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# BMJ Open Maximising comfort: how do patients describe the care that matters? A twostage qualitative descriptive study to develop a quality improvement framework for comfort-related care in inpatient settings

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To cite: Wensley C, Botti M, McKillop A, et al. Maximising comfort: how do patients describe the care that matters? A two-stage qualitative descriptive study to develop a quality improvement framework for comfort-related care in inpatient settings. BMJ Open 2020; 0:e033336. doi:10.1136/ bmjopen-2019-033336

Prepublication history and additional material for this paper are available online. To view these files, please visit the journal online (http://dx.doi. org/10.1136/bmjopen-2019-033336).

Received 31 July 2019 Revised 17 February 2020 Accepted 24 February 2020



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# **ABSTRACT**

Objective To develop a multidimensional framework representing patients' perspectives on comfort to guide practice and quality initiatives aimed at improving patients' experiences of care.

Design Two-stage qualitative descriptive study design. Findings from a previously published synthesis of 62 studies (stage 1) informed data collection and analysis of 25 semistructured interviews (stage 2) exploring patients' perspectives of comfort in an acute care setting.

Setting Cardiac surgical unit in New Zealand. Participants Culturally diverse patients in hospital

undergoing heart surgery.

Main outcomes A definition of comfort. The Comfort ALways Matters (CALM) framework describing factors influencing comfort.

Results Comfort is transient and multidimensional and, as defined by patients, incorporates more than the absence of pain. Factors influencing comfort were synthesised into 10 themes within four inter-related layers: patients' personal (often private) strategies; the unique role of family; staff actions and behaviours; and factors within the clinical environment.

**Conclusions** These findings provide new insights into what comfort means to patients, the care required to promote their comfort and the reasons for which doing so is important. We have developed a definition of comfort and the CALM framework, which can be used by healthcare leaders and clinicians to guide practice and quality initiatives aimed at maximising comfort and minimising distress. These findings appear applicable to a range of inpatient populations. A focus on comfort by individuals is crucial, but leadership will be essential for driving the changes needed to reduce unwarranted variability in care that affects comfort.

# INTRODUCTION

Championing patients' need for comfort was central to the origins of person-centred care organisations such as the Picker Institute<sup>1</sup> and Planetree.<sup>2</sup> Within the executive summary of

# Strengths and limitations of this study

- A comprehensive conceptual framework developed from an integrative review of 62 studies (14 theoretical and 48 qualitative) focused the exploration of patients' perspectives on comfort in an acute care setting.
- The definition of comfort (the state) and description of influencing factors (processes of care) were developed using qualitative methods aimed at understanding how comfort and comforting is perceived and experienced by patients.
- The study reported on here is the first that has set out to explore a cultural dimension of comfort via purposive sampling of culturally diverse patients.
- Peer debriefing, Maori and Pacific consultation, prolonged engagement, negative case analysis and triangulation promote credibility.
- The two-stage approach enabled development (stage 1) and then refinement (stage 2) of themes and operational definitions that capture the broad influences on comfort in one unifying framework. However, identifying context-specific detail is required for application.

the Institute of Medicine's landmark report 'To Err is Human' is stated, 'it is not acceptable for patients to be harmed by the health care system that is supposed to offer healing and comfort' (p. 3). Hippocrates' quote 'To cure sometimes, to relieve often, to comfort always' is familiar to many. More recently, the 2012 National Institute for Health and Care Excellence Patient Experience Guideline identified 'comfort' as one of seven outcomes of a good patient experience.<sup>4</sup> Informed by the work of Gerteis and colleagues,<sup>5</sup> promoting physical comfort became a core aspect of person-centred care frameworks. 467 Comfort is also regarded as holistic

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and multidimensional, 8-12 associated with concepts that are hallmarks of a caring and humane society such as dignity, empathy, kindness and compassion. 13-15 This notion of comfort fits with evidence provided by patients and family during the Mid-Staffordshire Inquiry 16 where good—and bad—care was described in terms of comfort, discomfort, comforting or feeling/looking uncomfortable. As such, comfort, or lack of it, is a defining aspect of patients' experiences and an indication of the overall quality and safety of care. A service that fails to provide high-quality care that includes the promotion of comfort, or recognise avoidable suffering as a source of harm, means that patients and their family have been let down by those who are meant to care for them. 3 16-22 Overall, reducing unwarrantedvariability in care important for comfort is a crucial aspect of quality person-centred care in contemporary healthcare settings.

But what is comfort, and what care matters to patients? Differing definitions <sup>8 10 11 23</sup> and perspectives on comfort depicted in person-centred frameworks <sup>6 7</sup> and concept analyses <sup>8-12</sup> highlight that this concept is poorly defined for practice and quality improvement. In particular, the absence of a framework incorporating all that is relevant from patients' perspectives <sup>24</sup> risks provider-centric improvement that fails to deliver the care that matters. The purpose of this research was to develop a multidimensional framework representing patients' perspectives on comfort that can be applied in a range of healthcare settings to guide practice and quality improvement initiatives aimed at improving patients' experiences of care.

# **METHOD**

A two-stage qualitative descriptive study design<sup>25</sup> was used to explore patients' perspectives on comfort and its influencing factors. This design is known for producing 'findings closer to the data'25 (p. 78) and was considered appropriate for generating findings that could be translated into practice. In stage 1, data from 62 studies exploring the concept of comfort in healthcare settings were synthesised into a conceptual framework representing patients' perspectives on comfort.<sup>24</sup> Integrative review methods facilitated identification of multiple dimensions of comfort that appeared relevant. This framework informed the study reported here, which explored the concept of comfort in patients undergoing heart surgery. Heart surgery can be physically and emotionally distressing,<sup>26</sup> therefore exploring patients' perspectives on comfort and comforting care in a cardiac surgical setting was ideal. In summary, our two-stage approach enabled development (stage 1) and then refinement (stage 2) of a framework representing patients' perspectives on factors influencing comfort.

# Patient and public involvement

We used an exploratory method of data collection to better understand patients' perspectives and experiences of care. Questions were informed by a conceptual framework developed from studies also exploring patients' perspectives. Patients were not directly involved in the design of this research. However, cultural advisors provided advice that facilitated Māori and Pacific recruitment, led to refinements of the interview procedure and supported accurate representation of Māori and Pacific worldviews. The acceptability of the interview process and questions were tested in five pilot interviews involving patients of Māori, Pacific and New Zealand European (NZE) ethnicities. As part of the informed consent process, participating patients were offered the opportunity to review their interview transcript and feedback on its accuracy via a prepaid postage return of the hard copy or follow-up phone call. Presentations of the findings have been made in order for our results to benefit future patients and to guide research aimed at improving patient experience.

# Site and setting

The study was conducted in a 47-bed cardiac surgical unit in a publicly funded hospital in Auckland, New Zealand.

# **Participant selection**

Purposive sampling was used to access and invite participation from culturally diverse patients. Sampling aimed for one-third each of Māori (the tangata whenua or indigenous people of Aotearoa/New Zealand), NZE and Pacific people (people who migrated from, or who identify with, the Pacific Islands) to enable exploration of a cultural dimension of comfort. Inclusion criteria were: postoperative day 4 or 5 after operations classified as coronary artery bypass graft or valve replacement/repair; age 16 years or older; English speaking; transferred from the intensive care unit postoperative day 1; an expectation of discharge at or before eight postoperative days; sedation score of 0 (awake and alert) or 1 (mild sedation and easy to rouse); and ability to provide consent. Participants were identified in consultation with a senior nurse and then invited to participate by one researcher (CW) who emphasised her non-employee status. Informed consent was obtained. One experienced researcher (CW) conducted all interviews. Data saturation was sought regarding understanding how perspectives on comfort differed by ethnicity.

# **Data collection**

Semistructured patient interviews explored: (1) what comfort meant to patients from which a definition of comfort was to be developed and (2) factors within the care setting that influenced comfort, that is, what care mattered to patients. Questions exploring influencing factors were informed by the conceptual framework<sup>24</sup> (see online supplementary file 1, patient interview guide). Patients were not asked directly if the broad influences identified a priori were important for comfort. Pilot testing indicated this approach risked bias towards affirmative responses and less nuanced data. Rather, patients were asked about aspects of care related to conceptual framework themes, and responses were probed to determine the influences



on comfort. Negative case analysis (searching for disconfirming evidence) was used throughout data collection and analysis.<sup>27</sup> The final interview question gave participants the opportunity to describe influences on comfort that may have been missed. Interview settings were patients' single rooms (n=7), a quiet room on the ward (n=13) or patients' four-bedded room (n=5) the latter being participants' preference. Interview durations were between 23 and 66 min (average 43 min) and similar between ethnicities (see online supplementary file 2, characteristics of patients). Audiorecorded interviews were transcribed verbatim. Participants were sent a copy of their interview transcript and given the opportunity to comment on accuracy and content.

