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What do medical ward patients want, and do they get it? A comparison of patient priorities in care quality and current practice in quality measurement

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3 **What do medical ward patients want, and do they get it?**
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6 **A comparison of patient priorities in care quality and current**
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9 **practice in quality measurement**
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ABSTRACT

Objectives

To compare the quality metrics selected for public display in NHS medical wards to patients' and carers' expressed quality priorities.

Design

Observational assessment of general medical ward practice and semi-structured interviews.

Setting

UK tertiary hospital

Participants

Fourteen patients and carers on acute medical wards and geriatric wards.

Results

Quality metrics on public display evaluated hand hygiene, hospital-acquired infections, nurse staffing, pressure ulcers, falls, and patient feedback. The intended audience for these metrics was unclear, and the displays gave no indication as to whether performance was improving or worsening. Interviews identified three perceived key components of high quality ward care: communication, staff attitudes, and hygiene. These aligned poorly with the priorities on display. Incomplete performance reporting had the potential to reduce patients' trust in their medical teams. More philosophically, patients' and carers' ongoing experiences of care would override any other evaluation, and they felt little need for measures relating to previous performance. The display of performance reports only served to emphasise patients' and carers' lack of control in this inpatient setting.

Conclusions

There is a persistent gap between general medical inpatients' care priorities and the aspects of care that are publicly reported. Patients and carers do not act as 'informed choosers' of healthcare in the inpatient setting, and tokenistic quality measurement may have unintended consequences.

STRENGTHS AND LIMITATIONS OF THE STUDY

- The study highlights the differences between inpatients' views of care quality and the care priorities expressed through public performance reporting.
- Participants included older, frail patients, and those who did not speak English as a first language – demographics often excluded from safety and quality research.
- The 'static' performance measures seen at the study site are typical of those reported in other literature.
- Other repositories for quality metrics, beyond the ward displays analysed here, may better approximate patient priorities.

INTRODUCTION

Patient involvement is a priority for the patient safety and healthcare quality movement,¹ but how best to involve patients remains unclear. Policymakers favour the transparent publication of quality metrics as a means of engaging patients in their care, framing this engagement as an informed choice of healthcare provider. In the right context, providing appropriate information can improve patients' and carers' participation in their care, perhaps even improving outcomes.² In the UK, this 'informed choice' argument has led to the mandatory display of performance metrics on NHS inpatient wards.³

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3 In the acute setting, however, inpatients are unlikely to use performance measures as would
4 typical 'consumers'. Few choices are available. The debilitation and stress of an acute illness
5 can impede information processing, and intense anxiety can lead to active information
6 avoidance. This may equally affect patients' families or carers, who focus on the immediate
7 health concerns of their loved ones. Even when patients are comfortable accessing complex
8 information at home, they should be treated as 'situationally-impaired' in the hospital
9 environment.⁴ Whether inpatients value service-level metrics, and how they relate to them,
10 have not yet been evaluated.

11
12 Here, we compare the quality metrics selected for public display in NHS medical wards to
13 patients' and carers' expressed quality priorities. We aim to capture patients' and carers'
14 perceptions of a 'good ward', and evaluate their reactions to the quality metrics on display.
15 Our secondary aim was to identify a set of quality metrics which might align incentives for
16 the varied stakeholders on these units – including staff, managers and patients.

34 METHODS

35
36 The study was conducted on general medical wards, which provide the majority of acute
37 inpatient care but struggle for organisational attention or targeted improvement strategies.⁵
38 We assessed ward information displays in acute medical wards and geriatric wards at a
39 tertiary hospital in London, with a standardised instrument. Free text notes highlighted any
40 adjacent information on the display boards. Examples were photographed with a digital
41 camera. Photos were then used as prompts in semi-structured interviews with general
42 medical inpatients and their carers at the hospital. The interviews were based on a topic
43 guide, co-developed with patient and carer representatives, exploring care priorities and the
44 concept of a 'good ward' [Online supplement].

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3 Ward staff (doctors, nurses, and allied professionals) were asked to suggest patients or
4 carers who would be physically capable of taking part in an interview. Participants were
5 aged over 18 years, and able to provide informed consent. Patients were excluded if they
6 were physiologically unstable, had major cognitive or communication difficulties, or did not
7 speak English. The interviews took place at patients' bedsides, as described previously in
8 qualitative work with hospitalised medical patients.⁶ The interviews were conducted by a
9 specialist registrar in internal medicine and gastroenterology, undertaking a PhD in
10 healthcare quality improvement, with previous experience of qualitative research (SP).
11 Interviews were audiotaped, and then transcribed verbatim. Using NVivo (QSR International,
12 Australia), two researchers (SP and SA) analysed the transcripts using an inductive thematic
13 analysis.⁷ Data collection ceased when the study reached saturation, with no new themes
14 emerging. Other qualitative interview studies reached data saturation within the first 12
15 interviews.⁸

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32 Ethical approval was granted by the Westminster Research Ethics Committee (16/LO/0196)
33 and the hospital's joint research compliance office (16SM3129).

34 35 36 37 38 39 *Patient involvement*

40 The interview topic guide was co-produced with local patient and carer representatives, who
41 in turn canvassed their patient and carer networks for opinions and feedback. The patient
42 representative (FH) co-authored the final manuscript reporting the study's results.
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49 **RESULTS**

50 51 *Interview participants*

52 Fourteen people were interviewed (nine patients and five carers). Seven were female.

53 Patients had a median age of 75 (range 57-86), with a median length of stay of five days.
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3 71% of participants spoke English as a first language. Half of the patients depended on
4 family or community support, and one-third of them had undergone other hospital
5 admissions in the preceding six months. Nine interviews took place on the acute medical
6 wards and five on medicine for the elderly wards. Interviews lasted a median of 23 minutes
7 (range 11-48 minutes).
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15 *What performance metrics were on display, and how were they portrayed?*

16 Performance metrics evaluated hand hygiene, hospital-acquired infections (MRSA and
17 C.difficile), nurse staffing, pressure ulcers, falls, and patient feedback [**Online supplement &**
18 **Table 1**]. The intended audience for these metrics was often unclear: individual display
19 boards contained combinations of messages for patients and staff. Possessive pronouns (our
20 and your) and pronouns (we and you) were used interchangeably, within the same display,
21 to refer to both patients and staff.
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32 Performance measures were displayed with little background information or context. Each
33 metric was displayed as a single, static measure of performance, with no evidence of trends
34 over time. There was no indication of an acceptable benchmark. No patient-actionable
35 information was given for any of the performance measures, other than a suggestion to
36 speak to a senior nurse for more information about staffing on the ward. Ward displays
37 about local quality and safety priorities (e.g., 'MRSA compliance') were not explicitly linked
38 to previous performance.
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49 *Thematic analysis: what makes a 'good ward' in the eyes of the patients and their carers?*

50 The interviews identified three key components of high quality ward care: communication,
51 staff attitudes, and hygiene.
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1. Communication

Participants felt entirely dependent on staff to keep them abreast of forthcoming investigations and treatments. They valued prompt communication and were keenly aware of its absence. At the same time, they recognised that treatment plans would frequently change, often for reasons outside of their teams' control, and simply held those teams accountable for keeping them updated:

'I know it is not always possible that definitive information is available. But as long as you are informed to the ability that they can inform you, you cannot have any gripes about that. If someone says to you, "Look, you may go home tomorrow", I am big enough and ugly enough to know that it may be the day afterwards...' (Patient 3)

The value of effective, shared communication within the multidisciplinary team was also highlighted. The capacity to speak to one team member, and have that conversation disseminated promptly to the rest of the team, was a key feature of good performance:

'I have found you'll be speaking to one person – and it could be a nurse or a doctor or anybody else – and at the end of the day, everybody knows what I'm talking about... So you can communicate with [just] one person... It's a vital thing.' (Carer 1)

Most comments about information sharing within multidisciplinary teams came from carers, rather than patients. This perhaps reflected the role of carers in the ward environment, where they act both as an information source for professional teams and as advocates for the patients.

2. Staff attitudes

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3 The second element of high quality care was staff attitude. Considerable attention was paid
4 to *how* staff went about their work: staff attentiveness, or ‘service’, influenced whether
5 patients felt they were on a good ward. Adjectives like ‘jolly’, ‘respectful’ and ‘helpful’, or
6
7 ‘abrupt’ and ‘wishy-washy’, were not so much seen as individual personality attributes, as
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9 they were features of work performance:
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15 *‘[A] good ward is to be helpful to patients, being more human than a machine, you*
16 *understand?’ (Patient 2)*
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21 *‘I think it’s the attitude of people [that makes a good ward]. It’s the main thing.’*
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23 *(Patient 6)*
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28 Thus, the manner of care delivery – rather than the resources available for it – largely
29 defined the care experience. The corollary of this was the potential for a major change
30 between one shift and the next, even on the same ward. There was a sense, perhaps, that
31 rather than a good or bad ward there were just good shifts or bad shifts:
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38 *‘Where it changes more than anything else is at night, when you have a complete*
39 *change of staff. Sometimes the night staff that come on are absolutely fantastic, and*
40 *are very engaged. But sometimes they are entirely the opposite. It is like, “Well we*
41 *are just here to get you through until the morning, when the people that are looking*
42 *after you come back.”’ (Patient 3)*
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51 As well as analysing their own interactions with staff, patients and carers were keen
52 observers of the working relationships between different professionals on the ward.
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Whether staff seemed appreciative of each other's efforts, or were openly disrespectful to one another, caused patients to wonder how they too were being treated:

'[You might think] the more staff, the better the person feels, and that is not how I feel... Everything depends on the lower level[s] of staff we've got working in the ward... and their position [should be] respected by the doctors and the more senior people... They did all [sorts of tasks], and nobody seemed to recognise that they were doing something like that...' (Patient 7)

'Two nurses were having a fight with each other, and that's not very good for the rest of us. And of the course the supervisor was asking them to be quiet, because they were shouting and screaming at each other.' (Patient 4)

Yet these observations of staff behaviours were quite nuanced. Patients recognised different types of unproductive working relationships, describing over-familiarity (*'almost like a bunch of friends working together'* – Patient 3), as well as open antagonism. They also made allowances for the general workload on the ward, even excusing displays of inappropriate behaviour:

'There's a lot of pressure put on the staff, you know it's understandable. You can see that they're actually very tired people, they needed a good rest, and that's why the whole thing gets on top of them, they're overworked.' (Patient 4)

3. Hygiene

In a similar vein, patients and carers expressed quite subtle views of why they held hygiene standards to be important. First, good hygiene was *de facto* evidence of a ward that was

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3 providing safe care, with little risk of iatrogenic infection. Patients and carers were conscious
4
5 of the possibility of hospital-acquired infection, understanding it as a major risk associated
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7 with inpatient care. Minimising that risk made it possible to focus on the acute medical
8
9 issues at hand. Second, good hygiene served as a deeper marker of staff pride, diligence and
10
11 attention to detail, all of which were reassuring:
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15 *'The cleanliness aspect, I think, is... more important than possibly people realise... It*
16
17 *sets out a marker if you like... if the mindset of the ward is, you know, "We are proud*
18
19 *of the place that we work in." So it is a fairly good marker of how that ward will*
20
21 *actually be.'* (Patient 3)
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26 *Thematic Analysis: How did patients and carers perceive the quality metrics on display?*
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30 1. Benefits – using infection data for hand hygiene, and understanding staff performance
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32 Patients and carers described some benefits of the quality metrics on display, particularly
33
34 when it came to infection data. They acknowledged prompts to focus on their own hand
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36 hygiene, whilst hoping that staff would do the same. In some cases, a vague familiarity with
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38 infection control terminology was helpful:
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43 *'Because that's in the press [MRSA rates], I suppose people do want to know that,*
44
45 *don't they? All of this you read in the papers of people being in hospital - they went*
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47 *in with one thing and they came out with that... You don't want to get worse.*
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49 *They're meant to be making you better.'* (Patient 5)
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53 Real-time information on staffing levels was also potentially helpful, in that it could help set
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55 realistic expectations of the care patients might receive:
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5 *'When I'm getting poor service on a particular day, at least I can see that there might*
6 *be a good reason for it... I would be more understanding, if I had to wait twice as*
7 *long for help, if I knew that there was only half the number of staff there should be.'*

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11 *(Patient 8)*

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15 *'When I saw the amount of staff that you're supposed to have on the ward, there*
16 *were not half the staff. So the other staff that turned up were constantly busy,*
17 *running back and forth, and you can see how much stress they were [under]. But*
18 *they were doing a good job... You can see the nurse who has turned up is doing a*
19 *really good job.'* *(Carer 1)*

