Development Report:

2013-14 Emergency Department Patient Survey

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1. INTRODUCTION

The NSW Patient Survey Program (the Survey Program) is a suite of surveys that collects information on the experiences of patients receiving care in public hospitals and other public healthcare facilities across New South Wales (NSW). The purpose of the Survey Program, which commenced in 2007, is to report on patients’ experiences and perceptions of care in NSW public hospitals and public healthcare facilities so that:

- hospital performance is readily available to the general public; and
- health services and policy makers can identify strengths and opportunities for improvement, to assist them to provide safe, quality care.

The following principles underpin the Survey Program:

- participation is voluntary
- confidentiality of patients’ personal information is assured
- questionnaires are informed by evidence
- information collected is reliable, comparable and relevant
- reporting methods are open and transparent
- information reported is impartial, easily understood and useful.

The Bureau of Health Information (BHI) currently manages the Survey Program. BHI was established by the NSW Government to independently report on the performance of the public health system in NSW, including the healthcare experiences of patients. In 2012, Ipsos Social Research Institute (Ipsos SRI) was contracted by NSW Health to develop and administer a new suite of surveys for the Survey Program.

The redevelopment was designed to ensure that the content of the surveys and any new surveys are specifically tailored to the NSW healthcare environment (the surveys used from 2007-2011 were originally developed by NRC Picker for use in the United States). Where relevant, the surveys include a set of core, common questions. These core questions have been tested in the Adult Admitted Patient Survey, the first of the suite to be developed, on behalf of the National Health Information Standards and Statistics Committee’s Patient Experience Information Development Working Group (PEIDWG).

A program of research informed the development of the EDPS. The aims and objectives of the research were to ensure that the EDPS adequately captures and provides feedback on the aspects of care that:

- are relevant to the current policy context
- are important to NSW patients
- will be useful to NSW health services and policy makers.
This report describes the research process undertaken to develop the EDPS. The first chapters of this report summarise the information collated at each stage of the developmental process, resulting in a list of potential question areas. The final chapter documents how these potential question areas were prioritised and translated into the final survey.

The results of the survey will be fed back to the NSW Government and public healthcare facilities to inform service improvement, and provided for public dissemination in the future.
2. METHODOLOGY

The development process comprised:

i) a rapid review of key literature (including policy documents and quality standards);

ii) focus groups with emergency department patients;

iii) stakeholder engagement;

iv) statistical analysis of the 2007-2011 NSW Health Emergency Patients Surveys;

v) three rounds of cognitive testing;

vi) extensive discussion between the development teams at BHI and Ipsos Social Research Institute (Ipsos SRI).

The following diagram illustrates the questionnaire development process (Figure 1).

Figure 1: Questionnaire development process
Rapid literature review

The rapid literature review was performed to provide context and to broadly inform the content of the EDPS. The aims of the review were as follows:

1) Identify and compare the core domains of emergency treatment for emergency patients and their care.
2) Identify the most important current policies and quality standards relevant to the EDPS (taking into account the suitability of the survey as a vehicle for assessment against these policies or standards).
3) Briefly describe and compare the format, content and questionnaire-related methodological issues associated with other jurisdictions’ emergency patient survey instruments.

In performing this review, the following research questions were addressed.

- What do we know about the emergency department patient experience that may be relevant to developing the EDPS?
- What are the key drivers of the emergency department patient experience identified within other jurisdictions’ surveys?
- What are the most important current policies and quality standards relevant to the EDPS?
- What are the core domains of care that are used in other jurisdictions’ emergency department surveys?
- What are the key learnings from the literature/other jurisdictions’ emergency department surveys in terms of the questionnaire design/format (for example, length or demographic questions included for standardisation purposes)?

In order to achieve the aims of the review and answer these research questions, a search of literature was completed by BHI in order to identify relevant research papers and grey literature. This search was performed on the NSW Health CIAP database. Search terms included combinations of synonyms of three phrases using the Boolean operator “and”. Specifically:


AND


AND

The search was restricted to original English-language papers, articles and reviews published in the last decade.