# **Data analysis**

Analysis was sequential. General inductive method<sup>28</sup> was used to analyse data contributing to a definition of comfort. Inductive analysis gave some assurance that the definition of comfort was data derived and developed without undue researcher influence.<sup>28</sup> Analysis involved: close reading of the transcribed text; creation of specific and then general (higher level) categories from patients' description of comfort or derivatives of the word comfort (comforting, comfortable, uncomfortable and discomfort); and revision and refinement until four overall categories capturing the essence of what comfort feels like to patients were identified. Categories were summarised into a definition of comfort.

Thematic analysis<sup>29</sup> and Framework method<sup>30</sup> were used to analyse data related to influences on comfort using both deductive and inductive analysis. Deductive analysis tested the relevance of the conceptual framework to patients' perspectives. Inductive analysis was important for enabling us to identify any new themes<sup>29</sup> 30 within patient interview data. The steps involved were:

- ► Familiarisation with the transcribed texts. The definition of comfort was used to identify and begin coding patient interview data relevant to influences on comfort. Familiarisation involved careful consideration of the overall 'fit' of that data to the conceptual framework themes. 24
- ► Constructing an initial thematic framework from the conceptual framework headings<sup>24</sup> building in themes and subthemes identified within the coded data. Some codes were derived from theme definitions developed a priori,<sup>24</sup> while other codes were developed inductively from the data.
- ▶ Indexing and sorting, in which data were systematically sorted into the thematic framework.
- Reviewing data extracts, checking for coherence between codes and refining the thematic framework accordingly.
- ▶ Data summary and display; matrices of distilled coded text were developed for each subtheme to enable data to be easily compared between participants and between ethnic groups.
- ► Abstraction and interpretation of the data; multiple and inter-related factors influencing patient comfort

were identified. A careful comparison between stage 1<sup>24</sup> and stage 2 findings was made to determine transferability beyond the cardiac surgical setting.<sup>31</sup>

Data were managed using NVivo Version 10 software. One researcher (CW) coded all data. Coding decisions were discussed at regularly scheduled meetings (MB, AM, CW). Peer debriefing<sup>27</sup> occurred throughout all stages of data analysis. Discussion and refinement of themes and subthemes occurred until consensus was reached. Consultation with Māori and Pacific healthcare staff ensured that the recruitment process, interview procedure and data analysis promoted participation of Māori and Pacific patients and accurate representation of their worldview. We used the SRQR checklist when writing our report.<sup>32</sup>

# **RESULTS**

Twenty-five participants were interviewed on either day 4 (72%) or day 5 (28%) after surgery. Eight patients self-identified as Māori, 7 as Pacific people and 10 as NZE. Median age was 63 years (range 30–85) and 64% were men. Fourteen patients underwent coronary artery bypass graft, 10 underwent valve replacement/repair (n=10) and 1 patient underwent both (online supplementary file 2). Fifteen patients declined participation for reasons outlined in online supplementary file 3.

# Comfort: a universal concept

Perspectives on comfort reported by patients in primary studies<sup>24</sup> were similar to those held by patients undergoing heart surgery. As such, comfort is regarded as having universal relevance, and the findings presented here appear applicable to a range of inpatient populations.

# Patients' perspectives on comfort

Patients' perspectives on comfort are summarised in the following definition:

Comfort is a transient and dynamic state characterised by ease from pain, emotional and physical distress and an emerging sense of positivity, safety, strength and acceptance of one's situation that is underpinned and sustained by feeling valued, cared for, confident and accepting treatment by choice. Total comfort is elusive; rather, patients seek to be as comfortable as they can be under the circumstances of their healthcare interaction.

Underpinning our definition are the following four senses of comfort that were identified in the patient interview data:

- ► 'Relief (ease) from pain, emotional and physical distress'.
- ▶ 'Feeling positive, safe and stronger'.
- ► 'Feeling confident, in control, accepting treatment and care by choice'.
- ► 'Feeling cared for, valued; connecting positively to people and place'.

# R PROOF

# **Comfort**

Comfort is a transient and dynamic state characterised by ease from pain, emotional and physical distress and an emerging sense of positivity, safety, strength and acceptance of one's situation that is underpinned and sustained by feeling valued, cared for, confident and accepting treatment by choice.

Total comfort is elusive; patients seek to be as comfortable as they can be under the circumstances of their healthcare interaction.

# Influences on comfort

- Self-comforting strategies; positive thinking, seeking (and finding) signs of safety and normality, self-care routines, developing acceptance (getting informed, planning, learning to trust).
- ✓ **Culturally connected**; finding cultural familiarity, sensing that one's cultural norms and values are understood and respected.
- ✓ **Spiritually connected**; sustaining personally significant spiritual or religious practices.
- Family; family have a unique ability to comfort arising from a shared culture and understanding.
- Symptom Management; all symptoms (not just pain).
- Holistic Care and Assistance; non-pharmacological interventions to ease discomfort, help provided willingly.
- Engaged and Committed staff; staff presence, therapeutic comforting strategies tailored to individual need.
- Information and Participation; accurate information that is sensitively provided so that patients can prepare for what lies ahead. Opportunities to participate in, and personalise, care.
- ✓ Competent staff; perceived and actual
- Physical Facilities and Ambience; clean, well-equipped and family-friendly. Patients can control their personal space (lights, noise). Staff project an ambience of positivity and caring, are seen to be working as a cohesive team and have time for ALL patients' needs.



Comfort ALways Matters (CALM) framework

Figure 1 Patients' perspectives on comfort and influencing factors; the Comfort ALways Matters (CALM) framework

igure 1 Patients' perspectives on comfort and influencing factors; the comfort always matters (CALM) framework.

# When is comforting care important?

Patients' need for comforting care varied between individuals and could occur at any stage of the healthcare interaction. Common triggers were: the uncertainty and fear of treatment and planned procedures; pain, emotional and physical distress; feeling vulnerable, dependent and weak from functional loss and the accumulative effect of multiple symptoms; being in an unfamiliar environment; and missing home and family.

# Factors influencing patients' comfort

Factors influencing comfort were complex but underpinned by 10 themes, as depicted in the conceptual framework that we had named the Comfort ALways Matters (CALM) framework<sup>24</sup> (see figure 1). Themes occurred within four integrated layers: patients' personal strategies; the role of family; staff actions and behaviours; and factors within the clinical environment. The broad themes identified in stage 1 were consistent with those identified by patients undergoing heart surgery. Most theme names were retained. However, patient interview data led to a deeper, more nuanced understanding of these themes. Accordingly, the theme definitions presented here have been refined to

better reflect: (1) the care that matters to patients, (2) the integrated nature of that care and (3) aspects of culturally responsive care that had not been previously identified. The theme related to family influences was renamed to reflect important ethnocultural differences in the way family comfort. The essence of each theme and their unified influence on patients' sense of comfort is portrayed in figure 1. Operational definitions, subthemes and illustrative quotes for all themes are provided in tables 1–4. Themes within each layer are now discussed.

Patients' personal strategies

The first (inner) layer of the CALM framework relates to patients' use of personal (often private) strategies to promote comfort and ease distress (see table 1). Three themes were identified within this layer, the first describes patients use of 'Self-comforting strategies' during times of distress and uncertainty. Strategies were categorised under four subthemes, which were maintaining positivity; looking for reassuring signs of safety through surveillance of self and others; easing distress using distraction or self-care routines; and developing acceptance of one's situation by, for example, getting informed, planning and learning to

| /ate) strategies                              | Subthemes and supporting evidence*† |
|---|-------------------------------------|
| Patients' personal (often private) strategies | Operational definition              |
| Table 1                                       | Influence                           |

Subthemes and supporting evidence\*† patients work to maintain a sense of comfort During times of distress and uncertainty, Operational definition

treatment and care. Examples include celebrating small milestones during postoperative recovery and focusing on the benefits of surgery rather than the risks. influences from family, staff, other patients and the looking for reassuring signs of safety and self-care routines, getting informed, planning and learning to trust. The success of these strategies normality through surveillance of self and others, using personal strategies that include positive is moderated by patient characteristics and

(disengagement from staff and service) or at least short-term but potentially self-harming relief from thoughts of doing so, as a strategy to promote Some patients may use withdrawal discomfort and distress. clinical environment.

Positive thinking helped patients stay positive and mentally strong when faced with fear and uncertainty of personally challenging The operational definition for the theme 'Self-comforting strategies' was generated from data coded to four subthemes: 'Maintaining positivity and strength'

able to rationalise symptoms as 'normal' (NZE8) could cause significant distress. Conversely, patients drew comfort from the knowledge Patients sought to reassure themselves of their safety through surveillance of their own symptoms and surveillance of staff. Not being that symptoms or odd sensations were to be expected under the circumstances. 'Safety through surveillance of self and others'

I just kept on saying to myself I'm part of the majority [who survive], that kept me going because I was going to walk straight out' (P5).

'I just told myself it was something from the surgery you know I knew exactly what it was' (NZE7).