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28 2. Significant drawbacks – problems in information delivery, prioritisation of personal
29 experience, and unintended consequences

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34 However, patients and carers were largely disparaging about the quality metrics on display.
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36 There were numerous problems with information delivery, such as inadequate font size or
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38 colour contrast. Yet even with these issues addressed, the information provided was
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40 fundamentally inadequate to make a judgement about quality. Patients struggled to see the
41
42 relevance of a single figure when no trend or benchmark was provided:
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47 *'Obviously as a member of the public I want the minimum [information], but I have*
48 *nothing to compare it with. So if you [say], "We've not had one [infection] for three*
49 *years", I can't compare that with anything. So it doesn't mean anything to me...'*

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53 *(Carer 5)*

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3 *'That [single figure] doesn't mean anything. That doesn't inform. It could be an*
4 *increase... but it could be [a] decrease.'* (Patient 2)
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9 More broadly, participants felt little need for measures that related to their wards' previous
10 performance. Their ongoing experiences of care would override any other evaluation. From
11 each individual's perspective, their personal care was the priority, whether or not it
12 reflected a typical standard of care on that ward. In that light, other performance metrics
13 became irrelevant:
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22 *'I use my own judgement. If I'm satisfied: that's it.'* (Patient 9)
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26 *'If we want information, we ask for it and we get it. As long as [my relative] is alright*
27 *and getting looked after, I'm not really bothered about nothing else. If she's getting*
28 *well looked after, the nurses are lovely, their care is great... that's all we are*
29 *concerned about.'* (Carer 3)
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36 As a result, the production of ward quality metrics had some unintended consequences,
37 even going so far as to reduce patients' trust in the whole enterprise. The absence of
38 baseline data in quality displays in particular raised suspicions that poor performance was
39 being concealed.
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47 *'Let us face it... you have got your 100% figure there. Would you put up a 20%*
48 *figure? ... What would you be doing? You would be ruining the confidence of the*
49 *patients...'* (Patient 3)
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3 Patients and carers felt that staff had to have ownership of the quality agenda in hospital:
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5 quality metrics were for staff – not patients – to digest. Many interviewees drew
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7 comparisons with other settings in which they were consumers: as restaurant diners, or as
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9 car purchasers, where their ability to exercise a choice was crucial. Here, however, they had
10
11 no power to choose, and the display of performance reports only served to emphasise their
12
13 lack of control:
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17 *'It would be great if I'm admitted and I'm given a choice of five wards, and I would*
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19 *say, "Well, how do I know which one's which, which one's best?" My next question*
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21 *would be, "Can you give me the audits of those wards to show which has the highest*
22
23 *rating?" and I would go to that... If there's no choice, then it's all academic.'* (Patient
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25 8)
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30 *'Well, other than clean the wards, there's not a lot we can do is there? What else can*
31
32 *you do?' (Carer 4)*
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36 The 'Friends and Family Test' question was found to be particularly challenging, given that
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38 these patients had no choice in arriving on the ward in the first place, nor could subsequent
39
40 patients exercise a preference to get there. Indeed, the service pressures on hospital
41
42 admissions were so well publicised that the idea of choosing a ward seemed faintly
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44 ridiculous:
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49 *'Would I recommend a ward? How can you recommend a ward?... I mean, that's a*
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51 *daft question, because... they put you in the place you need to be, don't they?'*
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53 *(Patient 5)*
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DISCUSSION

To our knowledge, this is the first study to compare publicly-displayed performance metrics with patient and carer perceptions of high quality care on UK medical wards. We identified discrepancies between patient- and carer-identified priorities and the quality metrics relating to their care on general medical wards. Three core components of high quality general medical care (communication, staff attitudes, and hygiene) were only partially aligned with the performance measures on display. Specifically, we found process and outcome measures relating to hand hygiene and iatrogenic infection, but none specifically relating to attitudes or communication. Patients and carers acknowledged limited benefits to the display of performance data, but had significant reservations about how it was contextualised. They relied on their own experience of care to judge its quality, above any objective measure of performance. More philosophically, they questioned the purpose of publicly displayed performance data, given their lack of choice in this setting. In some cases, these reservations actually eroded trust in ward teams' performance.

This study builds on a body of research exploring patient priorities and patient involvement in the acute hospital setting. Boyd surveyed recently-discharged patients, similarly finding that communication, patient-professional interactions, hygiene and the technical delivery of care were their main priorities.¹⁰ Our study suggests that Boyd's findings (which excluded current inpatients) were not unduly affected by recall bias. Nonetheless, hospitalised patients remain relatively indifferent to service-level performance and change.¹¹ We suggest an explanation for this: current inpatients are unable to exercise informed choices about their ward, nor are they able to directly use information to improve performance. They are therefore excluded from the two key pathways by which performance measurement may lead to quality improvement.¹²

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3 Our findings support the recent call for the abolition of the mandatory 'Friends and family
4 test'.¹³ It is expensive to maintain, "at best tolerated, often ignored, and sometimes
5 ridiculed".¹³ The resulting tokenistic display of performance data erodes patients' trust in
6 their caregivers. It can also be corrosive for staff morale, both at the frontline and at board
7 level.^{14,15} This tokenism is perpetuated by a dearth of resources for implementing
8 improvement.^{1,16} A credible, co-produced, quality framework for acute medical inpatients is
9 urgently required, with outcomes that are sensitive to the work¹⁷ and structures¹⁸ of
10 inpatient care. Co-produced quality standards should capitalise on the active contributions
11 of patients and carers, rather than depicting them as 'informed choosers' of healthcare
12 provision.

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26 Study limitations include a relatively small sample from a single site. Nonetheless, the group
27 of interviewees was a representative one, and the study reached data saturation.

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30 Participants included older, frail patients, and a significant proportion did not speak English
31 as a first language – demographics often excluded from safety and quality research.¹⁹ Ward
32 displays were also representative: the use of 'static' performance measures, as seen here, is
33 widespread.²⁰ There are other repositories for quality metrics, beyond those ward displays
34 analysed here, which may better approximate patient priorities. However, they typically use
35 composites of the data we found,²¹ or are aggregated to the hospital level, with no ward-
36 level interpretation.^{22,23}

37 38 39 40 41 42 43 44 45 46 47 **CONCLUSION**

48
49 There is a persistent gap between general medical inpatients' care priorities and the aspects
50 of care that are publicly reported. Tokenistic quality measurement may have unintended
51 consequences, eroding patients' trust in ward teams.

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Table 1: Performance indicators available in public ward areas

<i>Performance indicator</i>	<i>Display choice</i>	<i>Display format</i>
Hand hygiene	Percentage in last audit	Most recent result only; numerator and denominator definitions not provided.
Hospital-acquired infections	Date of last recorded event	Most recent result only
Pressure ulcers	Date of last recorded event	Most recent result only
Falls	Date of last recorded event	Most recent result only
Nurse staffing	Numbers of staff required for the shift vs those actually on duty, for staff nurses and health care assistants	Most recent result only; explanation of staff responsibilities
Patient feedback	'Friends and Family Test' star rating; percentage of patients who would recommend the ward*	Most recent result only; examples of patients' comments; no explanation of star rating system

*The 'Friends and Family Test' asks "How likely are you to recommend our service to friends and family if they needed similar care or treatment?"⁹

TOPIC GUIDE: Current patient / carer for current patient**1. Let's find out about you.**

Age
Employment
Education – school / university / postgraduate
Social support structures & marital status
Ethnicity

2. Why are you in hospital now?

Current diagnosis
Other conditions
Approximate length of stay to date
 < 1 day
 1 – 5 days
 5 – 10 days
 > 10 days

3. How many times have you been admitted to hospital in the last 6 months?

1-5
5-10
>10

4. Do you always come to this hospital or have you been admitted to other local hospitals?**5. How do you know if you're on a good ward? What is a 'good ward' to you?**

Environment

- Clean
- Quiet
- Toilet and shower are available when required
- Meal timeliness, warmth
- Help available when requested
- Staff are responsiveness to my needs / my family's needs

Welcome

- My arrival is expected
- Staff introduce themselves
- Staff make me feel I will be well looked after; show a caring attitude; and don't rush me

Communication and use of personal information

- Accurate knowledge of previous medical history / current diagnosis / current investigations / discharge plan / medication reconciliation
- Quality of communication / teamwork

Discharge preparation

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5 Friends' / families' recommendations
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7
8 Ward information boards / quality and safety boards
9

10 Ward information leaflets / other printed materials.
11

12 Ward information displays / electronic screens
13

14 **6. If you had to decide whether a ward was good or not, what information would you need to**
15 **make that decision?**
16

17
18 **7. Have you noticed any of the information the ward displays about itself? What do you think of**
19 **the information you've seen?**
20

21 Friends and family test results

22 Safety cross

23 Shift-by-shift staffing

24 Falls

25 Pressure ulcers

26 Safety thermometer / harm-free care

27 Venous thromboembolism prophylaxis

28 Hand hygiene compliance

29 Hospital-acquired infections

30 Infection rates

31 Incident reporting
32
33

34 **8. What would you like to know about how your ward is performing?**
35

36 Hand hygiene compliance

37 Staffing levels

38 Friends and family results

39 Hospital-acquired infections

40 Pressure Ulcers

41 Falls

42 Venous thromboembolism prophylaxis

43 Complaints

44 Compliments

45 Length of stay

46 Mortality

47 Readmission rate

48 Safety climate
49
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52 **9. How should your ward make that information available to you and your family??**
53

54 Ward displays

55 Leaflets

56 Smartphone / other device

57 Webpage
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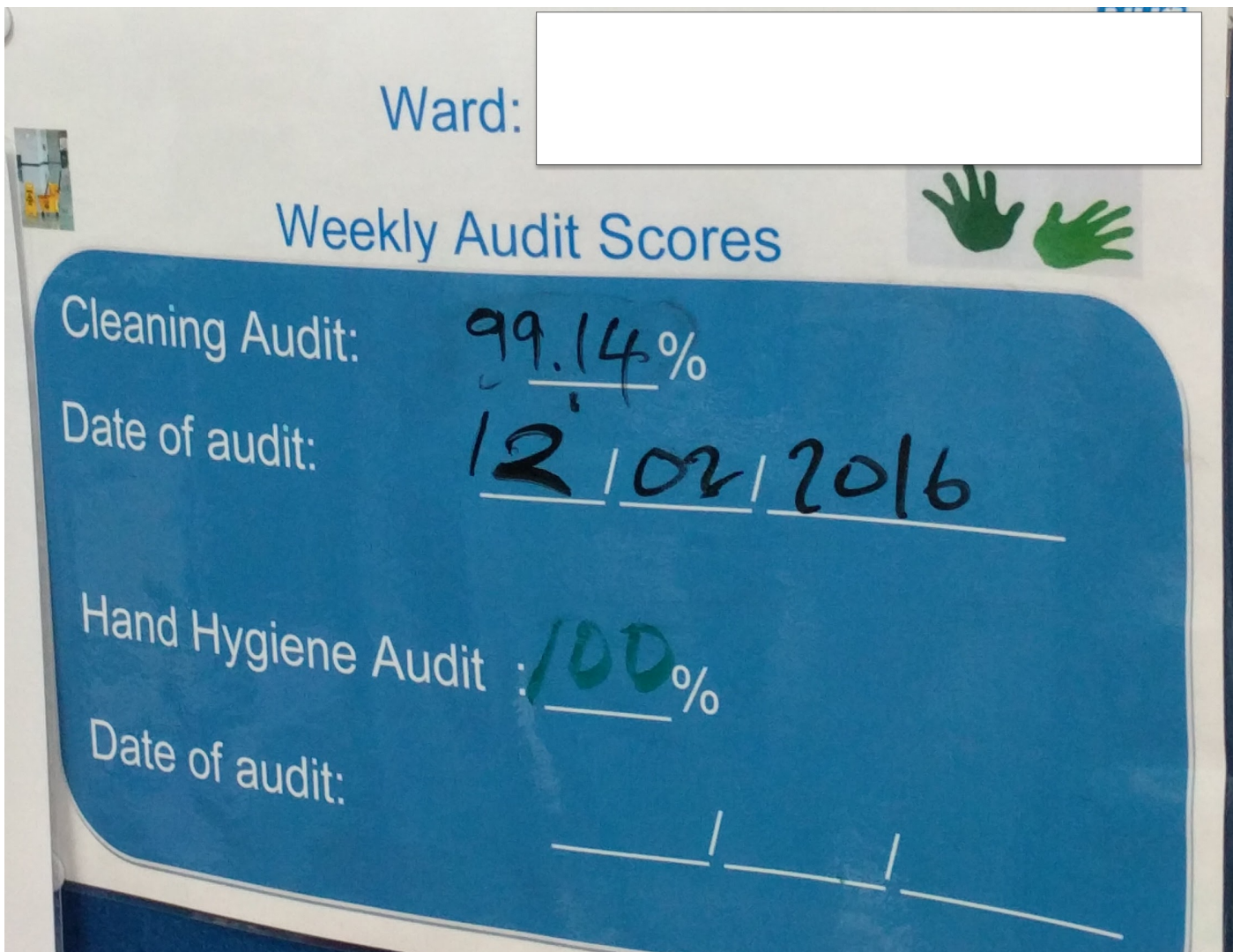
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3 **10. Preference for information seeking**
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5 Information-seeking sub-scale
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	Disagree strongly	Disagree slightly	Neutral	Agree slightly	Agree strongly
10 11 12 As you become sicker you should be told more and more about your illness					
13 14 15 You should understand completely what is happening inside your body as a result of your illness					
16 17 18 Even if the news is bad, you should be well informed					
19 20 21 Your doctor should explain the purpose of your laboratory tests					
22 23 24 It is important for you to know all the side effects of your medication					
25 26 27 Information about your illness is as important to you as treatment					
28 29 30 When there is more than one method to treat a problem, you should be told about each one					