In addition to articles returned in this search, relevant papers from the King’s Fund reading list were also sought by BHI. Further, BHI provided Ipsos SRI with key NSW and National policy documents and standards for healthcare for inclusion in the review.

These sources were synthesised to form the basis for the rapid literature review.

**Patient focus groups**

Patient focus groups were conducted in order to understand the range of experience of emergency department patients in NSW and, in particular, the aspects that were most important in creating a positive or negative hospital experience from the patient perspective. These topics were then collated with the findings from the other phases of the research before being reviewed by BHI and Ipsos SRI for potential inclusion in the survey.

Six focus group discussions were conducted with adults who had accessed the emergency department of a NSW public hospital within the previous 12 months (48 participants in total), using a quota controlled sampling strategy to allow for a range of patients’ views. The focus group composition consisted of a mix of metropolitan and non-metropolitan areas, age groups and admitted and non-admitted emergency department patients. More information about the composition of the groups is appended (Appendix A). The groups were conducted between 22 January and 24 January 2013.

A discussion guide was developed to ensure that key stages in the patient journey were discussed; from the mode of arrival, through triage and treatment, to discharge. Following a discussion around the stages of the patient experience, participants were asked to develop a set of cards, each describing an aspect of ED patient care, and, as a group, rank them in order of importance. The main purpose of this exercise was to observe the discussion and debate during and after this exercise to help understand what was important to patients, and why. The discussion guide used in the focus groups is appended (Appendix B). Each group was audio recorded and transcribed in order to facilitate analysis and to provide verbatim comments.

An analysis session, involving all of the Ipsos SRI group moderators, was conducted to establish common themes and points of difference between the six groups. This was followed by further analysis of moderator notes and transcriptions to provide a summary of the elements of the patient experience considered most important from the patient perspective.
Stakeholder engagement

A range of key stakeholders were consulted on topics for inclusion in the EDPS. This included issues such as informing service improvement and providing supporting evidence of compliance with quality standards and guidelines.

The key stakeholder distribution list was compiled by BHI and included representatives from the following groups:

- NSW Health;
- Local Health Districts;
- Health Consumers NSW;
- Agency for Clinical Innovation
- Clinical Excellence Commission;
- NSW Health and Families;
- Centre for Epidemiology and Evidence;
- Cancer Institute NSW;
- Feedback and Consumer Coordinators and Nursing Unit Managers at specific hospitals.

These stakeholders were invited by BHI to suggest areas for inclusion in the EDPS by submitting a pro forma response. The pro forma contained the following fields: aspect of care or question topic; reason for interest in this area; whether the question applied to a sub-set of patients; how the data would be used; and question phrasing (see Appendix C). The pro forma was distributed on 21 January 2013 and was completed by 25 contributors.

A smaller subset of stakeholders was then selected to take part in a follow-up telephone interview. These stakeholders were selected because: further detail/clarification of their responses to the pro-forma was required; a new/unexpected area was suggested; they did not return a pro forma; or their area of specialisation was of particular relevance. A total of 12 interviews were conducted by Ipsos SRI, involving 13 participants. The pro forma used to contact and collate their contributions, and a list of contributing stakeholders can be found in Appendix C. The interviews were structured around a discussion guide, designed in close consultation with BHI (the guide can be found in Appendix D). Interviews were audio recorded (with participants’ permission), and summary notes were written up for each. The contact email is appended (Appendix E).

Ipsos SRI reviewed the interview notes and conducted an analysis session to identify common themes and points of difference across interviews. The findings were then analysed alongside pro forma responses. Relevance to patients and information on how the data would be used were both taken into account during the subsequent prioritisation process and questionnaire design.
The question areas indicated by the stakeholder consultation were eventually collated with those identified from the other developmental phases of the research to create a comprehensive list of potential question areas for the EDPS, which took into account the perspective of both patients and stakeholders.