Observing that staff were watchful and checking on them 'when they're supposed to' (NZE7) also provided reassurance of safety, 'They'll pop their head in when it's not their time to see how you are. I know, I keep an eye on their schedules' (M1).

Distraction (watching TV, listening to music and seeking out people to chat with) eased emotional discomfort by helping patients take 'Strategies to develop a sense of ease'

'I didn't like being in a separate room, I didn't like that ... I felt quite isolated. I mean I'm a bit of a chatty person, not everybody likes to talk but you know you like to know the people around' (NZE4). their mind off unpleasant or unsettling events.

temporarily eased discomfort associated with disturbing factors within the hospital environment (such as noise and room sharing with Self-care routines (mindfulness and meditation), pulling curtains for privacy, making the effort to connect with one's roommates strangers).

Some patients used withdrawal and disengagement to ease discomfort and distress. Examples included withdrawing from interactions I'll just go into the room and I tend to pull the curtains across, I've got an iPod there, I usually listen to a bit of music' (NZE2). with staff, with other patients, contemplating not going through with the surgery, or self (early) discharge after surgery. I was a bit emotional before the operation ... I was crying, I want to go home, I want to go home' (NZE6) They say oh I'll be back in fivemin and they're gone. And then ring the bell, ring the bell, that's why I said to my daughter I'm ready to go

'Strategies promoting acceptance'

informed (reading and asking questions), developing some sort of plan or way forward for situations causing concern and focusing on the Underpinning a sense of comfort was developing acceptance of one's situation using strategies that included use of humour, getting necessity of unpleasant treatments, surgery, lifestyle changes and so forth.

II was] quite chirpy and cheeky to the (theatre) nurses just to try and keep myself cool, you know, just to cool myself down and get ready to accept the inevitable, you know' (M8). Patients also gained comfort by developing a sense of trust in either the process or the people around them. Trust was integral to feeling able to accept care and treatment by choice.

'I don't ask much because I haven't been concerned about anything really. I trust them. My first operation really gave me the trust you know, people that trained years to be there, you've got to trust them' (M7). Continued

comforting

Self-

strategies

| Table 1    | Table 1 Continued      |  |
|------------|------------------------|--|
| Influence  | Operational definition | Subthemes and supporting evidence*†  |
| Culturally |                        | Patients find it hard to be fully comfortable in hospital because they miss home, family and hospital because they miss home, family and practices that may be different to their own. Subthemes provide the context for a cultural dimension of comfort, the third indicates the importance of staff competence in culturally and paracitics that may be different to their own.  **Missing home and family - hospital as a culturally unfamiliar environment and patients understant to their own.  **Comfort is enhanced in an environment that patients understant their family, foreign and very different to home. Different things were missed by different people but, overall, unfamiliar routines, certain their family culturally familiar and here is the expectations of behaviour and missing home life exacerbated patients' sense of unease associated with being in the healthcare setting. Sense that others (staff, other patients) understand exceptions help patients develop a sense of comfort related to connecting positively with people and place without tension or the need to missing home and make the noise. I love the children! (M4).  **This my kids and my husband and my frank properties the including properties and my husband and my grandchildren! (M2E2).  **This my kids and my husband and my grandchildren! (M2E2).  **This my kids and my husband and my grandchildren! (N2E2).  **This my kids and my husband and my grandchildren! (N2E2).  **This my kids and my husband and my grandchildren! (Nath the make the noise of the children! (Nath the make the noise of the children! (Nath the make the noise of the children! (Nath the make the noise of comfort related to connecting positively with the make the noise of the make the ma |

pain and body modesty; expectations of caring (notion of service and being treated like family), food preferences and spiritual beliefs (use

of prayer/karakia). Underlying tensions associated with cultural differences were evident. For example, perspectives may differ between behaviour); room sharing; communication styles and deference to hospital rules; attitudes around treatment regimens, putting up with

'It's what Pacific Islanders do. We all have the same sort of morals...They [visitors] just come to show their support, respect and love,

patients, staff and other visiting families about who should visit and acceptable visitor behaviour.

All patients held important values and care preferences related to, for example, meaning of family (who should visit and expected visitor

patients) understood and accepted culturally important values and care preferences. Patients sought signs of welcome, of respect and of cultural acceptance. Examples include observing culturally diverse staff working as a team, the quality of communication between staff and other patients ('no racism here' M4), family being able to visit or share karakia outside of visiting hours, availability of cultural support

Crucial to comfort (feeling at ease, safe and positive connections) was patients' sense of welcome and that others (staff and other

Feeling welcome, connecting positively with others amidst cultural differences'

yeah' (P7).

... []t was a lot easier within our room because we were Māori, we understood. Like one whanau [family] came in first and I said kei te pai Attitudes, treatment regimens, rules and routines not congruent with one's personal values (eg, differing interpretations of body modesty,

(good, that's fine) you fellows have your time ... They felt like they were taking up too much space' (M3).

staff and culturally diverse décor.

expectations of service and care) or based on a stereotypical understanding of cultural preferences undermined patients' sense of

[S]ometimes they leave you there naked (under a sheet) you know, and you can't do anything' (P1).

welcome and could distress.

| Table 1 Continued | ontinued  |   |
|-------------------|---|---|
| Influence         | Operational definition  | Subthemes and supporting evidence*†   |
| Spiritually       | Some patients gain a sense of comfort from feeling connected to a higher power and sustaining that connection through personally significant spiritual or religious practices. Patients' believing need for spiritual comfort may be intensely private for yellowing and not always related to strongly held religious for spiritual beliefs. The need for spiritual comfort is dynamic, intensifying during times of distress or comfort uncertainty.    Ver new   Sustain | The operational definition for the theme 'Spiritually connected' was generated from data summarised in two subthemes:  'In God's Hands'  'In Adamathe God's Hands'  'In Adamathe God's Hands'  'In Adamathe God's Hands'  'In Adamathe God's Hands'  'In Adamathe God's |

ethnicity and interview order, that is, M1 is the first Maori interview, P1 for the first Pacific interview and NZE1 is the first New Zealand European (NZE) interview interviews of Patient interviews were coded by

trust (see table 1, self-comforting strategies). The second theme was about comfort arising from feeling 'Culturally connected', which related to seeking cultural familiarity, and feeling that one's cultural norms and values were understood and respected by others (see table 1, culturally connected). The third theme described comfort gained from feeling 'Spiritually connected'. For some patients, connecting to a higher power through personally significant spiritual or religious practices was comforting (see table 1, spiritually connected). In all three themes, actions and behaviour of family, staff, and factors within the clinical environment moderated the success of these strategies.

Influence of Family

The second layer of the CALM framework related to the theme 'Family's unique ability to comfort' (see table 2, family's unique ability to comfort). Exploring family comforting in a culturally diverse sample identified that family's unique connection with patients was pivotal to their ability to comfort. Differences in the way families comforted (whether by shared prayer/karakia, bringing food in and encouraging trust) and who comforted (immediate or extended family) were identified between ethnicities. A shared culture and understanding appeared to underpin the differences in family-initiated comforting observed.

Overall, family were an important buffer to the unfamiliar clinical environment. Additionally, for most patients, having loved ones near and connecting with those who know them best and whom they trust promoted positivity and acceptance of care. Family-initiated comforting activities also included providing holistic care and practical support. However, family could also distress. Patients expressed concern for the safety and well-being of family members and worried about being a burden. Conflict between staff and family could undermine patients' confidence in treatment decisions. Positive family-staff relationships and family-friendly facilities are the most comforting scenario for patients. These examples demonstrate the integration between family—staff clinical environment layers that was better understood through stage 2 patient enquiry.

Staff Actions and Behaviour

The third layer of the CALM framework relates to the way staff actions and behaviour influence comfort. Five distinct but integrated themes were identified (see table 3). The first staff-related theme was effective 'Symptom Management', which was essential for all symptoms including but not limited to pain. Distressing symptoms varied considerably even in a relatively homogeneous group of patients; therefore, individualised management was important (see table 3, symptom management).