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39 **11. Have you previously had to complain about care or healthcare staff, nurses or doctors? What made you complain? How? PALS / informally / in writing?**
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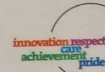
Ward: [redacted]
Patient Safety Information

Our last pressure ulcer (graded 1-4) was on:

JULY 2015

Our last patient fall was on:

23.9.2015



Ward: [redacted]
Infection Control Information

Our last incidence of MRSA was on:

25.05.14

Our last incidence of C.Diff was on:

15.12.14



I-Staff Safe Staffing Information Board

The Nurse in Charge today is:

[Redacted]

Staffing Status

[Redacted]

DATE:

15-2-15

Current Shift

Registered Nurses

Staff required

On duty

3

1

Healthcare Assistants

2

2

Additional Support
(for e.g. specials)

Roles and Responsibilities

	Responsibilities
Nurse in Charge	Provides supervision, management and direct clinical care
Registered Nurses	Provides direct clinical care and supervision
Health Care Assistants	Provides direct care under the supervision of a registered nurse
Additional Support	Specials (may be registered or unregistered providing 121 direct care with supervision)

If you have any queries about the staffing on this ward please speak to the Nurse in Charge

COREQ (CONsolidated criteria for REporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Topic	Item No.	Guide Questions/Description	Reported on Page No.
Domain 1: Research team and reflexivity			
<i>Personal characteristics</i>			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	
Occupation	3	What was their occupation at the time of the study?	
Gender	4	Was the researcher male or female?	
Experience and training	5	What experience or training did the researcher have?	
<i>Relationship with participants</i>			
Relationship established	6	Was a relationship established prior to study commencement?	
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	
Interviewer characteristics	8	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	
Domain 2: Study design			
<i>Theoretical framework</i>			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	
<i>Participant selection</i>			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	
Sample size	12	How many participants were in the study?	
Non-participation	13	How many people refused to participate or dropped out? Reasons?	
<i>Setting</i>			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	
<i>Data collection</i>			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	
Repeat interviews	18	Were repeat interviews carried out? If yes, how many?	
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	
Field notes	20	Were field notes made during and/or after the interview or focus group?	
Duration	21	What was the duration of the interviews or focus group?	
Data saturation	22	Was data saturation discussed?	
Transcripts returned	23	Were transcripts returned to participants for comment and/or	

Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
<i>Data analysis</i>			
Number of data coders	24	How many data coders coded the data?	
Description of the coding tree	25	Did authors provide a description of the coding tree?	
Derivation of themes	26	Were themes identified in advance or derived from the data?	
Software	27	What software, if applicable, was used to manage the data?	
Participant checking	28	Did participants provide feedback on the findings?	
<i>Reporting</i>			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	
Data and findings consistent	30	Was there consistency between the data presented and the findings?	
Clarity of major themes	31	Were major themes clearly presented in the findings?	
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

Once you have completed this checklist, please save a copy and upload it as part of your submission. DO NOT include this checklist as part of the main manuscript document. It must be uploaded as a separate file.

BMJ Open

What matters to medical ward patients, and do we measure it?

A qualitative comparison of patient priorities and current practice in quality measurement, on UK NHS medical wards

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2018-024058.R1
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Manuscripts

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3 **What matters to medical ward patients, and do we measure it?**
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6 **A qualitative comparison of patient priorities and current practice**
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9 **in quality measurement, on UK NHS medical wards**
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12

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15
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18
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34 NIHR Imperial PSTRC for her help developing the interview guide.
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ABSTRACT

Objectives

To compare the quality metrics selected for public display in NHS medical wards to patients' and carers' expressed quality priorities.

Methods

Qualitative observational assessment of general medical wards and semi-structured interviews.

Setting

UK tertiary NHS (public) hospital

Participants

Fourteen patients and carers on acute medical wards and geriatric wards.

Results

Quality metrics on public display evaluated hand hygiene, hospital-acquired infections, nurse staffing, pressure ulcers, falls, and patient feedback. The intended audience for these metrics was unclear, and the displays gave no indication as to whether performance was improving or worsening. Interviews identified three perceived key components of high quality ward care: communication, staff attitudes, and hygiene. These aligned poorly with the priorities on display. Suboptimal performance reporting had the potential to reduce patients' trust in their medical teams. More philosophically, patients' and carers' ongoing experiences of care would override any other evaluation, and they felt little need for measures relating to previous performance. The display of performance reports only served to emphasise patients' and carers' lack of control in this inpatient setting.

Conclusions

There is a gap between general medical inpatients' care priorities and the aspects of care that are publicly reported. Patients and carers do not act as 'informed choosers' of healthcare in the inpatient setting, and tokenistic quality measurement may have unintended consequences.

STRENGTHS AND LIMITATIONS OF THE STUDY

- Participants included older, frail patients, and those who did not speak English as a first language – demographics often excluded from safety and quality research.
- Our results build on the findings from post-discharge survey studies, free from recall bias.
- Current inpatients are in a vulnerable position and this may have affected some of their interview responses.
- The findings of this single-site study may not be generalisable, although the 'static' performance measures seen at the study site are typical of those reported in other literature.
- We focused on ward displays; other repositories for quality metrics, not in public view, may better approximate patient priorities.

INTRODUCTION

Patient involvement is a priority for the patient safety and healthcare quality movement,¹ but how best to involve patients remains unclear. Policymakers favour the transparent publication of quality metrics (i.e., performance reporting) as a means of engaging patients in their care, framing this engagement as an informed choice of healthcare provider. In the

1
2
3 right context, providing appropriate information can improve patients' and carers'
4 participation in their care, perhaps even improving outcomes.² In the UK, this 'informed
5 choice' argument has led to the mandatory display of performance metrics on NHS inpatient
6 wards.³
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13 In the acute setting, however, inpatients are unlikely to use performance measures as would
14 typical 'consumers'. These patients are rarely given a choice of provider. Instead, they are
15 assigned to an available ward, or medical team, as determined by organisational capacity. In
16 addition, the debilitation and stress of an acute illness can impede information processing,
17 and intense anxiety can lead to active information avoidance. This may equally affect
18 patients' families or carers, who focus on the immediate health concerns of their loved ones.
19 Even when patients are comfortable accessing complex information at home, they should be
20 treated as 'situationally-impaired' in the hospital environment.⁴ Whether inpatients value
21 service-level metrics, and how they relate to them, have not yet been evaluated.
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34 Here, we compare the quality metrics selected for public display in NHS medical wards to
35 patients' and carers' expressed quality priorities. We sought to capture patients' and carers'
36 perceptions of a 'good ward', to better understand their reactions to the quality metrics on
37 display.
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45 **METHODS**

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47 The study was conducted on general medical wards, which provide the majority of acute
48 inpatient care but struggle for organisational attention or targeted improvement strategies.⁵
49 We assessed ward information displays in two acute medical wards and two geriatric wards
50 at a tertiary NHS (public) hospital in London, with a standardised instrument. This captured
51 the type of performance metrics on public view (e.g., specific hospital-acquired infections or
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3 pressure ulcers); whether the metrics themselves were clearly defined; whether there was a
4
5 reference performance benchmark or goal; and how the information was displayed. Free
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7 text notes highlighted any adjacent information on the display boards.
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11 Examples were photographed with a digital camera. These images provided insights into the
12
13 time and priority that the displays were afforded in practice: images are powerful conduits
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15 for the feel and texture of environments.⁶ Visual materials '*reveal what is hidden in the inner*
16
17 *mechanisms of the ordinary*', providing perspective on everyday practices.⁶ This 'visual
18
19 sociology', or visual research method, also allows the researcher to reflect on what they
20
21 encounter in their fieldwork. In doing so, photographic meaning is constructed: one must be
22
23 aware that photos are not themselves unmediated or unbiased, but dependent on the
24
25 viewer.⁷ Although these documents of record are not undisputed, their value lies in
26
27 triangulation with other data, in this case the objective categorisation of their contents, and
28
29 in their interpretation by patients and carers.
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34 The photos were used as prompts in semi-structured interviews with general medical
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36 inpatients and their carers at the hospital. Interviews are key tools 'in assessing user views of
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38 services and healthcare provision, and in revealing why some care is perceived as poor
39
40 quality.'⁸ The interviews were based on a topic guide, co-developed with patient and carer
41
42 representatives, exploring care priorities and the concept of a 'good ward' [**Online**
43
44 **supplement**]. The topic guide was used flexibly, harnessing broad prompts and follow-up
45
46 questions, in view of the different roles of the participants (carers and patients) and their
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48 varying lengths of hospitalisation.
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53 Ward staff (doctors, nurses, and allied professionals) were asked to suggest patients or
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55 carers who would be physically capable of taking part in an interview. Participants were
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3 aged over 18 years, and able to provide informed consent. Patients were excluded if they
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5 were physiologically unstable, had major cognitive or communication difficulties, or did not
6
7 speak English. The interviews took place at patients' bedsides, as described previously in
8
9 qualitative work with hospitalised medical patients.⁹ Unintentional power relationships and
10
11 a false therapeutic rapport can develop within sensitive interviews, with implications for
12
13 data quality.^{10,11} To mitigate this, no members of the study team were involved in the
14
15 participants' clinical care, and this was clearly communicated to the interviewees when they
16
17 gave their consent to take part in the study. In addition, the interviews were framed as
18
19 entirely separate from their ongoing clinical care.¹¹ The interviews were conducted by a
20
21 specialist registrar in internal medicine and gastroenterology, undertaking a PhD in
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23 healthcare quality improvement, with previous experience of qualitative research (SP).
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25 Interviews were audiotaped, and then transcribed verbatim. Using NVivo (QSR International,
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27 Australia), two researchers trained in qualitative methods (SP – doctor; and SA -
28
29 psychologist) analysed the transcripts using an inductive (theory-generating) thematic
30
31 analysis.¹² Each researcher coded the transcripts individually, generating an individual coding
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33 frame, which was then discussed and refined between the two coders. The transcripts were
34
35 coded again, before a group of higher order themes was proposed. A third round of analysis
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37 – individually, and then with consensus – confirmed these metathemes and the aggregation
38
39 of coded transcript fragments within them. The two researchers serially reviewed these
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41 results as the interviews were ongoing, and data collection ceased when the study reached
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43 saturation, i.e. when no new themes were becoming apparent.
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49 Ethical approval was granted by the Westminster Research Ethics Committee (16/LO/0196)
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51 and the hospital's joint research compliance office (16SM3129).
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55 *Patient involvement*

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3 The interview topic guide was co-produced with local patient and carer representatives, who
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5 in turn canvassed their patient and carer networks for opinions and feedback. The patient
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7 representative (FH) co-authored the final manuscript reporting the study's results.
8
9

10 11 **RESULTS**

12 *Interview participants*

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14 Fourteen people were interviewed (nine patients and five carers). Seven people (four carers)
15
16 were female. Patients had a median age of 75 (range 57-86), with a median length of stay of
17
18 five days. 71% of participants spoke English as a first language. 44% (4/9) of patients
19
20 depended on family or community support, and 33% (3/9) of them had undergone other
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22 hospital admissions in the preceding six months. Nine interviews took place on the acute
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24 medical wards and five on medicine for the elderly wards. Interviews lasted a median of 23
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26 minutes (range 11-48 minutes).
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32 *What performance metrics were on display, and how were they portrayed?*