**Statistical analysis of previous surveys**

Survey results from the 2007-2011 NSW Non-Admitted Emergency Patient Surveys (when the survey was run by the NSW Ministry of Health), were analysed using:

- ‘Key drivers’ analysis, to indicate which broad question areas were most closely related to overall satisfaction and should therefore be prioritised for inclusion in the survey.
- Factor and reliability analysis, to identify which factors accounted for much of the variance across the patient groups, again indicating that these areas should be prioritised for inclusion in the survey. This analysis was also used to establish whether certain factors were of more or less significance to particular groups. The reliability analysis involved the identification of highly correlated questions, to indicate where two questions were likely to be measuring the same underlying issue and could therefore be combined or removed.
- Analysis of non-response and possible ceiling and floor effects, to suggest question areas that may be less useful for informing service improvement and/or where particularly careful consideration should be given to questionnaire routing, question wording and response scales.
- Analysis of respondent comments relating to the survey itself, taken from the free-text survey question, to identify any issues that should be addressed in the new survey.

Further details are provided below and full technical details can be found in Appendix F.

**Key driver analysis**

Key driver analysis was performed by NSW Health on the data from their NSW Emergency Patient Surveys from 2007-2011. Analysis was performed by examining Pearson correlation coefficients between experiential questions and the question relating to their overall experience with the care they received in hospital.

**Factor and reliability analysis**

Filters were created for each patient group to ensure that each round of factor analysis only comprised a more homogenous group of patients who had filled out the same sections of the Emergency Patient surveys.
Consequently, the groups included in analysis comprised:

- ‘general’ patients (i.e. those who had not filled out the ‘pain’ or ‘test’ sections);
- ‘pain’ pain (i.e. those who had filled out the ‘pain’ section but not the ‘test’ section); and
- ‘test’ patients (i.e. those who had filled out the ‘pain’ section but not the ‘test’ section).

Missing values were identified and populated for each of the patient groups using either modes (for scales with few response options) or means (for scales with more response options, or for scales where variance in responses was greater). Question scales were then standardised by allocating each response option a value between zero and 100 in equal increments, where zero represented the poorest level of performance and 100 represented the highest level of performance.

Principal Components Analyses were performed for each of the filtered participant groups using Varimax rotation to maximise the differences between factors. Questions that contributed to the variance of several factors were removed from the analyses to ensure meaningful factors. Factors were then analysed and named to represent the range of questions that they encompassed.

Following the identification of factors, the reliability and the pattern of inter-item association of their components were examined using Cronbach’s alpha and correlation matrices.

Non-response analysis

The survey results from the 2007-2011 Non-Admitted Emergency Patient Survey were analysed to identify patterns of non-response in the data. These data were analysed using the filters for each question to identify the valid rates of non-response.

Ceiling and floor effects

The 2007-2011 Non-Admitted Emergency Patient Survey was also analysed to identify questions that exhibited possible ceiling or floor effects.

A ceiling effect is present for a measurement variable when the majority of scores are at or close to the highest possible score, indicating a loss of sensitivity in the upper register. Conversely, a floor effect is present when the majority of scores are at or close to the lowest possible score.

In order to determine the occurrence of true ceiling or floor effects, several criteria were used. These criteria comprised: a sufficiently small standard deviation (25 or less), a skewness statistic exceeding 1.5 or below -1.5, and a mean greater than 85 or less than 15. These criteria represent characteristics of a probability distribution that exhibits a ceiling or floor effect. The skewness
statistic, in particular, has been demonstrated as a robust measure of test score ceiling and floor severity.¹

Dichotomous variables were excluded from the analysis because of the inherent response constraints of these questions.

Patient comment analysis

The Non-Admitted Emergency Patient Survey included a final free-text question - "if you could change one thing about the hospital, what would it be?"