The second staff-related theme, 'Holistic Care and Assistance' acknowledges the significant physical and emotional discomfort that can arise from the accumulative effect of symptoms, treatment side effects, unpleasant procedures and loss of functional ability. Holistic care involving multiple, non-pharmacological interventions was essential and complemented pharmacological symptom management. Help with personal care and basic tasks was crucial

| Table 2 Family influer             | Family influences on comfort   |  |
|------------------------------------|--|--|
| Influence                          | Operational definition   | Subthemes and supporting evidence*†  |
| Family's unique ability to comfort | Familiarity gives family the unique ability to comfort that complements care provided by staff. From most patients' perspectives, having loved ones near, connecting with those who know them best and whom they trust, promotes positivity and acceptance of care and provides an important buffer to the unfamiliarity and uncertainty of the clinical environment. Family also comfort through the provision of holistic care and practical support.  Patients do not readily relinquish their family role and responsibilities even when facing personal health challenges. Under these circumstances, family-friendly facilities and positive family-staff relationships offset patients' sense of discomfort about the impact their situation may be having on others. These factors also facilitate family's ability to comfort. Conflicting views between family and clinical staff can exacerbate doubt in treatment and care among those already feeling vulnerable or uncertain; the most comforting scenario for patients is that family and staff views align.  How family is defined and the nature of comforting activities need to be seen in the context of what is culturally important for patients and their family. | The operational definition for the theme 'Unique ability to comfort' was generated from data summarised in three subulbemes:  'You always want to see your family - comfort from someone who knows you'  The unique relationship between patient and family underprins family's ability to comfort. Loved ones can be a buffer the unique relationship between patient and family underprins family's ability to comfort. Loved ones can be a buffer the unique relationship between patient and cancellands and a constant comforting presence during times of illness and uncertainty. Patients spoke of hospital life as '100% worse without your partner' (NZE2), the comfort of having someone 'hold my hand' (NZE4) and someone' to touch' (M.7).  " if doesn't matter how good the nurses, or the doctors are I always want to see your family.' (P4).  Family also help patients feel safer and more confident about treatment and care decisions.  My uncle came and just had a good word to me and sort of put me on track, he sort of made me feel better too you know. The was just more positive you know like you're going to be better, have a better life, you're going to have a fonger life if I didn't have no family I would have taken off (P7).  Comfort through practical support and care.  Family provide holistic and practical support that eased patients' concerns over impending discharge, lifestyle changes life they would manage at home.  'Comfort through practical support and advocating for care promoting physical comfort (losition changes and pain relief). Family also provided practical support that eased patients' concerns over impending discharge, lifestyle changes and how they would manage at home.  'Ye noticed the doctors and nurses take the time to explain things to her [wife] as well as to me which is good. They can probably see I look really spaced out its better to talk to her' (NZE5).  **Disconfort, unease related to family*  morbably see I look really spaced out its better to talk to her' (NZE5).  **Disconfort, it's too far for them . |

\* Patient interviews were coded by ethnicity and interview order, that is, M1 is the first Māori interview, P1 for the first Pacific interview and NZE1 is the first New Zealand European (NZE) interview. TExamples are from stage 2 semistructured interviews of patients undergoing heart surgery.

NZE, New Zealand European.

|                             | Subthemes and supporting evidence*† |
|-----------------------------|-------------------------------------|
| Staff influences on comfort | Operational definition              |
| Table 3                     | Influence                           |

Patients' symptom experience varied in terms of symptom presence, severity and trajectory. Physical and associated emotional discomfort 'Variation in experience of common postoperative symptoms' commonly arose from pain. trajectories vary between patients; therefore, symptoms for which effective and sustained relief is crucial for their comfort. Symptom

The operational definition for the theme 'Symptom Management' summarises the findings from two underlying subthemes

I was in a lot of pain. I couldn't move. I was really in agony. I couldn't put my legs flat so I remember clearly having my legs up and if I got them up to a certain point it was just very slightly less painful than anywhere else. You know I remember just lying like that holding my knees because

individualised assessment and treatment is

actions that promote effective symptom symptoms, taking patients' symptoms

Patients experience a range of distressing

management

Symptom

breath, constipation, low mood, or depression, dreams, hallucinations and visual disturbance, taste disturbance, palpitations, and fluid retention Other distressing symptoms were postoperative nausea ('... it's killing me...' (P2)), fatigue, inability to sleep, loss of appetite, shortness of was the best I could do' (NZE5) management include routinely asking about essential. From patients' perspectives, staff

It's a very simple thing but it was upsetting, my fingers they were swollen twice the size …it was horrible' (NZE4) Complexity of effective symptom management': seriously, pre-emptive or prompt treatment and working with patients to understand

opioids and sleeping tablets), conflicting opinions on effective treatment, clinical jargon and the ability to personalise care. Patients emphasised Complex patient and contextual barriers to effective symptom management were identified. Barriers related to patients' motivation for reporting the importance of participation in symptom management decisions and of feeling heard. Not feeling listened to or believed about the extent of thought they were giving me too much painkillers ... they were just saying we're giving as much as we can ... they were trying to find the best symptoms, patients' beliefs and preferences for treatment regimens, staff competence, underlying attitudes of staff and patients (such as to I think because I'm big you know I don't show the full soreness of my body ...maybe they think I might be lying or something ... I think they one for me but weren't actually asking me which one was the best you know...' (P7). symptom distress, prolonged physical distress and was emotionally upsetting.

influencing factors such as holistic care and

comfort becomes more dependent on other

effective pharmacological options, patient accepting treatment. When there are few

barriers to reporting symptoms and

Other comforting actions become crucial when there were few effective strategies to combat distressing symptoms. These included support from family, empathetic and holistic care, reassurance about 'normality' and expected trajectory (refer family's unique ability to comfort, holistic Regular and competent symptom assessment followed by titrated symptom relief was essential for the duration of the admission. Pre-emptive application of evidence-based symptom management protocols and on staff working with patients to understand and address barriers to symptom management and regularly offering analgesics were also important. Overall, symptom management depended on competent reporting symptoms and accepting treatment (refer 'Engagement and Commitment' and 'Information and Participation'). care and assistance, information and participation).

| Table 3                            | Table 3 Continued   |  |
|------------------------------------|---|--|
| Influence                          | Operational definition  | Subthemes and supporting evidence*†  |
| Holistic<br>care and<br>assistance | Patients experience significant physical and emotional discomfort from the accumulative effect of symptoms, treatment side effects, unpleasant procedures and loss of functional ability. Holistic care involving multiple, non-pharmacological interventions for relieving physical and emotional discomfort is essential and complements efforts to promote comfort through pharmacological symptom management. Assistance provided willingly reduces the substantial emotional and physical impact of lose of function and is an assential acoust of | Patients experience significant physical and The operational definition for the theme 'Holistic Care and Assistance' summarises the findings from three underlying subthemes, the first of emotional discomfort and discomfort and discomfort and discomforts, treatment side effect of symptoms, treatment side effects of symptoms, treatment side effects of patients and loss unpleasant procedures and loss unpleasant treatments and procedures (a 'cocktail' of pills, venepuncture, echocardiogram, intravenous lines, oxygen therapy and blood multiple, non-pharmacological interventions pressure monitoring) and restricted mobility (from surgery and from being attached to equipment).  That two days of pure hell, 1 just felt like 1'd been run over by a truck. But there was no life to push to get up' (M3).  Patients had limited ability to self-care, needing assistance getting out of bed, to the toilet; even pouning a drink of water could not be done without help.  Assistance provided willingly reduces the "I've felt like," [I have] been being run over by a bus and then backed over again, I feel terrible. You can't even take your hands off the table to substitute and one provided and provided provided and provided and provided provided and provided provided provided provided provided provided provided provided provi |
|                                    | comforting.   | Treating the whole person, not discrete symptoms?  |
|                                    |   | Complementing pharmacological symptom management was holistic assessment and care  |

SS

prevent strain on the chest wound. Other interventions were a cooling fan, ice to suck, swift removal of drains, urinary catheters and intravenous Holistic interventions specific to heart surgery included being taught to use a 'cough pillow' and providing larger patients with a chest binder to (the nurse) asked me really nicely and politely how I was, was this happening or is this happening, have I got any of this ... you felt that complementing pharmacological symptom management was holistic assessment and care. somebody cared for sure which was, the other guys were saying that too' (NZE7). lines, shower for itchy skin and positioning.

... [W]hen the nurse came in I told her it was getting a bit sore around the back and shoulder blade and she says, get your bum back in that bed, she gets my pillow and straightens them up and, 'lie there now' so I lay back down and oh yeah she knows what she's talking about alright. It felt a hell of a lot better' (M8).

# Getting the help needed'

Getting help with personal care and basic tasks was crucial for a sense of comfort (feeling cared for and safe). However, patients felt unprepared for how reliant they would be on nursing staff. Adjusting to dependency was difficult and some were reluctant to ask for help for reasons that included worry about being 'demanding' (NZE4) and feeling uncomfortable asking for help with 'basic bodily things' (NZE9). Observing staff readily and 'graciously' (NZE10) providing help relieved a sense of unease about asking for, and accepting, the help needed.

... I didn't realise that we'd have to be dependent on the nurses as much. I think I thought I could just get up and go, no it was far from it ... they've been tremendous you know ... it's an eye opener' (NZE10).

Overall, comfort from holistic care and assistance was enhanced when delivered by staff with comforting staff qualities (refer 'Engagement and Commitment"). Experiencing such care sets the tone for positive patient-staff relationships and satisfaction with the service.

I trust them. That's their work to give life back to people that's their work. Very hard work, but they never tum their back they try to do their work ... [Pjeople going to hospital, they always talk about the nurses and I basically said it was absolutely true. You know they're the front-line staff thoroughly. That's how I believe them' (P4).