33
34 Performance metrics evaluated hand hygiene, hospital-acquired infections (MRSA and
35
36 C.difficile), nurse staffing, pressure ulcers, falls, and patient feedback [**Online supplement &**
37
38 **Table 1**]. The intended audience for these metrics was often unclear: individual display
39
40 boards contained combinations of messages for patients and staff. Possessive pronouns (our
41
42 and your) and pronouns (we and you) were used interchangeably, within the same display,
43
44 to refer to both patients and staff.
45
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48

49 Performance measures were displayed with little background information or context. Each
50
51 metric was displayed as a single, static measure of performance, with no evidence of trends
52
53 over time. There was no indication of an acceptable benchmark. No patient-actionable
54
55 information was given for any of the performance measures, other than a suggestion to
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2
3 speak to a senior nurse for more information about staffing on the ward. Ward displays
4
5 about local quality and safety priorities (e.g., 'MRSA compliance') were not explicitly linked
6
7 to previous performance.
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9

10
11 Patient and carer interviews were wide-ranging. For ease of understanding we have
12
13 aggregated the results into the following sections.
14
15

16
17 *What makes a 'good ward' in the eyes of the patients and their carers?*
18

19 The interviews identified three key components of high quality ward care: communication,
20
21 staff attitudes, and hygiene.
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24
25

26 1. Communication

27
28 Participants felt entirely dependent on staff to keep them abreast of forthcoming
29
30 investigations and treatments. They valued prompt communication and were keenly aware
31
32 of its absence. At the same time, they recognised that treatment plans would frequently
33
34 change, often for reasons outside of their teams' control, and simply held those teams
35
36 accountable for keeping them updated:
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39

40
41 *'I know it is not always possible that definitive information is available. But as long*
42
43 *as you are informed to the ability that they can inform you, you cannot have any*
44
45 *gripes about that. If someone says to you, "Look, you may go home tomorrow", I am*
46
47 *big enough and ugly enough to know that it may be the day afterwards...'* (Patient 3)
48
49

50
51 The value of effective, shared communication within the multidisciplinary team was also
52
53 highlighted. The capacity to speak to one team member, and have that conversation
54
55 disseminated promptly to the rest of the team, was a key feature of good performance:
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5 *'I have found you'll be speaking to one person – and it could be a nurse or a doctor or*
6 *anybody else – and at the end of the day, everybody knows what I'm talking about...*

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8
9 *So you can communicate with [just] one person... It's a vital thing.'* (Carer 1)

10
11
12
13 Most comments about information sharing within multidisciplinary teams came from carers,
14 rather than patients. This perhaps reflected the role of carers in the ward environment,
15 where they act both as an information source for professional teams and as advocates for
16 the patients.
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24 2. Staff attitudes

25
26 The second element of high quality care was staff attitude. Considerable attention was paid
27 to *how* staff went about their work: staff attentiveness, or 'service', influenced whether
28 patients felt they were on a good ward. Adjectives like 'jolly', 'respectful' and 'helpful', or
29 'abrupt' and 'wishy-washy', were not so much seen as individual personality attributes, as
30 they were features of work performance:
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36
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38 *'[A] good ward is to be helpful to patients, being more human than a machine, you*
39 *understand?'* (Patient 2)

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44
45 *'I think it's the attitude of people [that makes a good ward]. It's the main thing.'*
46
47 (Patient 6)

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50
51 Thus, the manner of care delivery – rather than the resources available for it – largely
52 defined the care experience. The corollary of this was the potential for a major change
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3 between one shift and the next, even on the same ward. There was a sense, perhaps, that
4
5 rather than a good or bad ward there were just good shifts or bad shifts:
6
7

8
9 *'Where it changes more than anything else is at night, when you have a complete*
10 *change of staff. Sometimes the night staff that come on are absolutely fantastic, and*
11 *are very engaged. But sometimes they are entirely the opposite. It is like, "Well we*
12 *are just here to get you through until the morning, when the people that are looking*
13 *after you come back."' (Patient 3)*
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19
20
21 As well as analysing their own interactions with staff, patients and carers were keen
22
23 observers of the working relationships between different professionals on the ward.
24
25 Whether staff seemed appreciative of each other's efforts, or were openly disrespectful to
26
27 one another, caused patients to wonder how they too were being treated:
28
29
30

31
32 *'[You might think] the more staff, the better the person feels, and that is not how I*
33 *feel... Everything depends on the lower level[s] of staff we've got working in the*
34 *ward... and their position [should be] respected by the doctors and the more senior*
35 *people... They did all [sorts of tasks], and nobody seemed to recognise that they were*
36 *doing something like that...'* (Patient 7)
37
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44
45 *'Two nurses were having a fight with each other, and that's not very good for the*
46 *rest of us. And of the course the supervisor was asking them to be quiet, because*
47 *they were shouting and screaming at each other.'* (Patient 4)
48
49
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51

52
53 Yet these observations of staff behaviours were quite nuanced. Patients recognised different
54
55 types of unproductive working relationships, describing over-familiarity (*'almost like a bunch*
56
57

1
2
3 *of friends working together' – Patient 3), as well as open antagonism. They also made*
4
5 allowances for the general workload on the ward, even excusing displays of inappropriate
6
7 behaviour:

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9
10
11 *'There's a lot of pressure put on the staff, you know it's understandable. You can see*
12
13 *that they're actually very tired people, they needed a good rest, and that's why the*
14
15 *whole thing gets on top of them, they're overworked.'* (Patient 4)
16
17

18 19 20 3. Hygiene

21
22 In a similar vein, patients and carers expressed quite subtle views of why they held hygiene
23
24 standards to be important. First, good hygiene was *de facto* evidence of a ward that was
25
26 providing safe care, with little risk of iatrogenic infection. Patients and carers were conscious
27
28 of the possibility of hospital-acquired infection, understanding it as a major risk associated
29
30 with inpatient care. Minimising that risk made it possible to focus on the acute medical
31
32 issues at hand. Second, good hygiene served as a deeper marker of staff pride, diligence and
33
34 attention to detail, all of which were reassuring:

35
36
37
38 *'The cleanliness aspect, I think, is... more important than possibly people realise... It*
39
40 *sets out a marker if you like... if the mindset of the ward is, you know, "We are proud*
41
42 *of the place that we work in." So it is a fairly good marker of how that ward will*
43
44 *actually be.'* (Patient 3)
45
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48

49 *How did patients and carers perceive the quality metrics on display?*

50 51 52 53 1. Benefits – using infection data for hand hygiene, and understanding staff performance

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3 Patients and carers described some benefits of the quality metrics on display, particularly
4 when it came to infection data. They acknowledged prompts to focus on their own hand
5 hygiene, whilst hoping that staff would do the same. In some cases, a vague familiarity with
6 infection control terminology was helpful:
7
8
9

10
11
12
13 *'Because that's in the press [MRSA rates], I suppose people do want to know that,*
14 *don't they? All of this you read in the papers of people being in hospital - they went*
15 *in with one thing and they came out with that... You don't want to get worse.*
16 *They're meant to be making you better.'* (Patient 5)
17
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24 Real-time information on staffing levels was also potentially helpful, in that it could help set
25 realistic expectations of the care patients might receive:
26
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28
29

30 *'When I'm getting poor service on a particular day, at least I can see that there might*
31 *be a good reason for it... I would be more understanding, if I had to wait twice as*
32 *long for help, if I knew that there was only half the number of staff there should be.'*
33
34
35
36
37 (Patient 8)
38
39

40 *'When I saw the amount of staff that you're supposed to have on the ward, there*
41 *were not half the staff. So the other staff that turned up were constantly busy,*
42 *running back and forth, and you can see how much stress they were [under]. But*
43 *they were doing a good job... You can see the nurse who has turned up is doing a*
44 *really good job.'* (Carer 1)
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- 53 2. Significant drawbacks – problems in information delivery, prioritisation of personal
54 experience, and unintended consequences
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5 However, patients and carers were largely disparaging about the quality metrics on display.
6
7 There were numerous problems with information delivery, such as inadequate font size or
8
9 colour contrast. Yet even with these issues addressed, the information provided was
10
11 fundamentally inadequate to make a judgement about quality. Patients struggled to see the
12
13 relevance of a single figure when no trend or benchmark was provided:
14

15
16
17 *'Obviously as a member of the public I want the minimum [information], but I have*
18
19 *nothing to compare it with. So if you [say], "We've not had one [infection] for three*
20
21 *years", I can't compare that with anything. So it doesn't mean anything to me...'*
22
23 *(Carer 5)*
24

25
26
27
28 *'That [single figure] doesn't mean anything. That doesn't inform. It could be an*
29
30 *increase... but it could be [a] decrease.'* *(Patient 2)*
31

32
33
34 More broadly, participants felt little need for measures that related to their wards' previous
35
36 performance. Their ongoing experiences of care would override any other evaluation. From
37
38 each individual's perspective, their personal care was the priority, whether or not it
39
40 reflected a typical standard of care on that ward. In that light, other performance metrics
41
42 became irrelevant:
43

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45
46
47 *'I use my own judgement. If I'm satisfied: that's it.'* *(Patient 9)*
48

49
50
51 *'If we want information, we ask for it and we get it. As long as [my relative] is alright*
52
53 *and getting looked after, I'm not really bothered about nothing else. If she's getting*
54

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2
3 *well looked after, the nurses are lovely, their care is great... that's all we are*
4
5 *concerned about.'* (Carer 3)
6
7
8

9 As a result, the production of ward quality metrics had some unintended consequences,
10 even going so far as to reduce patients' trust in the whole enterprise. The absence of
11 baseline data in quality displays in particular raised suspicions that poor performance was
12 being concealed.
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19
20 *'Let us face it... you have got your 100% figure there. Would you put up a 20%*
21 *figure? ... What would you be doing? You would be ruining the confidence of the*
22 *patients...'* (Patient 3)
23
24
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26
27

28 Patients and carers felt that staff had to have ownership of the quality agenda in hospital:
29 quality metrics were for staff – not patients – to digest. Many interviewees drew
30 comparisons with other settings in which they were consumers: as restaurant diners, or as
31 car purchasers, where their ability to exercise a choice was crucial. Here, however, they had
32 no power to choose, and the display of performance reports only served to emphasise their
33 lack of control:
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43 *'It would be great if I'm admitted and I'm given a choice of five wards, and I would*
44 *say, "Well, how do I know which one's which, which one's best?" My next question*
45 *would be, "Can you give me the audits of those wards to show which has the highest*
46 *rating?" and I would go to that... If there's no choice, then it's all academic.'* (Patient
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51 8)
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3 ‘Well, other than clean the wards, there’s not a lot we can do is there? What else can
4
5 you do?’ (Carer 4)
6
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8

9 The ‘Friends and Family Test’ question was found to be particularly challenging, given that
10
11 these patients had no choice in arriving on the ward in the first place, nor could subsequent
12
13 patients exercise a preference to get there. Indeed, the service pressures on hospital
14
15 admissions were so well publicised that the idea of choosing a ward seemed faintly
16
17 ridiculous:
18

19
20
21 ‘Would I recommend a ward? How can you recommend a ward?... I mean, that’s a
22
23 daft question, because... they put you in the place you need to be, don’t they?’
24
25 (Patient 5)
26
27
28
29

