

3. to review the effectiveness of data collection mechanisms.

Table 3: Four Phases of the Research (Medical Research Council 2006)

1) Development: focuses on identifying the evidence base and, modelling process and outcomes prior to actual project/intervention

2) Feasibility/Piloting: focuses on preparatory work to a) establish if there are any problems with acceptability, engagement or buy-in with key stakeholders; b) to establish the degree to which the intervention is meeting the aims set out in the development phase and to select methods to collect evidence

3) Evaluation: focuses on assessing effectiveness and determining the adequacy of the intervention for the needs of its target user

4) Implementation. involves dissemination using methods that increase the likelihood of getting findings translated into practice; surveillance and monitoring, and long-term follow-up.

Figure 1: The eight person-centred KPIs aligned to the Person-Centred Nursing Framework (McCormack & McCance, 2019)

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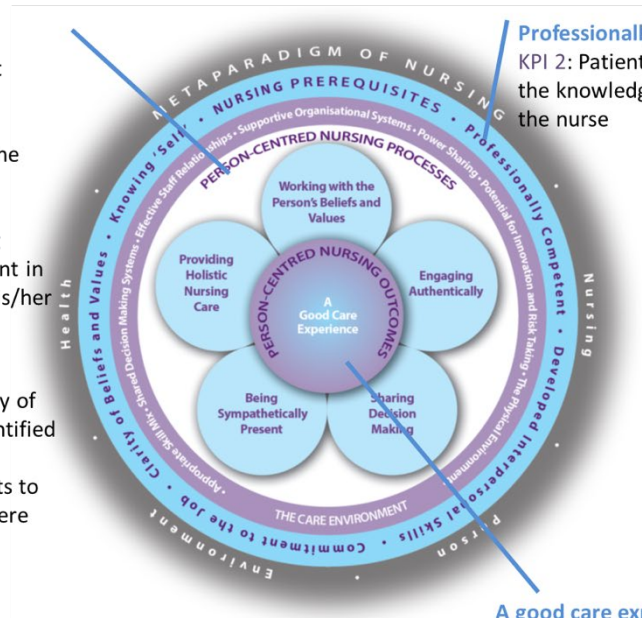KPI 8: Knowing what is important to the patient

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

A good care experience
KPI 3: Patient's sense of safety

Figure 2: Overview of themes