Conversely, a failure of staff to appear caring, helpful and responsive to one's needs harboured resentment and made patients wary of future and the ones you deal with every day and they're all amazing' (NZE2) engagement with that staff member.

She didn't seem to be caring enough, yeah. I woke up having a bad dream and asked her to get me a flannel, which they don't even ask, can 1?, didn't have any bedclothes on because I was so hot but they don't even ask if they can put bedclothes on you know and so it's little things like that, you know. [How does that affect you]. I think it affects me in the way that when I ring the bell I hope she doesn't come you know. She was on nights and I was thinking gosh I hope that lady don't come again' (M2)

| Table 3 C                       | Continued   |  |
|---------------------------------|---|--|
| Influence                       | Operational definition  | Subthemes and supporting evidence*†  |
| Staff engagement and commitment | Knowing that staff (all roles) are watchful and available when needed is fundamental to a sense of comfort. Patients' comfort is also enhanced when staff make an effort to connect (are welcoming and friendly), when they promote positivity through reassurance and encouragement, are considerate and responsive to patients' needs and when they demonstrate understanding of patients' discomfort (distress, uncertainty and vulnerability) using therapeutic strategies tailored to individual need. Strategies include empathetic listening, taking time to explain, comforting touch, careful use of humour/chit chat, maintaining privacy, dignity and a respectful and carring manner during interactions. Being cared for in this way is foundational to a positive patient experience and appears to have therapeutic importance by promoting positive patientstaff relationships and a willingness to engage with staff, the service and health promoting behaviour in general. | The operational definition for the theme 'Engagement and Commitment' summarises the findings from three underlying subthemes.  Condrofting staff presence - layers of surveillance and availability Patients' perceptions that staff are present and available to them promotes emotional confort associated with feeling safe and cared for. A comforting staff presence consisted of three layers: perception of 24 hours nursing presence; contact with doctors via ward or pain rounds, even in the first and incoming the staff were available should they be needed.  [She pinmary nurse] might be attending another person but if she is normally it's – 'can you wait?' but you know they're going to come' (MZEB).  Staff qualities described as comforting were summarised as:  Staff qualities described as comforting the staff and smilling).  Feassuing, encouraging and promoting positivity.  Fensel present and warm  I thought the gui from Melbourne up in the surgery I thought she had a very comforting and emplained in the surgery I thought she was very good she just sort of says you'll be oldest and give your arm a part or something like that/INZE1).  Therapeutic conforting strategies tailored to patients' individual needs'  Conforting staff were those who combined conforting qualities with individualised strategies in a way that was foundational to a positive patient experience and prose who combined conforting qualities with individualised strategies to disclose concerns, participation in care and relationation and conforting patients' willingness to disclose concerns, participation in care and relationation gas and patients strongly unpleasant procedures/mobilisation (emphassing the necessity of the procedure while pure and possitive patients with meany day about the surgery of t |

|           | Subthemes and supporting evidence*+ |
|-----------|-------------------------------------|
| ontinued  | Operational definition              |
| Table 3 C | Influence                           |

Participation

Information

topic and sensitive to patients' situation and Information promotes comfort by reducing and the care provided. However, informing be provided by staff knowledgeable in the patients is an art and science; to comfort lies ahead. Information also comforts by patients to prepare for and accept what (and not distress), information needs to the distress of uncertainty and enables promoting trust and confidence in staff personal preference for detail.

treatment decisions. Feeling disempowered, inclined to seek help, report symptoms, ask why and how to report symptoms, who feel Individualised care is essential for patients' to be concerned for their welfare are more for clarification and participate in care and who are accurately informed about when, comfortable with staff and perceive them emotional and physical comfort. Patients or unable to participate in care decisions, can distress

The operational definition for the theme 'Information and Participation' summarises the findings from three underlying subthemes:

Importance of personalised care, personalised information'

Underpinning the operational definition of this theme is the importance of personalising symptom management and holistic care. As such, patients needed to feel empowered to initiate non-standardised care and participate in treatment decisions.

Similarly, the right 'dose' of information was crucial to patients' sense of comfort because information could either comfort or frighten and I had a bit of nausea but as soon as I mentioned it people tried to help me with it' (M4).

I came to see the anaesthetist and the only question I asked him was you just make sure I wake up ... that's the only thing that really frightened distress. Patients' information needs were variable and personal. me' (M2).

Patients gained a sense of comfort from understanding what is currently happening and what is likely to happen. This information helps them "When delivered well, information underpins comfort (feeling prepared, reassured, accepting; can personalised care)"

prepare for and accept what lies ahead.

Information about what, when and how to report symptoms or other causes of discomfort supported patient's ability to personalise care, ... the surgeon has been very comforting. He came along and explained, nice warm eyes you know' (M2).

including safe self-triage, which was common.

I never ring the bell straightaway. No, 1 just hang on [and think] whether why this pain comes in, why the pain, why I got a pain? ... I try to play

Information was also important for addressing attitudinal barriers to symptom management. fair and square' (P4).

[They did say, however little your pain is it's good to let them know. Don't be a tough boy and handle the pain you know which is what I would probably do' (M8).

However, sometimes information does not (and indeed cannot) comfort. Under these circumstances, staff experienced in the art and science of informing are pivotal. Balancing information about risk with positivity was important, as was being believable. For one patient, this meant staff nformation also comforted by reassuring patients their symptoms and side effects they were experiencing was normal and likely to pass. being 'confident but not cocky' (NZE5).

(There was one nurse [who] was just very, very good at just calming me down in general and just saying the right things to make me just feel a Feeling comfortable with staff - the subtle factor influencing personalised care, patient participation' ittle bit more comfortable. Others have been very good at explaining the technical side of things...' (NZES)

I just sort of you know let them do what they've got to do. I just want them to do their job yep. And just say nothing to them like I'm alright' (M6). Feeling comfortable with staff underpinned patients' willingness and ability to personalise care. For example, patients could be reluctant to ask questions, disclose concerns or use the call bell between times of staff-initiated contact for reasons that included expectations of an unfavourable reaction from staff, not wanting to 'annoy' staff, a reluctance to question the 'experts' or take up valuable time.

However, patients' preferences for participation varied, and there was a level of comfort to be gained from having confidence in staff to step back from decision making. Patients tended to seek greater involvement when symptoms were poorly controlled, when they were anxious They'll show you, there's the buzzer if you need me, when you need me, just push the buzzer don't be worried about what time it is' (M1). uncomfortable situation of reluctant (rather than willing) acceptance of care and treatment. This was emotionally distressing and delayed to avoid complications or worried about their safety. At these times, feeling unable to participate in care decisions placed patients in an Staff who demonstrated comforting qualities (refer Engagement and Commitment) helped to minimise these barriers.

[Discussing pain management] It could be better I think but who am I you know? These guys are professionals. They know what they're talking effective symptom management. As such, comfort and participation are inextricably linked.

| Table 3 Continued                     | Sontinued  |  |
|---------------------------------------|--|--|
| Influence                             | Operational definition   | Subthemes and supporting evidence*†  |
| Perceived<br>and actual<br>competence | The perception of clinical competency promotes a sense of comfort (safety and ease) because patients feel confident in the care provided. However, all staff—clinical and ancillary—have the potential to be comforting by being competent in their role while mindful of patients' comfort needs. | The operational definition for the theme 'Perceived and Actual Competence' summarises the findings from two underlying subthemes:  'Perception of competence' Perception of competence' Perceiving that staff were competent was comforting in the sense that patients felt at ease and confident in the care provided.  ' [The doctors and the nurses they re very confident in how they attend you.(How does that make you feel?) Relaxed. And in good care' (M7).  'Actual competence – expert comforters' Staff competence related to each influence is essential. Staff whom patients particularly remembered for their comforting qualities were those that seemed to blend competence and commitment with comforting qualities. In some cases, care was not protocol driven; indeed, some staff had deviated from protocols to make a difference, such as ancillary staff enabling family to visit outside of visiting times, or a nurse letting a sleep-deprived patient sleep in a spare room. Other examples were the surgeon who expertly managed a patients' pain, the sonographer who described to one patient how well her new heart valve was working and the kaumätua who had knowledge of tikanga Māori (Māori protocols and practices).  ' [H]e said to me oh you from [place]? I said yeah. And he's been up there too and that's where I'm from. That's my marae I identified with him for being from the same place as he is, somebody from home being Māori and him coming to talk to me it's good, made a big difference [It was I uplifting' (M5). |

Patient interviews were coded by ethnicity and interview order, that is, M1 is the first Māori interview, P1 for the first Pacific interview and NZE1 is the first New Zealand European (NZE) interview Examples are from Stage 2 two semi-structured interviews of patients undergoing heart surgery for a sense of comfort related to feeling cared for and safe (see table 3, holistic care and assistance).