30 DISCUSSION

31
32 To our knowledge, this is the first study to compare publicly-displayed performance metrics
33
34 with patient and carer perceptions of high quality care on UK medical wards. We identified
35
36 discrepancies between patient- and carer-identified priorities and the quality metrics
37
38 relating to their care on general medical wards. Patients and carers expressed three core
39
40 components of high quality general medical care: communication, staff attitudes, and
41
42 hygiene. These were only partially aligned with the performance measures on display.
43
44 Specifically, we found process and outcome measures relating to hand hygiene and
45
46 iatrogenic infection, but none specifically relating to attitudes or communication. Patients
47
48 and carers acknowledged limited benefits to the display of performance data, but had
49
50 significant reservations about how it was contextualised. They relied on their own
51
52 experience of care to judge its quality, above any objective measure of performance. More
53
54 philosophically, they questioned the purpose of publicly displayed performance data, given
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1
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3 their lack of choice in this setting. In some cases, these reservations actually eroded trust in
4 ward teams' performance.
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8
9 This study builds on a body of research exploring patient priorities and patient involvement
10 in the acute hospital setting. Boyd surveyed recently-discharged patients, similarly finding
11 that communication, patient-professional interactions, hygiene and the technical delivery of
12 care were their main priorities.¹³ Our study suggests that Boyd's findings (which excluded
13 current inpatients) were not unduly affected by recall bias. Nonetheless, hospitalised
14 patients remain relatively indifferent to service-level performance and change.¹⁴ We suggest
15 an explanation for this: current inpatients are unable to exercise informed choices about
16 their ward, nor are they able to directly use information to improve performance. They are
17 therefore excluded from the two key pathways by which performance measurement may
18 lead to quality improvement.¹⁵
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32 Our findings question the mandatory collection, and display, of performance data that do
33 not align with patient priorities. These data collection exercises have considerable
34 opportunity costs. We note the recent call for the abolition of the mandatory 'Friends and
35 family test', one of the performance indicators we found on display, which has been
36 criticised on similar lines.¹⁶ These data sets are expensive to maintain, "*at best tolerated,*
37 *often ignored, and sometimes ridiculed*".¹⁶ The resulting tokenistic display of performance
38 data erodes patients' trust in the system that organises and governs their care. It can also be
39 corrosive for staff morale, both at the frontline and at board level.^{17,18} This tokenism is
40 perpetuated by a dearth of resources for implementing meaningful improvement.^{1,19} A
41 credible, co-produced, quality framework for acute medical inpatients is urgently required,
42 with outcomes that are sensitive to the work²⁰ and structures²¹ of inpatient care. Co-
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3 produced quality standards should capitalise on the active contributions of patients and
4
5 carers, rather than depicting them as 'informed choosers' of healthcare provision.
6
7

8
9 Study limitations include a relatively small sample from a single site. We collected
10
11 demographic data for patients but not their carers. Nonetheless, the group of interviewees
12
13 included demographics often excluded from safety and quality research: older, frail patients,
14
15 and those who do not speak English as a first language.²² The study reached data saturation,
16
17 with no new themes emerging as the final interviews took place. Ward displays at this site
18
19 were also typical for regional practice. 'Static' performance measures, as seen here, are
20
21 widespread, and even the performance data presented at healthcare board level rarely
22
23 depicts the role of chance in the formation of data patterns.^{23,24} Finally, other repositories
24
25 for quality metrics, beyond those ward displays analysed here, may better approximate
26
27 patient priorities. However, they typically use composites of the data we found,²⁵ or are
28
29 aggregated to the hospital level, with no ward-level interpretation.^{26,27}
30
31
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33

34 CONCLUSION

35
36 There is a gap between general medical inpatients' care priorities and the aspects of care
37
38 that are publicly reported. Tokenistic quality measurement may have unintended
39
40 consequences, eroding patients' trust in ward teams.
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Table 1: Performance indicators available in public ward areas

<i>Performance indicator</i>	<i>Display choice</i>	<i>Display format</i>
Hand hygiene	Percentage in last audit	Most recent result only; numerator and denominator definitions not provided.
Hospital-acquired infections	Date of last recorded event	Most recent result only
Pressure ulcers	Date of last recorded event	Most recent result only
Falls	Date of last recorded event	Most recent result only
Nurse staffing	Numbers of staff required for the shift vs those actually on duty, for staff nurses and health care assistants	Most recent result only; explanation of staff responsibilities
Patient feedback	'Friends and Family Test' star rating; percentage of patients who would recommend the ward*	Most recent result only; examples of patients' comments; no explanation of star rating system

*The 'Friends and Family Test' asks "How likely are you to recommend our service to friends and family if they needed similar care or treatment?"²⁸

TOPIC GUIDE: Current patient / carer for current patient**1. Let's find out about you.**

Age
Employment
Education – school / university / postgraduate
Social support structures & marital status
Ethnicity

2. Why are you in hospital now?

Current diagnosis
Other conditions
Approximate length of stay to date
 < 1 day
 1 – 5 days
 5 – 10 days
 > 10 days

3. How many times have you been admitted to hospital in the last 6 months?

1-5
5-10
>10

4. Do you always come to this hospital or have you been admitted to other local hospitals?**5. How do you know if you're on a good ward? What is a 'good ward' to you?**

Environment

- Clean
- Quiet
- Toilet and shower are available when required
- Meal timeliness, warmth
- Help available when requested
- Staff are responsiveness to my needs / my family's needs

Welcome

- My arrival is expected
- Staff introduce themselves
- Staff make me feel I will be well looked after; show a caring attitude; and don't rush me

Communication and use of personal information

- Accurate knowledge of previous medical history / current diagnosis / current investigations / discharge plan / medication reconciliation
- Quality of communication / teamwork

Discharge preparation

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2
3
4
5 Friends' / families' recommendations
6

7
8 Ward information boards / quality and safety boards
9

10 Ward information leaflets / other printed materials.
11

12 Ward information displays / electronic screens
13

14 **6. If you had to decide whether a ward was good or not, what information would you need to**
15 **make that decision?**
16

17
18 **7. Have you noticed any of the information the ward displays about itself? What do you think of**
19 **the information you've seen?**
20

21 Friends and family test results

22 Safety cross

23 Shift-by-shift staffing

24 Falls

25 Pressure ulcers

26 Safety thermometer / harm-free care

27 Venous thromboembolism prophylaxis

28 Hand hygiene compliance

29 Hospital-acquired infections

30 Infection rates

31 Incident reporting
32
33

34 **8. What would you like to know about how your ward is performing?**
35

36 Hand hygiene compliance

37 Staffing levels

38 Friends and family results

39 Hospital-acquired infections

40 Pressure Ulcers

41 Falls

42 Venous thromboembolism prophylaxis

43 Complaints

44 Compliments

45 Length of stay

46 Mortality

47 Readmission rate

48 Safety climate
49
50

51 **9. How should your ward make that information available to you and your family??**
52

53 Ward displays

54 Leaflets

55 Smartphone / other device

56 Webpage
57
58
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60

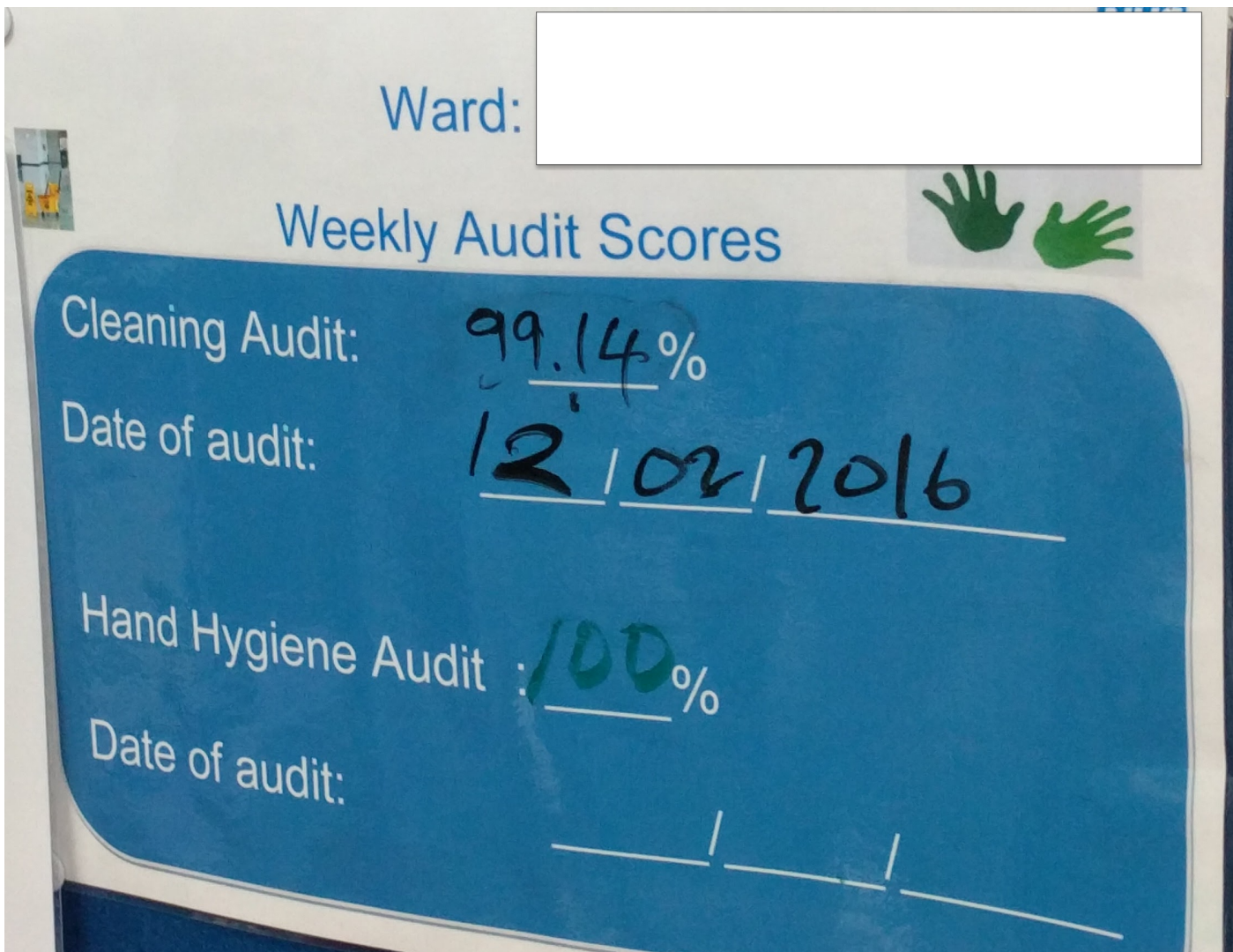
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3 **10. Preference for information seeking**
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5 Information-seeking sub-scale
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	Disagree strongly	Disagree slightly	Neutral	Agree slightly	Agree strongly
10 11 12 As you become sicker you should be told more and more about your illness					
13 14 15 You should understand completely what is happening inside your body as a result of your illness					
16 17 18 Even if the news is bad, you should be well informed					
19 20 21 Your doctor should explain the purpose of your laboratory tests					
22 23 24 It is important for you to know all the side effects of your medication					
25 26 27 Information about your illness is as important to you as treatment					
28 29 30 When there is more than one method to treat a problem, you should be told about each one					

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39 **11. Have you previously had to complain about care or healthcare staff, nurses or doctors? What made you complain? How? PALS / informally / in writing?**
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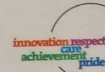
Ward: [redacted]
Patient Safety Information

Our last pressure ulcer (graded 1-4) was on:

JULY 2015

Our last patient fall was on:

23.9.2015



Ward: [redacted]
Infection Control Information

Our last incidence of MRSA was on:

25.05.14

Our last incidence of C.Diff was on:

15.12.14



I-Staff Safe Staffing Information Board

The Nurse in Charge today is:

[Redacted]

Staffing Status

[Redacted]

DATE:

15-2-15

Current Shift

Registered Nurses

Staff required

On duty

3

1

Healthcare Assistants

2

2

Additional Support
(for e.g. specials)

Roles and Responsibilities

	Responsibilities
Nurse in Charge	Provides supervision, management and direct clinical care
Registered Nurses	Provides direct clinical care and supervision
Health Care Assistants	Provides direct care under the supervision of a registered nurse
Additional Support	Specials (may be registered or unregistered providing 121 direct care with supervision)

If you have any queries about the staffing on this ward please speak to the Nurse in Charge

COREQ (CONsolidated criteria for REporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Topic	Item No.	Guide Questions/Description	Reported on Page No.
Domain 1: Research team and reflexivity			
<i>Personal characteristics</i>			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	
Occupation	3	What was their occupation at the time of the study?	
Gender	4	Was the researcher male or female?	
Experience and training	5	What experience or training did the researcher have?	
<i>Relationship with participants</i>			
Relationship established	6	Was a relationship established prior to study commencement?	
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	
Interviewer characteristics	8	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	
Domain 2: Study design			
<i>Theoretical framework</i>			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	
<i>Participant selection</i>			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	
Sample size	12	How many participants were in the study?	
Non-participation	13	How many people refused to participate or dropped out? Reasons?	
<i>Setting</i>			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	
<i>Data collection</i>			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	
Repeat interviews	18	Were repeat interviews carried out? If yes, how many?	
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	
Field notes	20	Were field notes made during and/or after the interview or focus group?	
Duration	21	What was the duration of the interviews or focus group?	
Data saturation	22	Was data saturation discussed?	
Transcripts returned	23	Were transcripts returned to participants for comment and/or	

Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
<i>Data analysis</i>			
Number of data coders	24	How many data coders coded the data?	
Description of the coding tree	25	Did authors provide a description of the coding tree?	
Derivation of themes	26	Were themes identified in advance or derived from the data?	
Software	27	What software, if applicable, was used to manage the data?	
Participant checking	28	Did participants provide feedback on the findings?	
<i>Reporting</i>			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	
Data and findings consistent	30	Was there consistency between the data presented and the findings?	
Clarity of major themes	31	Were major themes clearly presented in the findings?	
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

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BMJ Open

What matters to medical ward patients, and do we measure it?