Comments made by survey respondents were entered into a data file and coded into themes. This analysis was used as an additional indicator of the aspects of the emergency patient experience that were most important to patients. More importantly, all comments coded as ‘other mentions’ and/or containing the keyword ‘survey’ were manually reviewed for content relating to the conduct of the survey.

Cognitive interviews

Three rounds of cognitive interviews were conducted with NSW emergency patients in order to investigate how they interpreted and responded to the survey questions. This was performed to: ensure questionnaire validity (i.e. that questions were understood, consistently interpreted and measured what they were intended to measure); ensure that patients were able to follow the questionnaire routing instructions; ensure that they understood the cover letter; and as a final opportunity to confirm that individual questions were relevant to patients and that no crucial question areas were missing (from the patient perspective).

The first two rounds of interviews were conducted to test the questionnaire content. Questions identified as problematic in these interviews were redrafted and presented to patients in the subsequent round of the cognitive interviews, or removed altogether. The final round of cognitive interviews was conducted primarily to test the layout of the printed survey and the other materials to be sent with the survey (i.e. accompanying letter and language information sheet).

The interviews were conducted among a wide range of emergency patients from the north shore, east and west of Sydney. Quotas were set to ensure representation of a range of participants in terms of age, level of educational attainment and background (including culturally and linguistically diverse and Aboriginal patients).

A total of 21 cognitive interviews were conducted between 3 June – 22 July 2013. The profile of participants in each round can be found in Appendix G.

Each interview was audio recorded and cover notes were prepared by Ipsos SRI consultants to facilitate analysis. The discussion guides used in the cognitive interviews can be found in Appendix H.

**Analysis sessions involving Ipsos SRI and BHI**

Throughout the development process, BHI and Ipsos SRI teams were in regular contact. This involved ad-hoc discussions, as well as a series of meetings held at the key stages of the development, including:

- following completion of the patient focus groups and stakeholder interviews
- following each round of cognitive testing
- following each substantial redraft of the survey.

At each meeting, survey inclusions and exclusions were discussed, with decisions made in light of the results of the development components, BHI’s expert knowledge of the NSW healthcare system, data analysis and reporting needs and Ipsos SRI’s research expertise. Further, upon the drafting of the penultimate version of the survey, the survey was presented to BHI’s Strategic Advisory Committee (SAC) for final review. Feedback from the SAC was subsequently incorporated into the final version of the survey.
3. FINDINGS

3.1 Rapid review of key literature

A rapid review of key literature was performed by Ipsos Social Research Institute (Ipsos SRI) in collaboration with the Bureau of Health Information (BHI). The review encompasses information from salient policy documents/standards as well as results from research literature.

The current state of NSW emergency departments

Emergency department (ED) attendance in New South Wales (NSW) has increased in recent times; from 1.96 million in 2007 to 2.24 million in 2012. Whilst the number of hospitals with EDs has also increased during this period, the escalation in the use of EDs has nevertheless led to ED congestion, which has had profound negative consequences, such as a reduction in the quality of care provided to patients and in the availability of patient beds.

Despite this increased demand for ED care, ED waiting times in NSW are gradually improving. From 2007-2008 to 2011-2012, the proportion of ED patients seen on time increased from 69 to 72%, while the 90th percentile waiting time dropped from 124 minutes to 108 minutes. This reduction in waiting time over the past half-decade compares favourably with other Australian states and territories. However, despite this progress, there is still room for improvement. In 2010, more than one in 20 patients who attended ED left without receiving treatment. Further, NSW’s performance in achieving the National Emergency Access Target (NEAT) - that is, 90% of patients leaving the ED either via admission, transfer or discharge, within four hours - was the second lowest nationally. As of 2011-2012, only 60% of patients in NSW met the NEAT target, with only the ACT reporting a lower proportion (58%).