Comfort from holistic care and assistance was enhanced when delivered by staff with qualities described in the third theme, 'Engagement and Commitment'. This theme relates to a sense of comfort arising from patients' perceptions that staff were engaged in, and committed to, their welfare. Staff presence was important, which encompassed: the perception of 24 hours nursing presence; contact with doctors via ward rounds; and knowing that staff were available should they be needed. Comforting staff qualities included making an effort to connect, providing reassurance, encouragement and responding to patients' discomfort or distress using therapeutic strategies tailored to individual need (see table 3, engagement and commitment).

The fourth theme related to staff influence was 'Information and Participation', which influenced comfort in complex ways. When delivered well, information influenced comfort by enabling patients to feel prepared, reassured or, at least, accept the need for treatment and care. In addition, information and participation opportunities moderated patients' ability to personalise many aspects of care important for their comfort. For example, patients were more likely to seek help, disclose concerns or report symptoms when clearly informed about when, why and how to do so. Personalising care in this way also seemed more likely when patients felt comfortable with staff (refer to 'Engagement and Commitment'). Preferences for participation varied but feeling overlooked, or unable to participate in care decisions could distress (see table 3, information and participation).

The fifth staff-related theme was 'Perceived and Actual Competence'. Perception of staff competence was comforting in the sense that patients felt at ease and confident in the care provided. Actual competence in all influences was crucial. Interview data indicated that all staff can influence comfort by being competent in their role while mindful that patients' need for comfort is individual and may occur at any stage of their healthcare experience (see table 3, perceived and actual competence).

Factors within the clinical environment

The outer layer of the CALM framework relates to the theme 'Physical Facilities and Ambience', which summarises factors within the clinical environment that influence comfort (see table 4, physical facilities and ambience). Among the factors important here were an ambience of caring and positivity, observing that staff had time for all patients' needs, having control over one's personal space (lights and noise) and facilities that were clean, well-equipped and family-friendly.

# **DISCUSSION**

Through a two-stage process commencing with an integrative review involving 62 studies<sup>24</sup> followed by semistructured patient interviews, we have: (1) defined patients' perspectives on comfort and (2) developed a multidimensional framework representing patients' perspectives on

|   | al environment          |  |
|---|-------------------------|--|
|   | the clinical (          |  |
|   | within the              |  |
|   | mfort wi                |  |
|   | es on co                |  |
| ; | Influences on comfort w |  |
|   | Table 4                 |  |

Subthemes and supporting evidence\*† Operational definitior Influence

Influence
Physical facilities
and ambience

who acknowledge, welcome and keep family informed; can be difficult therefore supporting patients' personal beds, chairs and fresh air) and support self-comforting and Wi-Fi) and a sense that one's culture is respected. sleep is crucial. Additionally, facilities should be clean, strategies such as faith-based activity, distraction (TV Family's unique comforting role is facilitated by staff Patients feel comfortable (at ease, positive and safe) well equipped, physically comfortable (temperature, home, feeling confined and sharing personal space amily-friendly space and flexible visiting times are in a clinical environment in which staff are positive, preferences for privacy, companionship, quiet and helpful, have time for all patients' needs and work as a cohesive team (all roles and all ethnicities) to relieve discomfort and distress. Being away from

The operational definition for the theme 'Physical Facilities and Ambience' summarises the findings from four underlying

I've never once felt I didn't want to be here'

type of thing... I've never once felt I didn't want to be here, if I had to be somewhere doing what I'm doing you know this will do Contributing to comfort was an ambience of caring, positivity (staff are friendly and encouraging) and support, irrespective of [What makes you feel cared for]... It's quite subtle, [but] you soon pick it up... really caring you know. I feel comfortable here who was on duty.

me' (NZE7). Even the people that are bringing breakfast for us and the cleaners, they're all good, good people' (M5).

… I get a bit stressed because I think the nurse in there now she's amazing …[but] she's the only one and she's doing the best job she can ... I find it a bit hard because everyone's demanding things off her ... she hasn't had her break and everybody else observing staff working as a cohesive team. Perceiving that there were enough staff to meet all patients' care needs (not just Being able to rest/sleep without constant interruptions or disturbance from lights and noise was crucial. Also important was their own) was important. Patients did not like seeing busy, overworked staff, or other patients not getting prompt attention. you know gets on top of her. I find that really hard to watch' (NZE6).

'Facilitating family's comforting role'

included making an effort to connect with family, acknowledging and validating family's situation, supporting advocacy, keeping Important here was that family felt welcome, supported and able to be involved through staff actions and behaviour that them informed and through flexible visiting hours.

him to be quite honest. He's a bit naughty he sort of sits there beside me over the hour (when ward is closed to visitors)but then ... [M]y husband's come in every day and that's been good and hard for him. I'll be pleased to get home to make it easier for he doesn't talk. He just sits there and holds my hand' (NZE4).

Physical facilities that were important for comfort include those that support privacy, rest and sleep (quiet, comfortable beds) Physical facilities are clean, well equipped and facilitate all other influences on comfort'

are clean and essential equipment is readily available.

[T]he top-up of the hand gloves, the towel, it's very good. You know they don't wait until they run out ...(How does that make you feel when you see that?) I feel comfortable, yes. Yeah I feel comfortable you know...I get used to seeing the nurses wear the gloves, so I always feel good. That's hygienic to me wearing the gloves' (P6).

for prayer/ karakia) and cultural connectedness (such as culturally diverse décor). For example, this is what a tapa cloth wall Also important are family-friendly facilities, family space and an environment that sustains spiritual connectedness (place

hanging signified to one Pacific patient: '... [O]ur island is respected by here, our culture and everything like that' (P4)

Control over personal space

The inability to control one's personal space with respect to lights, noise disturbances, roommates and other patients' visitors could be very distressing.

which is 100% worse when you're feeling awful ... I like everything to be right and you can't have it right when you're in hospital then you want to go to sleep their lights are on and they won't turn the lights off and that's happened here all this week. This is not your place; you're a guest here. So my tendency is to not sleep because of that' (NZE2)

Patients appreciated staff-initiated efforts to reduce environmental stressors as they were reluctant to ask roommates, family or staff to curtail activities.

Patient interviews were coded by ethnicity and interview order, that is, M1 is the first Māori interview, P1 for the first Pacific interview and NZE1 is the first New Zealand European (NZE) interview. Examples are from stage 2 semistructured interviews of patients undergoing heart surgery. NZE, New Zealand European

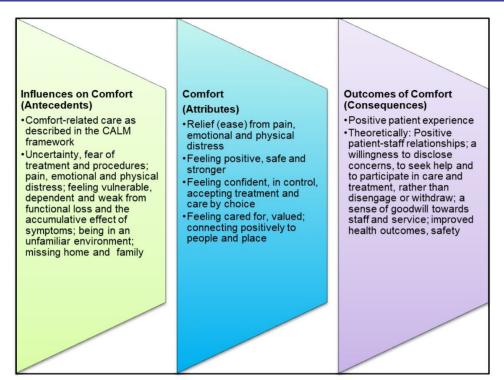


Figure 2 Influences, attributes and outcomes of comfort, CALM, Comfort ALways Matters.

important comfort-related care. Operational definitions for each theme reflect the essence of care that matters to patients and the integrated nature of this care.

Our definition of comfort broadly aligns with others  $^{8\ 10\ 11}$  in the sense that comfort is defined as a dynamic and multidimensional state. Similarly, nurse theorists, <sup>8</sup> <sup>33–37</sup> multiple qualitative studies<sup>24</sup> and concept analyses <sup>9</sup> <sup>10</sup> <sup>12</sup> <sup>23</sup> <sup>38–40</sup> have consistently described the holistic dimensions of comfort and the art of comforting that we believe are captured in our findings. However, the CALM framework differs from most comfort frameworks/models<sup>21 41-48</sup> in that patients' perspectives of all influencing factors are captured in one unifying framework. Differentiating the definition of comfort (the state) from the process of comforting (influencing factors) meant that findings are presented as a more 'tangible product' considered essential for implementing qualitative findings into practice<sup>49</sup> (p. 765). Operational definitions are generated from rich, in-depth data using methods explicitly exploring patients' perspectives. We suggest these definitions provide a clearer direction for practice and quality improvement than other published frameworks. 21 41-48 50

# Implications for practice and quality improvement

Improving patients' experiences of care is core to health-care quality. Patient experience is defined as 'the sum of all interactions, shaped by an organization's culture, that influence patient perceptions across the continuum of care' [p. 10]. Improving patient experience, therefore, requires an understanding of what matters to patients during their interactions with healthcare staff. Work in this area has resulted in a range of frameworks and

guiding principles.<sup>6</sup> <sup>52</sup> <sup>53</sup> Comfort-related care incorporates many factors considered important for patient experience<sup>54</sup> including compassionate care<sup>55</sup> <sup>56</sup>; compassion most simply described as 'the recognition of and response to the distress and suffering of others'<sup>56</sup> (p. 310).