A qualitative comparison of patient priorities and current practice in quality measurement, on UK NHS medical wards

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Manuscripts

What matters to medical ward patients, and do we measure it?

A qualitative comparison of patient priorities and current practice in quality measurement, on UK NHS medical wards

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1
2
3 study; collection, management, analysis or interpretation of the data; or preparation, review
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6
7 necessarily those of the NHS, the NIHR or the Department of Health and Social Care.
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10 *Contributions:*

11
12 Study design: SP, SA, TA, FH, NS, SJL. Study implementation and data collection: SA, SP, SJL.

13
14 Analysis: SA, SP, NS, FH, TA. All authors contributed to, read and approved the final
15
16 manuscript.
17

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19
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21 *Ethical approval:*

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24
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35
36

37
38
39 *Data sharing:* There are no additional unpublished data.
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41

42
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44 *Key words:* healthcare quality; medical ward; patient experience
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ABSTRACT

Objectives

To compare the quality metrics selected for public display in NHS medical wards to patients' and carers' expressed quality priorities.

Methods

Multi-modal qualitative evaluation of general medical wards and semi-structured interviews.

Setting

UK tertiary NHS (public) hospital

Participants

Fourteen patients and carers on acute medical wards and geriatric wards.

Results

Quality metrics on public display evaluated hand hygiene, hospital-acquired infections, nurse staffing, pressure ulcers, falls, and patient feedback. The intended audience for these metrics was unclear, and the displays gave no indication as to whether performance was improving or worsening. Interviews identified three perceived key components of high quality ward care: communication, staff attitudes, and hygiene. These aligned poorly with the priorities on display. Suboptimal performance reporting had the potential to reduce patients' trust in their medical teams. More philosophically, patients' and carers' ongoing experiences of care would override any other evaluation, and they felt little need for measures relating to previous performance. The display of performance reports only served to emphasise patients' and carers' lack of control in this inpatient setting.

Conclusions

There is a gap between general medical inpatients' care priorities and the aspects of care that are publicly reported. Patients and carers do not act as 'informed choosers' of healthcare in the inpatient setting, and tokenistic quality measurement may have unintended consequences.

STRENGTHS AND LIMITATIONS OF THE STUDY

- Participants included older, frail patients, and those who did not speak English as a first language – demographics often excluded from safety and quality research.
- Our results build on the findings from post-discharge survey studies, free from recall bias.
- Current inpatients are in a vulnerable position and this may have affected some of their interview responses.
- The findings of this single-site study may not be generalisable, although the 'static' performance measures seen at the study site are typical of those reported in other literature.
- We focused on ward displays; other repositories for quality metrics, not in public view, may better approximate patient priorities.

INTRODUCTION

Patient involvement is a priority for the patient safety and healthcare quality movement,¹ but how best to involve patients remains unclear. Policymakers favour the transparent publication of quality metrics (i.e., performance reporting) as a means of engaging patients in their care, framing this engagement as an informed choice of healthcare provider. In the right context, providing appropriate information can improve patients' and carers'

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3 participation in their care, perhaps even improving outcomes.² In the UK, this 'informed
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5 choice' argument has led to the mandatory display of performance metrics on NHS inpatient
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7 wards.³
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12 In the acute setting, however, inpatients are unlikely to use performance measures as would
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14 typical 'consumers'. These patients are rarely given a choice of provider. Instead, they are
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16 assigned to an available ward, or medical team, as determined by organisational capacity. In
17
18 addition, the debilitation and stress of an acute illness can impede information processing,
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20 and intense anxiety can lead to active information avoidance. This may equally affect
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22 patients' families or carers, who focus on the immediate health concerns of their loved ones.
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24 Even when patients are comfortable accessing complex information at home, they should be
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26 treated as 'situationally-impaired' in the hospital environment.⁴ Whether inpatients value
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28 service-level metrics, and how they relate to them, have not yet been evaluated.
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34 Here, we compare the quality metrics selected for public display in NHS medical wards to
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36 patients' and carers' expressed quality priorities. We sought to capture patients' and carers'
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38 perceptions of a 'good ward', to better understand their reactions to the quality metrics on
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40 display.
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45 **METHODS**

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48 The study was conducted on general medical wards, which provide the majority of acute
49
50 inpatient care but struggle for organisational attention or targeted improvement strategies.⁵
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52 We assessed ward information displays in two acute medical wards and two geriatric wards
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54 at a tertiary NHS (public) hospital in London, with a proforma. This captured the type of
55
56 performance metrics on public view (e.g., specific hospital-acquired infections or pressure
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58 ulcers); whether the metrics themselves were clearly defined; whether there was a
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1
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3 reference performance benchmark or goal; and how the information was displayed. Free
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5 text notes highlighted any adjacent information on the display boards.
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10 Examples were photographed with a digital camera. These images provided insights into the
11
12 time and priority that the displays were afforded in practice: images are powerful conduits
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14 for the feel and texture of environments.⁶ Visual materials '*reveal what is hidden in the inner*
15
16 *mechanisms of the ordinary*', providing perspective on everyday practices.⁶ This 'visual
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18 sociology', or visual research method, also allows the researcher to reflect on what they
19
20 encounter in their fieldwork. In doing so, photographic meaning is constructed: one must be
21
22 aware that photos are not themselves unmediated or unbiased, but dependent on the
23
24 viewer.⁷ Although these documents of record are not undisputed, their value lies in
25
26 triangulation with other data, in this case the objective categorisation of their contents, and
27
28 in their interpretation by patients and carers.
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34 The photos were used as prompts in semi-structured interviews with general medical
35
36 inpatients and their carers at the hospital. Interviews are key tools 'in assessing user views of
37
38 services and healthcare provision, and in revealing why some care is perceived as poor
39
40 quality.'⁸ The interviews were based on a topic guide, co-developed with patient and carer
41
42 representatives, exploring care priorities and the concept of a 'good ward' [**Online**
43
44 **supplement**]. The topic guide was used flexibly, harnessing broad prompts and follow-up
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46 questions, in view of the different roles of the participants (carers and patients) and their
47
48 varying lengths of hospitalisation.
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54 Ward staff (doctors, nurses, and allied professionals) were asked to suggest patients or
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56 carers who would be physically capable of taking part in an interview. Participants were
57
58 aged over 18 years, and able to provide informed consent. Patients were excluded if they
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60

1
2
3 were physiologically unstable, had major cognitive or communication difficulties, or did not
4 speak English. The interviews took place at patients' bedsides, as described previously in
5 qualitative work with hospitalised medical patients.⁹ Unintentional power relationships and
6 a false therapeutic rapport can develop within sensitive interviews, with implications for
7 data quality.^{10,11} To mitigate this, no members of the study team were involved in the
8 participants' clinical care, and this was clearly communicated to the interviewees when they
9 gave their consent to take part in the study. In addition, the interviews were framed as
10 entirely separate from their ongoing clinical care.¹¹ The interviews were conducted by a
11 specialist registrar in internal medicine and gastroenterology, undertaking a PhD in
12 healthcare quality improvement, with previous experience of qualitative research (SP).
13 Interviews were audiotaped, and then transcribed verbatim. Using NVivo (QSR International,
14 Australia), two researchers trained in qualitative methods (SP – doctor; and SA -
15 psychologist) analysed the transcripts using an inductive (theory-generating) thematic
16 analysis.¹² Each researcher coded the transcripts individually, generating an individual coding
17 frame, which was then discussed and refined between the two coders. The transcripts were
18 coded again, before a group of higher order themes was proposed. A third round of analysis
19 – individually, and then with consensus – confirmed these metathemes and the aggregation
20 of coded transcript fragments within them. The two researchers serially reviewed these
21 results as the interviews were ongoing, and data collection ceased when the study reached
22 saturation, i.e. when no new themes were becoming apparent.

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50 Ethical approval was granted by the Westminster Research Ethics Committee (16/LO/0196)
51 and the hospital's joint research compliance office (16SM3129).

52 53 54 55 56 57 *Patient involvement* 58 59 60

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3 The interview topic guide was co-produced with local patient and carer representatives, who
4
5 in turn canvassed their patient and carer networks for opinions and feedback. The patient
6
7 representative (FH) co-authored the final manuscript reporting the study's results.
8
9

10 11 12 **RESULTS**

13 14 *Interview participants*

15
16 Fourteen people were interviewed (nine patients and five carers). Seven people (four carers)
17
18 were female. Patients had a median age of 75 (range 57-86), with a median length of stay of
19
20 five days. 71% of participants spoke English as a first language. 44% (4/9) of patients
21
22 depended on family or community support, and 33% (3/9) of them had undergone other
23
24 hospital admissions in the preceding six months. Nine interviews took place on the acute
25
26 medical wards and five on medicine for the elderly wards. Interviews lasted a median of 23
27
28 minutes (range 11-48 minutes).
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32 33 34 *What performance metrics were on display, and how were they portrayed?*

35
36 Performance metrics evaluated hand hygiene, hospital-acquired infections (MRSA and
37
38 C.difficile), nurse staffing, pressure ulcers, falls, and patient feedback [**Online supplement &**
39
40 **Table 1**]. The intended audience for these metrics was often unclear: individual display
41
42 boards contained combinations of messages for patients and staff. Possessive pronouns (our
43
44 and your) and pronouns (we and you) were used interchangeably, within the same display,
45
46 to refer to both patients and staff.
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52 Performance measures were displayed with little background information or context. Each
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54 metric was displayed as a single, static measure of performance, with no evidence of trends
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56 over time. There was no indication of an acceptable benchmark. No patient-actionable
57
58 information was given for any of the performance measures, other than a suggestion to
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1
2
3 speak to a senior nurse for more information about staffing on the ward. Ward displays
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5 about local quality and safety priorities (e.g., 'MRSA compliance') were not explicitly linked
6
7 to previous performance.
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12 Patient and carer interviews were wide-ranging. For ease of understanding we have
13
14 aggregated the results into the following sections.
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19 *What makes a 'good ward' in the eyes of the patients and their carers?*

20
21 The interviews identified three key components of high quality ward care: communication,
22
23 staff attitudes, and hygiene.
24
25

26 27 28 1. Communication

29
30 Participants felt entirely dependent on staff to keep them abreast of forthcoming
31
32 investigations and treatments. They valued prompt communication and were keenly aware
33
34 of its absence. At the same time, they recognised that treatment plans would frequently
35
36 change, often for reasons outside of their teams' control, and simply held those teams
37
38 accountable for keeping them updated:
39
40

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42
43 *'I know it is not always possible that definitive information is available. But as long*
44
45 *as you are informed to the ability that they can inform you, you cannot have any*
46
47 *gripes about that. If someone says to you, "Look, you may go home tomorrow", I am*
48
49 *big enough and ugly enough to know that it may be the day afterwards...'* (Patient 3)
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52
53
54 The value of effective, shared communication within the multidisciplinary team was also
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56 highlighted. The capacity to speak to one team member, and have that conversation
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58 disseminated promptly to the rest of the team, was a key feature of good performance:
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'I have found you'll be speaking to one person – and it could be a nurse or a doctor or anybody else – and at the end of the day, everybody knows what I'm talking about...

So you can communicate with [just] one person... It's a vital thing.' (Carer 1)

Most comments about information sharing within multidisciplinary teams came from carers, rather than patients. This perhaps reflected the role of carers in the ward environment, where they act both as an information source for professional teams and as advocates for the patients.