However, not only is the use of EDs increasing, but the composition of patients attending has also changed. Ageing populations have brought a new set of challenges to healthcare systems, both worldwide and in Australia. Australia, like other developed nations has seen an increase in the use of hospitals and EDs in NSW by older patients. With the increased use of EDs by older patients come new challenges. Older patients are more likely to present with co-morbidities and/or chronic conditions, often resulting in additional time for treatment and diagnosis. Consequently, older patients are significantly more likely to experience access block in EDs than younger patients, often waiting eight or more hours for a hospital bed.

Given the increase in pressure placed on EDs, and the additional complexity of the condition of patients attending facilities, a measure of the quality of care provided to NSW ED patients is warranted. One of the most well-established ways to investigate the quality of healthcare provided and address issues encountered by ED patients is to administer a patient experience survey.
Patient experience and patient-centred care: the need for patient experience surveys

Health systems across the world are widely integrating ‘patient-centred’ approaches into their delivery of care.17 ‘Patient-centred’ approaches are aimed at providing care that is suited to (and based around) the needs, values and priorities of the variety of patients that present at hospitals and health facilities.18 Inherent in this definition of ‘patient-centred care’ is the necessity for dialogue between hospital staff and management and patients; it is impossible to understand and subsequently respond to the needs of patients without first being able to define them. One of the components of this dialogue is often patient surveys (encompassing both patient experience and patient satisfaction surveys), which are used in combination with supplementary sources of data, such as complaint receipt mechanisms and qualitative methods such as focus groups and/or interviews.19,20 These methods are primarily used to gauge patients’ level of satisfaction with their hospital care; measure hospital quality; provide feedback to facilities on the quality of care from the patients’ perspectives; and clarify areas in which health care can be improved both in a specific facility or a wider geographic area.21,22

What we know about emergency department patients’ perceptions and experiences of care

The increasing prevalence of patient experience surveys has included those specific to the experience of patients in the ED. Many factors have been shown to influence patients’ perceptions of, and satisfaction with, their ED care. These factors were considered for inclusion in the development of the EDPS.

Patient characteristics

A range of patients’ demographic and health-related characteristics may be associated with their perception of care received in ED, and as a result, satisfaction with that care. Factors such as older age, higher acuity, higher health literacy and being from a non-English speaking background are associated with ED patient satisfaction.23,24,25,26,27,28,29 Furthermore, minority groups in Australia, including Indigenous, culturally and linguistically diverse, mentally ill and old/young patients, each have their own specific needs and priorities with regard to treatment in the ED30. Assessing these in addition to general patient socio-demographic factors in the survey was also a consideration.

In addition to demographic characteristics, health-related characteristics have also been shown to influence patients’ level of satisfaction of care in the ED. Chronic pain, both as an independent factor and when interacting with other characteristics such as age, is one such characteristic.31 This is a particularly crucial point considering a high proportion of patients at the ED (particularly older patients) present for pain management.32

15
Staff and hospital characteristics

Research has also demonstrated that certain characteristics of waiting rooms, hospitals and even treatment pathways can influence how patients perceive the care received in hospital and the ED.\(^{33}\)

**Physical environment**

Despite the limited research investigating the effects of the physical environment of the ED on patient satisfaction, the ‘comfort’, ‘pleasantness’ and cleanliness of both the waiting area and the examination area have been found to be drivers of patient satisfaction with their care in the ED.\(^{34}\) These results are supported by other research which found that the design of the ED service environment (including temperature, lighting and level of noise) affected patients’ perception of their waiting time, and consequently, their satisfaction with care.\(^{35}\)

In addition to the physical features of the ED environment, other facets of the ED environment that have been shown to impact upon patients’ satisfaction are patients’ perception of privacy (especially in their discussion with staff at admission)\(^{36}\) and patients’ perception of safety and security. Patients who feel threatened throughout their stay in the ED are often more likely to report dissatisfaction with care provided in the ED.\(^{37}\)