One could assume that initiatives aimed at improving patient experience will also improve comfort. However, all patients interviewed had experienced distressing events even though patient experience indicators at the research site suggested a high-level of person-centred care. Similarly, examples of missed nursing care described in the literature (also known as errors of omission or care rationing) 19 22 57-60 relate to care patients described as important for comfort, such as position changes, patient surveillance, comforting/talking with patients, pain management, patient teaching and feeling prepared for discharge. These similarities highlight the inextricable link between care promoting comfort and that inherent in high-quality, safe care.

However, improvement targeting causes of missed nursing care is not the only consideration when aiming to maximise patients' comfort. First, important care is not specific to the actions of any discipline or indeed clinical staff. Second, staff (any role) may not be able to provide the care they wish to provide because of factors beyond their control (eg, lack of equipment, unsupportive ward culture and absence of evidence-based symptom protocols). Therefore, the breadth and depth of all that matters indicate that maximising patients' comfort requires an informed and systematic approach aimed at supporting staff to provide the person-centred care they most likely wish to provide. We therefore ask that healthcare leaders consider how the



CALM framework may be used to drive a culture of care that maximises patient comfort, beginning with the message that comfort-related care is essential work <sup>19 57-61</sup> encompassing a caring, compassionate response to human distress <sup>54-56</sup> for which healthcare leaders have accountability to promote, monitor and address omissions.

Three principles underpin application of the CALM framework. The first is appreciating the context-specific nature of comfort, meaning that the detail of care underlying each of the broad influences may differ by condition, ethnicity and age. For example, effective symptom management is crucial for comfort, but distressing symptoms may fluctuate by type and stage of a condition. Similarly, family influenced the comfort of patients of all ethnicities but how patients define family and comforting activities differs by ethnicity, age and stage of condition.<sup>31</sup> The second is that individualised care underpins all operational definitions. Efforts to reduce unwarranted variability through standardised care must not be at the expense of the intuitive art of comforting. The third is that all staff can comfort (or distress). Therefore, consider actions of clinical and ancillary staff when applying the framework. Operational definitions can be used to guide conversations with patients, family and staff about their perception of important care for each influence, with identified gaps providing a basis for improvement work.

# **Transferability**

Triggers for the need for comforting care identifed in stage 2 were consistent with those identified in other inpatient settings. Similarly, the definition of comfort and the CALM framework appear applicable to a range of inpatient populations. Transferability is suggested on the basis that patients of different clinical conditions, age, ethnicity and from a range of inpatient settings within 15 countries held similar perspectives on the meaning of comfort and the care that influenced it.

# **Strengths and limitations**

A comprehensive conceptual framework<sup>24</sup> focused the exploration of patients' perspectives in a clinical setting. Definitions are data derived and represent patients' perspectives. Our method enabled categorisation of concept characteristics in a way that promotes translation into practice; upwards of 60 attributes of comfort and comforting have been previously identified. <sup>10</sup> This is the first study that has set out to explore a cultural dimension of comfort. Findings collectively represent perspectives held by Māori, Pacific and NZE participants, suggesting that the CALM framework encompasses culturally responsive care. Importantly, within the CALM framework, the patient determines the extent to which culturally safe care is being provided through their sense of feeling 'Culturally connected', that is, they and their family feel welcome; actions and behaviours of others indicate understanding and respect for one's cultural norms and values. This emphasis is consistent with the notion of unsafe cultural practice as 'any action which

diminishes, demeans or disempowers the cultural identity and well being of an individual'. 62

Recruitment stopped when we reached an understanding of how perspectives on comfort broadly differ by ethnicity. However, more can be learnt of the underlying detail for each influencing factor, such as preferences for comforting staff behaviour, attitudes to pain management or body modesty. In accordance with Morse's view, <sup>63</sup> data saturation on all possible context-specific or individual details was not our intent. Peer debriefing by experienced qualitative researchers throughout all stages of the analysis, Māori and Pacific consultation, prolonged engagement (1082 min of interview), negative case analysis and triangulation methods<sup>27</sup> promote credibility of the findings. Triangulation—using multiple data sources to produce understanding-was used in both stages of this research. Stage 1 compared findings generated from theoretical and qualitative research (methods triangulation) and involving people from a range of healthcare settings, ages and ethnicities spanning decades of healthcare (triangulation of sources).<sup>27</sup> Further triangulation occurred in stage 2 when patient interview data were contrasted with findings from the integrative review and included studies.<sup>31</sup> Concept clarification was sought during all interviews.<sup>27</sup> However, a limitation is that participants were not asked to comment on the findings.

# **Implications for research**

Replication of this research may lead to further refinements of operational definitions, evaluate claims of transferability and build an evidence base of context-specific care. Exploring staff perspectives on comfort and determinants of comfort-related care in healthcare settings will inform implementation strategies. Research is also required to identify how the art of comforting can be taught and modelled in clinical practice and educational curricula.

The influence of comfort on patients' outcomes may go beyond patients' experiences of care (see figure 2). Our interview data indicate that a sense of comfort during one's healthcare interaction is associated with positive patient–staff relationships, a willingness to disclose concerns, to seek help and to participate in care and treatment, rather than disengage or withdraw. Other qualitative studies exploring comfort have proposed similar outcomes. An informed, systematic approach to maximising patients' comfort may, therefore, improve not only patients' experiences but also population health, particularly in vulnerable sections of the population. These potential benefits warrant further evaluation. Clinically relevant metrics for quantifying comfort and monitoring important aspects of care are also needed.

# CONCLUSION

This research provides new insights into what comfort means to patients, the care required to promote their comfort and the reasons for which doing so is important. We have developed a definition of comfort and the CALM



framework, which can be used by healthcare leaders and clinicians to guide practice and quality initiatives aimed at maximising comfort and minimising distress in a range of inpatient populations. A focus on comfort by individuals is crucial, but leadership will be essential for driving the changes needed to reduce unwarranted variability in care that affects comfort.

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Acknowledgements The authors would like to thank all staff in the Cardiac Surgical Unit, Auckland City Hospital, He Kamaka Waiora, Māori Health and Pacific Health, Auckland City Hospital, Auckland New Zealand, for supporting this research. The authors would also like to thank the patients who generously agreed to participate in interviews and share their experiences of care, without whom this research would not have been possible.

Contributors CW contributed to conceptualisation of the project, research design, undertook data collection, analysis, wrote the first draft of the manuscript and coordinated its multiple revisions. MB contributed to conceptualisation of the project, research design, analysis and interpretation of the data and critical revision of the manuscript. AM contributed to research design, analysis and interpretation of the data and critical revision of the manuscript. AFM contributed to conceptualisation of the project, research design, interpretation of stage 1 data and critical revision of the manuscript.

Funding This work was supported by an Australian Postgraduate Award (to CW) and a Deakin University Postgraduate Research Scholarship, Australia (to CW).

# Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

# Patient consent for publication Not required.

Ethics approval Ethics approval was gained from Deakin University Human Research Ethics Committee (2013–180), the New Zealand Health and Disability Ethics Committee (13/CEN/95) and the institution at which recruitment and interviewing occurred (A+5824).

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Consistent with our institution's ethics approval, no additional data generated in this study can be made available.

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# **REFERENCES**

- 1 Picker Institute Europe. About Us: Our history & impact. Available: https://www.picker.org/about-us/our-history-impact/ [Accessed Nov 2019].
- 2 Charmel PA, Frampton SB. Building the business case for patient-centered care. *Healthc Financ Manage* 2008;62:80–5.
- 3 Committee on Quality of Health Care in America, Institute of MedicineKohn LT, Corrigan J, Donaldson MS, eds. To err is human:

- building a safer health system. Washington, D.C: National Academy Press. 2000.
- 4 National Institute for Health and Clinical Excellence. Patient experience in adult NHS services: improving the experience of care for people using adult NHS services clinical guidance, 2012. Available: https://www.nice.org.uk/guidance/cg138/evidence/fullguideline-pdf-185142637 [Accessed Nov 2019].
- 5 Gerteis M, Edgman-Levitan S, Daley J. Through the patient's eyes: understanding and promoting patient-centered care, 1993.
- 6 Picker Institute Europe. Principles of patient centred care 2017, 2017. Available: http://www.picker.org/about-us/principles-ofpatient-centred-care/ [Accessed May 2017].
- 7 Institute of Medicine, Committee on Quality of Health Care in America. Crossing the quality chasm: a new health system for the 21st century. Washington, DC: National Academy Press, 2001.
- 8 Kolcaba K. Comfort theory and practice. New York: Springer Publishing company, 2003.
- 9 Lowe LM, Cutcliffe JR. A concept analysis of comfort. In: Cutliffe JR, McKenna HP, eds. The essential concepts of nursing: building blocks for practice. London: Elsevier, 2005.
- 10 Siefert ML. Concept analysis of comfort. Nurs Forum 2002;37:16-23.
- 11 Morse JM. Comfort: the refocusing of nursing care. Clin Nurs Res 1992;1:91–106.
- 12 Tutton E, Seers K. An exploration of the concept of comfort. J Clin Nurs 2003;12:689–96.
- 13 Lin Y-P, Watson R, Tsai Y-F. Dignity in care in the clinical setting: a narrative review. *Nurs Ethics* 2013;20:168–77.
- 14 Baillie L. Patient dignity in an acute hospital setting: a case study. Int J Nurs Stud 2009;46:23–37.
- 15 Gray A, Cox J. The roots of compassion and empathy: implementing the Francis report and the search for new models of health care. Eur J Pers Cent Healthc 2015;3:122–30.
- 16 The Mid Staffordshire NHS Foundation Trust Inquiry. Independent inquiry into care provided by mid Staffordshire NHS Foundation trust; 2010. https://www.gov.uk/government/publications/independent-inquiry-into-care-provided-by-mid-staffordshire-nhs-foundation-trust-january-2001-to-march-2009
- 17 Bauer A. First, do no harm: the patient's experience of avoidable suffering as harm. Patient Exp J 2018;5:13–15.
- 18 Dixon-Woods M, Baker R, Charles K, et al. Culture and behaviour in the English National health service: overview of lessons from a large multimethod study. BMJ Qual Saf 2014;23:106–15.
- 19 Lake ET, Germack HD, Viscardi MK. Missed nursing care is linked to patient satisfaction: a cross-sectional study of US hospitals. BMJ Qual Saf 2016;25:535–43.
- 20 Allen T, Rieck T, Salsbury S. Patient perceptions of an AIDET and hourly rounding program in a community hospital: results of a qualitative study. *Patient Exp J* 2016;3:42–9.
- 21 Tutton E, Seers K. Comfort on a ward for older people. J Adv Nurs 2004;46:380–9.
- 22 Aiken LH, Sloane DM, Ball J, et al. Patient satisfaction with hospital care and nurses in England: an observational study. BMJ Open 2018;8:e019189.
- 23 Pinto S, Caldeira S, Martins JC, et al. Evolutionary analysis of the concept of comfort. *Holist Nurs Pract* 2017;31:243–52.
- 24 Wensley C, Botti M, McKillop A, et al. A framework of comfort for practice: an integrative review identifying the multiple influences on patients' experience of comfort in healthcare settings. Int J Qual Health Care 2017;29:151–62.
- 25 Sandelowski M. What's in a name? qualitative description revisited. Res Nurs Health 2010;33:77–84.
- 26 Ball K, Swallow V. Patient experiences of cardiac surgery and nursing care: a narrative review. *British Journal of Cardiac Nursing* 2016;11:348–58.
- 27 Lincoln YS, Guba EG. Naturalistic inquiry. Beverly Hills: Calif: Sage Publications, 1985: 9. 438–9.
- 28 Thomas DR. A general inductive approach for analyzing qualitative evaluation data. *Am J Eval* 2006;27:237–46.
- 29 Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006;3:77–101.
- 30 Ritchie J, Lewis J, McNaughton Nicholls C, et al. Qualitative research practice: a guide for social science studers and researchers. Los Angeles, California: Sage, 2014.
- 31 Wensley C. A multidimensional framework of comfort for practice and quality improvement, 2018: 312. http://dro.deakin.edu.au/view/DU: 30111035
- 32 O'Brien BC, Harris IB, Beckman TJ, et al. Standards for reporting qualitative research: a synthesis of recommendations. Acad Med 2014;89:1245–51.

- 33 Orlando IJ. The dynamic nurse-patient relationship: function, process, and principles. New York: National League for Nursing, 1900
- 34 Paterson J, Zderad L. Humanistic nursing, 1976. http://www.gutenberg.org/files/25020/25020-8.txt
- 35 Hall LE. The Loeb center for nursing and rehabilitation, Montefiore hospital and medical center, Bronx, New York. Int J Nurs Stud 1969;6:81–97.
- 36 Watson J. Nursing the philosophy and science of caring, revised edition. Boulder University Press of Colorado, 2008. http://www.jstor. org/stable/j.ctt1d8h9wn
- 37 Leininger MM. Culture care diversity and universality: a theory of nursing. New York: National League for Nursing Press, 1991.
- 38 Kolcaba KY, Kolcaba RJ. An analysis of the concept of comfort. J Adv Nurs 1991;16:1301–10.
- 39 Malinowski A, Stamler LL. Comfort: exploration of the concept in nursing. J Adv Nurs 2002;39:599–606.
- 40 Oliveira I. Comfort measures: a concept analysis. Res Theory Nurs Pract 2013;27:95–114.
- 41 Williams AM, Irurita VF. Therapeutic and non-therapeutic interpersonal interactions: the patient's perspective. *J Clin Nurs* 2004;13:806–15.
- Williams AM, Irurita VF. Enhancing the therapeutic potential of hospital environments by increasing the personal control and emotional comfort of hospitalized patients. *Appl Nurs Res* 2005;18:22–8.
- 43 Williams AM, Irurita VF. Emotional comfort: the patient's perspective of a therapeutic context. *Int J Nurs Stud* 2006;43:405–15.
- 44 Williams AM, Dawson S, Kristjanson LJ. Exploring the relationship between personal control and the hospital environment. J Clin Nurs 2008;17:1601–9.
- 45 Chau L, Hegedus L, Praamsma M, et al. Women living with a spinal cord injury: perceptions about their changed bodies. Qual Health Res 2008;18:209–21.
- 46 Yousefi H, Abedi HA, Yarmohammadian MH, *et al.* Comfort as a basic need in hospitalized patients in Iran: a hermeneutic phenomenology study. *J Adv Nurs* 2009;65:1891–8.
- 47 Coelho A, Parola V, Escobar-Bravo M, et al. Comfort experience in palliative care: a phenomenological study. *BMC Palliat Care* 2016;15:1–8.
- 48 Morse JM, Havens GA, Wilson S. The comforting interaction: developing a model of nurse-patient relationship. *Sch Inq Nurs Pract* 1997;11:321–47.
- 49 Morse JM. Towards understanding comfort and comforting. In:
  Analyzing and Conceptualizing the theoretical foundations of

- nursing. New York: United States Springer Publishing Company, 2017: 675–98
- 50 Kolcaba KY. Holistic comfort: operationalizing the construct as a nurse-sensitive outcome. ANS Adv Nurs Sci 1992;15:1–10.
- 51 Wolf JA, Niederhauser V, Marshburn D, et al. Defining patient experience. Patient Exp J 2014;1:7–19.
- 52 Institute for Healthcare Improvement. Person- and Family-Centered care 2015. Available: http://www.ihi.org/Topics/PFCC/Pages/ Overview.aspx [Accessed Jul 2018].
- 53 The Beryl Institute. Experience framework. Available: https://www. theberylinstitute.org/page/ExperienceFramework [Accessed Jul 2018].
- 54 Wolf JA. To care is human: the factors influencing human experience in healthcare today 2018. Available: https://www.theberylinstitute. org/page/ToCareIsHuman [Accessed Jan 2019].
- 55 Durkin J, Usher K, Jackson D. Embodying compassion: a systematic review of the views of nurses and patients. *J Clin Nurs* 2019;28:1380–92.
- 56 Lown BA, McIntosh S, Gaines ME, et al. Integrating Compassionate, Collaborative Care (the "Triple C") Into Health Professional Education to Advance the Triple Aim of Health Care. Acad Med 2016;91:310–6.
- 57 Ball JE, Murrells T, Rafferty AM, et al. 'Care left undone' during nursing shifts: associations with workload and perceived quality of care. BMJ Qual Saf 2014;23:116–25.
- 58 Ball JE, Bruyneel L, Aiken LH, et al. Post-Operative mortality, missed care and nurse staffing in nine countries: a cross-sectional study. Int J Nurs Stud 2018;78:10–15.
- 59 Kalisch BJ, Landstrom G, Williams RA. Missed nursing care: errors of omission. *Nurs Outlook* 2009;57:3–9.
- 60 New Zealand Nurses Organisation. NZNO position statement on care rationing 2014. Available: http://www.nzno.org.nz/carerationing [Accessed Jul 2017].
- 61 Feo R, Conroy T, Jangland E, et al. Towards a standardised definition for fundamental care: a modified Delphi study. J Clin Nurs 2018;27:2285–99.
- 62 Nursing Council of New Zealand. Guidelines for cultural safety, the Treaty of Waitangi and Māori health in nursing education and Practice2011. Available: http://nursingcouncil.org.nz/Publications/ Standards-and-guidelines-for-nurses [Accessed Jul 2018].
- 63 Morse JM. "Data were saturated ...". Qual Health Res 2015;25:587–8.
- 64 Zelazny SM, Chang JC, Burke JG, et al. Adolescent and young adult women's recommendations for establishing comfort with family planning providers' communication about and assessment for intimate partner violence. J Commun Healthc 2019;12:32–43.