2. Staff attitudes

The second element of high quality care was staff attitude. Considerable attention was paid to *how* staff went about their work: staff attentiveness, or 'service', influenced whether patients felt they were on a good ward. Adjectives like 'jolly', 'respectful' and 'helpful', or 'abrupt' and 'wishy-washy', were not so much seen as individual personality attributes, as they were features of work performance:

'[A] good ward is to be helpful to patients, being more human than a machine, you understand?' (Patient 2)

'I think it's the attitude of people [that makes a good ward]. It's the main thing.'
(Patient 6)

Thus, the manner of care delivery – rather than the resources available for it – largely defined the care experience. The corollary of this was the potential for a major change

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3 between one shift and the next, even on the same ward. There was a sense, perhaps, that
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5 rather than a good or bad ward there were just good shifts or bad shifts:
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10 *'Where it changes more than anything else is at night, when you have a complete*
11 *change of staff. Sometimes the night staff that come on are absolutely fantastic, and*
12 *are very engaged. But sometimes they are entirely the opposite. It is like, "Well we*
13 *are just here to get you through until the morning, when the people that are looking*
14 *after you come back."' (Patient 3)*
15
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23 As well as analysing their own interactions with staff, patients and carers were keen
24
25 observers of the working relationships between different professionals on the ward.
26
27 Whether staff seemed appreciative of each other's efforts, or were openly disrespectful to
28
29 one another, caused patients to wonder how they too were being treated:
30
31
32
33

34 *'[You might think] the more staff, the better the person feels, and that is not how I*
35 *feel... Everything depends on the lower level[s] of staff we've got working in the*
36 *ward... and their position [should be] respected by the doctors and the more senior*
37 *people... They did all [sorts of tasks], and nobody seemed to recognise that they were*
38 *doing something like that...'* (Patient 7)
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48 *'Two nurses were having a fight with each other, and that's not very good for the*
49 *rest of us. And of the course the supervisor was asking them to be quiet, because*
50 *they were shouting and screaming at each other.'* (Patient 4)
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57 Yet these observations of staff behaviours were quite nuanced. Patients recognised different
58
59 types of unproductive working relationships, describing over-familiarity (*'almost like a bunch*
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3 *of friends working together' – Patient 3), as well as open antagonism. They also made*
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5 allowances for the general workload on the ward, even excusing displays of inappropriate
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7 behaviour:
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12 *'There's a lot of pressure put on the staff, you know it's understandable. You can see*
13
14 *that they're actually very tired people, they needed a good rest, and that's why the*
15
16 *whole thing gets on top of them, they're overworked.'* (Patient 4)
17
18

21 3. Hygiene

22
23 In a similar vein, patients and carers expressed quite subtle views of why they held hygiene
24
25 standards to be important. First, good hygiene was *de facto* evidence of a ward that was
26
27 providing safe care, with little risk of iatrogenic infection. Patients and carers were conscious
28
29 of the possibility of hospital-acquired infection, understanding it as a major risk associated
30
31 with inpatient care. Minimising that risk made it possible to focus on the acute medical
32
33 issues at hand. Second, good hygiene served as a deeper marker of staff pride, diligence and
34
35 attention to detail, all of which were reassuring:
36
37
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39
40

41 *'The cleanliness aspect, I think, is... more important than possibly people realise... It*
42
43 *sets out a marker if you like... if the mindset of the ward is, you know, "We are proud*
44
45 *of the place that we work in." So it is a fairly good marker of how that ward will*
46
47 *actually be.'* (Patient 3)
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52 *How did patients and carers perceive the quality metrics on display?*
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56 1. Benefits – using infection data for hand hygiene, and understanding staff performance

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3 Patients and carers described some benefits of the quality metrics on display, particularly
4 when it came to infection data. They acknowledged prompts to focus on their own hand
5 hygiene, whilst hoping that staff would do the same. In some cases, a vague familiarity with
6 infection control terminology was helpful:
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14 *'Because that's in the press [MRSA rates], I suppose people do want to know that,*
15 *don't they? All of this you read in the papers of people being in hospital - they went*
16 *in with one thing and they came out with that... You don't want to get worse.*
17 *They're meant to be making you better.'* (Patient 5)
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25 Real-time information on staffing levels was also potentially helpful, in that it could help set
26 realistic expectations of the care patients might receive:
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32 *'When I'm getting poor service on a particular day, at least I can see that there might*
33 *be a good reason for it... I would be more understanding, if I had to wait twice as*
34 *long for help, if I knew that there was only half the number of staff there should be.'*
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39 (Patient 8)
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43 *'When I saw the amount of staff that you're supposed to have on the ward, there*
44 *were not half the staff. So the other staff that turned up were constantly busy,*
45 *running back and forth, and you can see how much stress they were [under]. But*
46 *they were doing a good job... You can see the nurse who has turned up is doing a*
47 *really good job.'* (Carer 1)
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- 57 2. Significant drawbacks – problems in information delivery, prioritisation of personal
58 experience, and unintended consequences
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5 However, patients and carers were largely disparaging about the quality metrics on display.
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7
8 There were numerous problems with information delivery, such as inadequate font size or
9
10 colour contrast. Yet even with these issues addressed, the information provided was
11
12 fundamentally inadequate to make a judgement about quality. Patients struggled to see the
13
14 relevance of a single figure when no trend or benchmark was provided:
15
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17

18
19 *'Obviously as a member of the public I want the minimum [information], but I have*
20
21 *nothing to compare it with. So if you [say], "We've not had one [infection] for three*
22
23 *years", I can't compare that with anything. So it doesn't mean anything to me...'*
24

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26 *(Carer 5)*
27

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30 *'That [single figure] doesn't mean anything. That doesn't inform. It could be an*
31
32 *increase... but it could be [a] decrease.'* *(Patient 2)*
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36
37 More broadly, participants felt little need for measures that related to their wards' previous
38
39 performance. Their ongoing experiences of care would override any other evaluation. From
40
41 each individual's perspective, their personal care was the priority, whether or not it
42
43 reflected a typical standard of care on that ward. In that light, other performance metrics
44
45 became irrelevant:
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51 *'I use my own judgement. If I'm satisfied: that's it.'* *(Patient 9)*
52
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55 *'If we want information, we ask for it and we get it. As long as [my relative] is alright*
56
57 *and getting looked after, I'm not really bothered about nothing else. If she's getting*
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3 *well looked after, the nurses are lovely, their care is great... that's all we are*
4
5 *concerned about.'* (Carer 3)
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10 As a result, the production of ward quality metrics had some unintended consequences,
11 even going so far as to reduce patients' trust in the whole enterprise. The absence of
12 baseline data in quality displays in particular raised suspicions that poor performance was
13 being concealed.
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21 *'Let us face it... you have got your 100% figure there. Would you put up a 20%*
22 *figure? ... What would you be doing? You would be ruining the confidence of the*
23 *patients...'* (Patient 3)
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30 Patients and carers felt that staff had to have ownership of the quality agenda in hospital:
31 quality metrics were for staff – not patients – to digest. Many interviewees drew
32 comparisons with other settings in which they were consumers: as restaurant diners, or as
33 car purchasers, where their ability to exercise a choice was crucial. Here, however, they had
34 no power to choose, and the display of performance reports only served to emphasise their
35 lack of control:
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45 *'It would be great if I'm admitted and I'm given a choice of five wards, and I would*
46 *say, "Well, how do I know which one's which, which one's best?" My next question*
47 *would be, "Can you give me the audits of those wards to show which has the highest*
48 *rating?" and I would go to that... If there's no choice, then it's all academic.'* (Patient
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3 *'Well, other than clean the wards, there's not a lot we can do is there? What else can*
4
5 *you do?'* (Carer 4)
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10 The 'Friends and Family Test' question was found to be particularly challenging, given that
11 these patients had no choice in arriving on the ward in the first place, nor could subsequent
12 patients exercise a preference to get there. Indeed, the service pressures on hospital
13 admissions were so well publicised that the idea of choosing a ward seemed faintly
14 ridiculous:
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23 *'Would I recommend a ward? How can you recommend a ward?... I mean, that's a*
24 *daft question, because... they put you in the place you need to be, don't they?'*
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27
28 (Patient 5)
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31

32 **DISCUSSION**

33
34 To our knowledge, this is the first study to compare publicly-displayed performance metrics
35 with patient and carer perceptions of high quality care on UK medical wards. We identified
36 discrepancies between patient- and carer-identified priorities and the quality metrics
37 relating to their care on general medical wards. Patients and carers expressed three core
38 components of high quality general medical care: communication, staff attitudes, and
39 hygiene. These were only partially aligned with the performance measures on display.
40
41 Specifically, we found process and outcome measures relating to hand hygiene and
42 iatrogenic infection, but none specifically relating to attitudes or communication. Patients
43 and carers acknowledged limited benefits to the display of performance data, but had
44 significant reservations about how it was contextualised. They relied on their own
45 experience of care to judge its quality, above any objective measure of performance. More
46 philosophically, they questioned the purpose of publicly displayed performance data, given
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3 their lack of choice in this setting. In some cases, these reservations actually eroded trust in
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5 ward teams' performance.
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10 This study builds on a body of research exploring patient priorities and patient involvement
11
12 in the acute hospital setting. Boyd surveyed recently-discharged patients, similarly finding
13
14 that communication, patient-professional interactions, hygiene and the technical delivery of
15
16 care were their main priorities.¹³ Our study suggests that Boyd's findings (which excluded
17
18 current inpatients) were not unduly affected by recall bias. Nonetheless, hospitalised
19
20 patients remain relatively indifferent to service-level performance and change.¹⁴ We suggest
21
22 an explanation for this: current inpatients are unable to exercise informed choices about
23
24 their ward, nor are they able to directly use information to improve performance. They are
25
26 therefore excluded from the two key pathways by which performance measurement may
27
28 lead to quality improvement.¹⁵
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34 Our findings question the mandatory collection, and display, of performance data that do
35
36 not align with patient priorities. These data collection exercises have considerable
37
38 opportunity costs. We note the recent call for the abolition of the mandatory 'Friends and
39
40 family test', one of the performance indicators we found on display, which has been
41
42 criticised on similar lines.¹⁶ These data sets are expensive to maintain, "*at best tolerated,*
43
44 *often ignored, and sometimes ridiculed*".¹⁶ The resulting tokenistic display of performance
45
46 data erodes patients' trust in the system that organises and governs their care. It can also be
47
48 corrosive for staff morale, both at the frontline and at board level.^{17,18} This tokenism is
49
50 perpetuated by a dearth of resources for implementing meaningful improvement.^{1,19} A
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52 credible, co-produced, quality framework for acute medical inpatients is urgently required,
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54 with outcomes that are sensitive to the work²⁰ and structures²¹ of inpatient care. Co-
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3 produced quality standards should capitalise on the active contributions of patients and
4 carers, rather than depicting them as 'informed choosers' of healthcare provision.
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10 Study limitations include a relatively small sample from a single site. We collected
11 demographic data for patients but not their carers. Nonetheless, the group of interviewees
12 included demographics often excluded from safety and quality research: older, frail patients,
13 and those who do not speak English as a first language.²² The study reached data saturation,
14 with no new themes emerging as the final interviews took place. Ward displays at this site
15 were also typical for regional practice. 'Static' performance measures, as seen here, are
16 widespread, and even the performance data presented at healthcare board level rarely
17 depicts the role of chance in the formation of data patterns.^{23,24} Finally, other repositories
18 for quality metrics, beyond those ward displays analysed here, may better approximate
19 patient priorities. However, they typically use composites of the data we found,²⁵ or are
20 aggregated to the hospital level, with no ward-level interpretation.^{26,27}
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37 In conclusion, we found a gap between general medical inpatients' care priorities and the
38 aspects of care that are publicly reported. Where performance measurement could have
39 been useful to patients and carers, suboptimal displays only served to emphasise their
40 passive receipt of services. Unless patients and carers are invited to define the quality
41 metrics they hold relevant, ward services may struggle to engage them in improvement
42 efforts. Ultimately, tokenistic quality measurement may have unintended consequences,
43 eroding patients' trust in their healthcare teams.
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Table 1: Performance indicators available in public ward areas

<i>Performance indicator</i>	<i>Display choice</i>	<i>Display format</i>
Hand hygiene	Percentage in last audit	Most recent result only; numerator and denominator definitions not provided.
Hospital-acquired infections	Date of last recorded event	Most recent result only
Pressure ulcers	Date of last recorded event	Most recent result only
Falls	Date of last recorded event	Most recent result only
Nurse staffing	Numbers of staff required for the shift vs those actually on duty, for staff nurses and health care assistants	Most recent result only; explanation of staff responsibilities
Patient feedback	'Friends and Family Test' star rating; percentage of patients who would recommend the ward*	Most recent result only; examples of patients' comments; no explanation of star rating system

*The 'Friends and Family Test' asks "How likely are you to recommend our service to friends and family if they needed similar care or treatment?"²⁸

TOPIC GUIDE: Current patient / carer for current patient**1. Let's find out about you.**

Age
Employment
Education – school / university / postgraduate
Social support structures & marital status
Ethnicity

2. Why are you in hospital now?

Current diagnosis
Other conditions
Approximate length of stay to date
 < 1 day
 1 – 5 days
 5 – 10 days
 > 10 days

3. How many times have you been admitted to hospital in the last 6 months?

1-5
5-10
>10

4. Do you always come to this hospital or have you been admitted to other local hospitals?**5. How do you know if you're on a good ward? What is a 'good ward' to you?**