**Process**

According to the literature, patients’ perception of their care in hospital begins at the point of entry into the system. For example, patients who arrive at hospital via ambulance demonstrate higher levels of satisfaction with their care, even if all other factors are held constant.\(^{38}\) Additionally, a discussion paper examining the features of delays at ED that impacted on patients’ perceptions of their wait for treatment noted that characteristics of ED waits such as early interactions during the wait period; level of occupation throughout the wait; and level of disclosure regarding the wait, all help to shape patients’ perception of wait times, and in turn, satisfaction with their care.\(^{39}\)

Provision of information to patients has also been shown to be particularly important to patients in the ED. Conversely, ED characteristics that negatively influence patients’ satisfaction with their care in the ED (as well as likelihood to recommend the service in the ED) include crowding, being positioned in a hallway during waits and actual wait times.\(^{40}\)

**Staff**

Recent research has shown that interactions between staff and patients, as well as the behaviour of ED staff are also influential in shaping patients’ perceptions of, and satisfaction with, the care that they receive. Both the communication of information by staff to the patient (for example, regarding patients’ presenting complaint, experience of delays, results of tests and management of
their condition upon discharge), and interpersonal manner of staff during care (including patients’ perceptions of clinicians’ friendliness, courtesy, respectfulness or compassion), have been shown to affect patients’ overall satisfaction with their care, as well as their likelihood to recommend the facility to family and friends.\textsuperscript{41,42}

In addition to interpersonal interactions, clinicians’ competence and/or the perceived extent of their technical proficiency, as well as the adequate management of pain have also been shown to impact upon patients’ level of satisfaction with their ED experience.\textsuperscript{43,44} Provision of understandable results and explanation of the reason for admission are also positively associated with satisfaction of ED patients.\textsuperscript{45,46,47}

**Key drivers of emergency department patient experience**

Empirical research also often examines the key drivers of patient satisfaction. Key drivers are questions or question areas that are the most highly associated with, or have the largest effect upon, patients’ satisfaction with their care and therefore should be included in the EDPS.

From the academic literature in this review, the demonstrated key drivers of ED patient satisfaction were as follows:

- wait times\textsuperscript{48,49,50}
- staff bedside manner/empathy\textsuperscript{51,52}
- clear communication/information provision\textsuperscript{53,54,55,56}
- clear instructions for discharge\textsuperscript{57}
- availability of diagnostic tests\textsuperscript{58}
- technical competence\textsuperscript{59,60}
- pain management\textsuperscript{51,62}

These drivers were largely congruent with the key drivers of NSW patients, as identified by analysis performed by the NSW Ministry of Health in their analysis of patient surveys from 2007-2010. Courtesy of ED doctors was the most influential aspect of care in all three years, followed by courtesy of ED staff.\textsuperscript{63,64,65} Other important drivers included how well ED doctors and nurses worked together, the explanation of what the ED did (in treatment) and the completeness of care provided by the ED.\textsuperscript{66,67,68}

**Policy and standards documents related to the development of the EDPS**

Patient surveys are also increasingly becoming embedded in legislation and government policy both in Australia and overseas\textsuperscript{69,70}, and are often used to ensure that standards of care – including adherence to clinical guidelines\textsuperscript{71} - are being met over time. In order to confirm that the EDPS includes questions relevant to Australian and NSW policy and standards, the documentation around the following were consulted.
Australian Charter of Healthcare Rights

On a national level, the Australian Charter of Healthcare Rights (the Charter) is a document that outlines the rights of Australian patients using the health system. The document delineates seven rights that patients can expect from their care in the Australian health system including: access to health care; receipt of safe and high quality care; receipt of respect and dignity in care; open, timely communication; involvement in decisions and choices about care; privacy and confidentiality; and the opportunity to comment on or complain about their care. All of these rights are relevant to the ED patient experience and were used to generate potential questions for the EDPS.