Environment

- Clean
- Quiet
- Toilet and shower are available when required
- Meal timeliness, warmth
- Help available when requested
- Staff are responsiveness to my needs / my family's needs

Welcome

- My arrival is expected
- Staff introduce themselves
- Staff make me feel I will be well looked after; show a caring attitude; and don't rush me

Communication and use of personal information

- Accurate knowledge of previous medical history / current diagnosis / current investigations / discharge plan / medication reconciliation
- Quality of communication / teamwork

Discharge preparation

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5 Friends' / families' recommendations
6

7
8 Ward information boards / quality and safety boards
9

10 Ward information leaflets / other printed materials.
11

12 Ward information displays / electronic screens
13

14 **6. If you had to decide whether a ward was good or not, what information would you need to**
15 **make that decision?**
16

17
18 **7. Have you noticed any of the information the ward displays about itself? What do you think of**
19 **the information you've seen?**
20

21 Friends and family test results

22 Safety cross

23 Shift-by-shift staffing

24 Falls

25 Pressure ulcers

26 Safety thermometer / harm-free care

27 Venous thromboembolism prophylaxis

28 Hand hygiene compliance

29 Hospital-acquired infections

30 Infection rates

31 Incident reporting
32
33

34 **8. What would you like to know about how your ward is performing?**
35

36 Hand hygiene compliance

37 Staffing levels

38 Friends and family results

39 Hospital-acquired infections

40 Pressure Ulcers

41 Falls

42 Venous thromboembolism prophylaxis

43 Complaints

44 Compliments

45 Length of stay

46 Mortality

47 Readmission rate

48 Safety climate
49
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51 **9. How should your ward make that information available to you and your family??**
52

53 Ward displays

54 Leaflets

55 Smartphone / other device

56 Webpage
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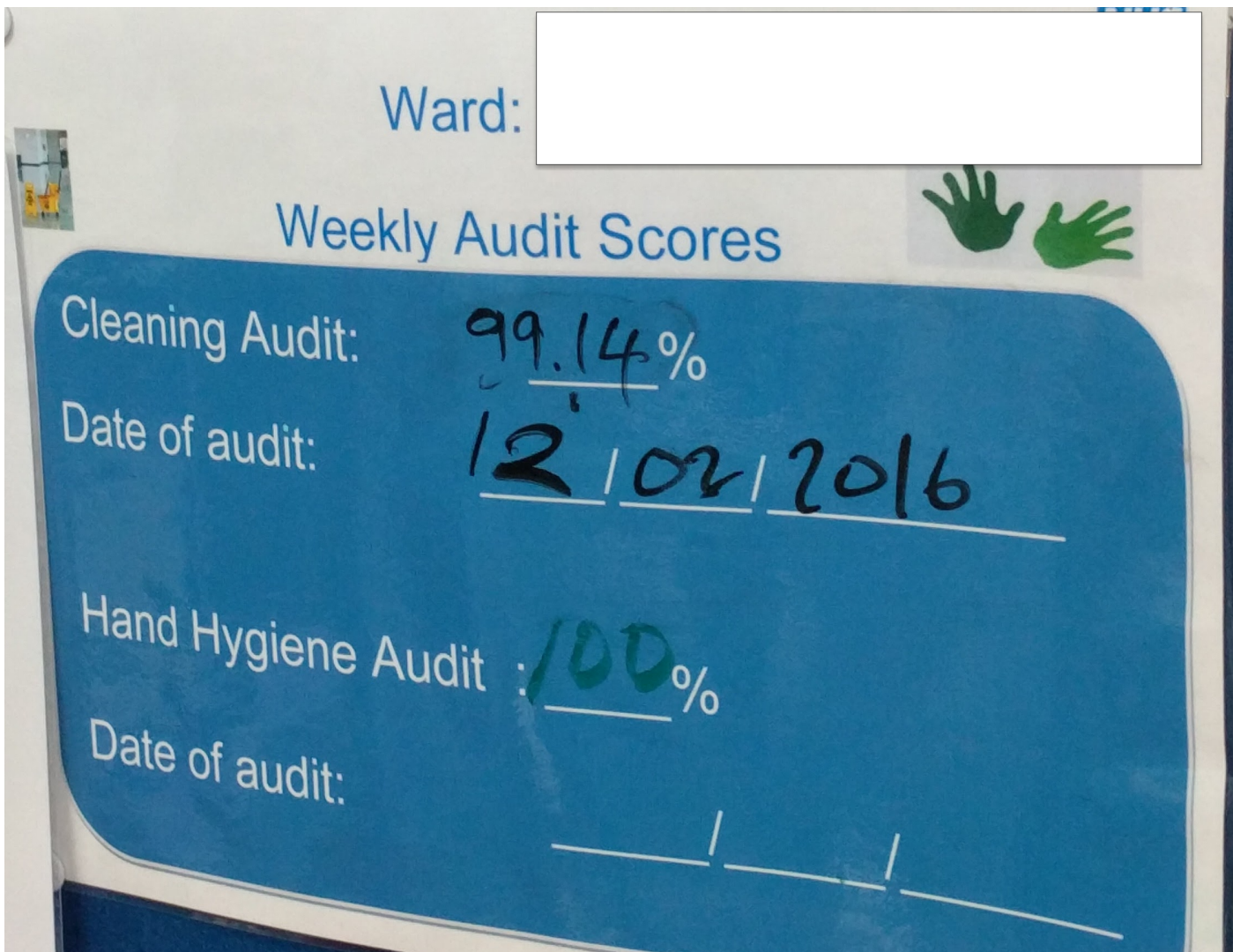
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3 **10. Preference for information seeking**
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5 Information-seeking sub-scale
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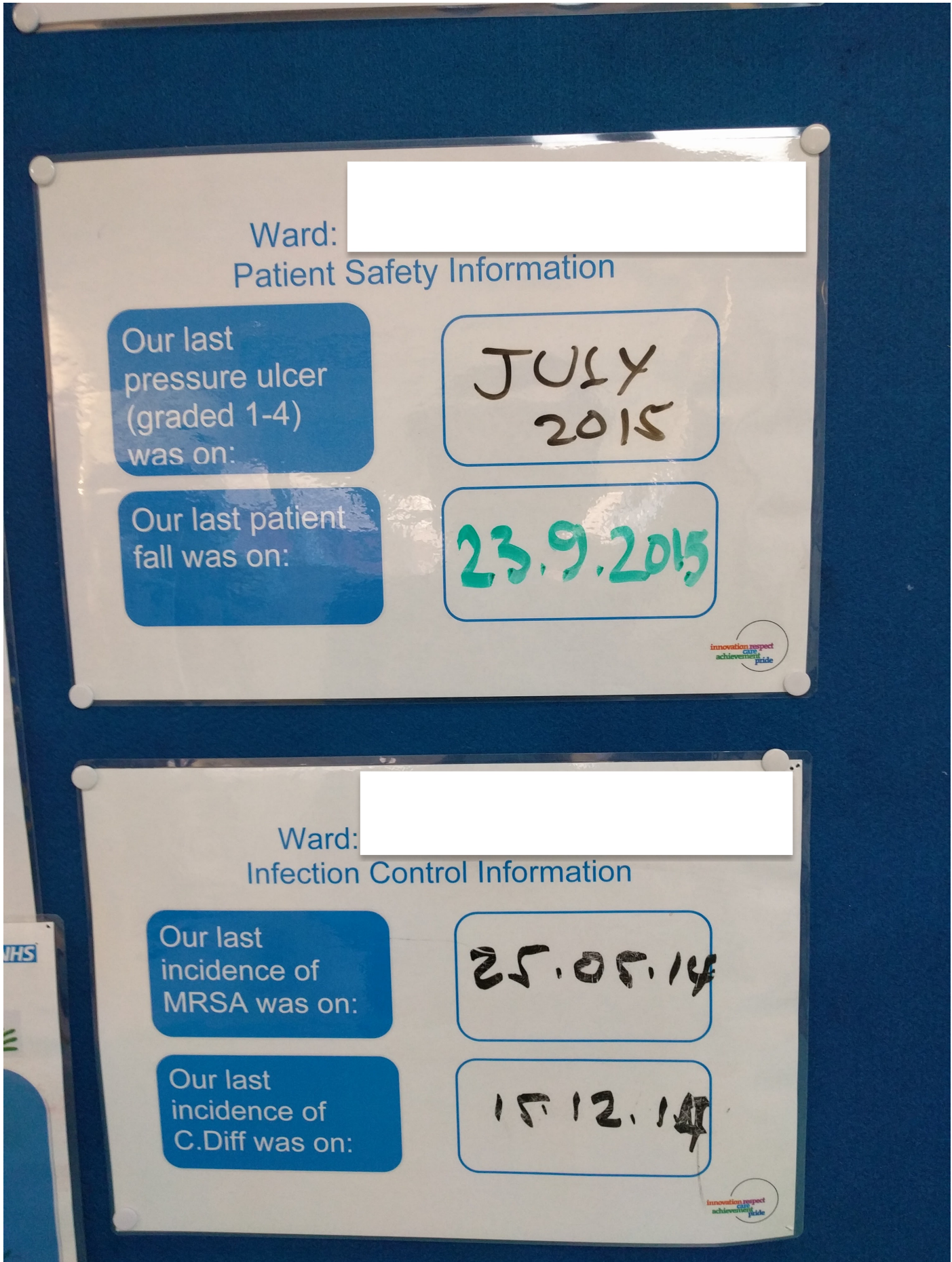
	Disagree strongly	Disagree slightly	Neutral	Agree slightly	Agree strongly
10 11 12 As you become sicker you should be told more and more about your illness					
13 14 15 You should understand completely what is happening inside your body as a result of your illness					
16 17 18 Even if the news is bad, you should be well informed					
19 20 21 Your doctor should explain the purpose of your laboratory tests					
22 23 24 It is important for you to know all the side effects of your medication					
25 26 27 Information about your illness is as important to you as treatment					
28 29 30 When there is more than one method to treat a problem, you should be told about each one					

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39 **11. Have you previously had to complain about care or healthcare staff, nurses or doctors? What made you complain? How? PALS / informally / in writing?**
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I-Staff Safe Staffing Information Board

The Nurse in Charge today is:

[Redacted]

Staffing Status

[Redacted]

DATE:

15-2-15

Current Shift

Registered Nurses

Staff required

On duty

3

1

Healthcare Assistants

2

2

Additional Support
(for e.g. specials)

Roles and Responsibilities

	Responsibilities
Nurse in Charge	Provides supervision, management and direct clinical care
Registered Nurses	Provides direct clinical care and supervision
Health Care Assistants	Provides direct care under the supervision of a registered nurse
Additional Support	Specials (may be registered or unregistered providing 121 direct care with supervision)

If you have any queries about the staffing on this ward please speak to the Nurse in Charge

COREQ (CONsolidated criteria for REporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Topic	Item No.	Guide Questions/Description	Reported on Page No.
Domain 1: Research team and reflexivity			
<i>Personal characteristics</i>			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	
Occupation	3	What was their occupation at the time of the study?	
Gender	4	Was the researcher male or female?	
Experience and training	5	What experience or training did the researcher have?	
<i>Relationship with participants</i>			
Relationship established	6	Was a relationship established prior to study commencement?	
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	
Interviewer characteristics	8	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	
Domain 2: Study design			
<i>Theoretical framework</i>			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	
<i>Participant selection</i>			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	
Sample size	12	How many participants were in the study?	
Non-participation	13	How many people refused to participate or dropped out? Reasons?	
<i>Setting</i>			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	
<i>Data collection</i>			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	
Repeat interviews	18	Were repeat interviews carried out? If yes, how many?	
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	
Field notes	20	Were field notes made during and/or after the interview or focus group?	
Duration	21	What was the duration of the interviews or focus group?	
Data saturation	22	Was data saturation discussed?	
Transcripts returned	23	Were transcripts returned to participants for comment and/or	

Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
<i>Data analysis</i>			
Number of data coders	24	How many data coders coded the data?	
Description of the coding tree	25	Did authors provide a description of the coding tree?	
Derivation of themes	26	Were themes identified in advance or derived from the data?	
Software	27	What software, if applicable, was used to manage the data?	
Participant checking	28	Did participants provide feedback on the findings?	
<i>Reporting</i>			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	
Data and findings consistent	30	Was there consistency between the data presented and the findings?	
Clarity of major themes	31	Were major themes clearly presented in the findings?	
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

Once you have completed this checklist, please save a copy and upload it as part of your submission. DO NOT include this checklist as part of the main manuscript document. It must be uploaded as a separate file.