NSW 2021

NSW 2021 is the NSW Government’s 32 goal plan for future development. In this document, Goal 12 (‘Provide World Class Clinical Services with Timely Access and Effective Infrastructure’) makes reference to ensuring that the provision of health care in NSW is patient-centred. This goal includes aims such as: reducing waiting times for ED treatments so that the time from triage to the commencement of clinical treatment meets the national benchmarks; and increasing patient satisfaction as measured in the suite of NSW Patient Surveys. The EDPS will help to facilitate the achievement of both of the aims above by acting as a metric through which progress in both of these areas can be monitored over time and fed back to Government and health care providers.

Caring Together – the Health Action Plan for NSW

The Health Action Plan for NSW is another prominent document that seeks to ensure patient-centred care in NSW. The plan was created in response to the recommendations made by the Inquiry into Acute Care Services in NSW Hospitals (also known as the Garling Report), and was informed by an extensive consultation process with key stakeholders. In order to facilitate better experience of care for patients, the report outlines six strategies for improving healthcare. The strategies relevant to the formulation of survey questions include:

- creating better experiences for patients (including establishing the new role of nurse/midwife in charge; familiarising patients with staff names; protecting patient dignity; hygiene; patient transport; and improving the emergency experience)
- safety (enhancing ward handovers; improving transfer of care; proactive response to patients’ deterioration; supervision of junior staff)
- education for future generations (adequate training of new starters).

Due to the nature of the recommendations outlined in the Garling Report, an independent panel was contracted to investigate the progress and development of hospitals in NSW following the dissemination of the Plan. The Independent Final Progress Report documents action taken to address the concerns and recommendations articulated in the Garling Report. In addition, achievements and recommendations for the future are outlined. Amongst these recommendations are actions and procedures to be performed by medical staff that could be observed by emergency patients in their care. Specifically:

- patient safety and quality (including medication safety and hand hygiene/infection prevention)
- communication and patient experience (bedside handover, staff identification, dissemination of discharge information forms, compliance with communications mechanisms such as name badges and single-gender wards).

**Other policy and standard documents**

The development process also involved a review of other relevant policy and standards documents including the National Safety and Quality Health Service Standards and the Australian Safety and Quality Framework for Health Care. These documents contributed to the complete list of potential question areas to be assembled prior to the drafting of the survey. For clarification on the question areas derived from these documents, please refer to the Adult Admitted Patient Survey Development Report.

**Core domains of care in other jurisdictions’ emergency department surveys**

In addition to the key drivers and general question areas listed above, the potential question list contained other questions relevant to the ED patient experience. These questions addressed the recurring themes or topics (domains) in other prominent ED surveys (the National Health Service A&E Department 2012 Survey\textsuperscript{78}, the Consumer Quality Index A&E\textsuperscript{79} and the Picker Institute Europe - Child/Parent Emergency Care Survey\textsuperscript{80}), and sought to fill some of the gaps in their content (see Figure 2).
Figure 2: ED patient survey domains

<table>
<thead>
<tr>
<th></th>
<th>NHS A&amp;E Department 2012 Survey</th>
<th>Consumer Quality Index A&amp;E</th>
<th>Picker Institute Europe - Child/Parent Emergency Care Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrival at the ED</td>
<td>✓ ✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ambulance</td>
<td>✓ ✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Reception</td>
<td>✓ ✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Waiting</td>
<td>✓ ✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Doctors and nurses</td>
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<td>Care and treatment</td>
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</tr>
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<td>Tests</td>
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<td></td>
</tr>
<tr>
<td>Pain</td>
<td>✓ ✓</td>
<td>✓</td>
<td></td>
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<tr>
<td>Demographics</td>
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<td>✓</td>
<td></td>
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</tbody>
</table>

✓ ✓
Addressed in a domain                  ✓
Addressed partially

Key learnings from research and other jurisdictions’ emergency department surveys

Aside from questions and question areas, research into patient experience and the use of surveys yielded other findings useful for the: design of the survey; distribution of the survey; collation of findings; and presentation of results.

Design of survey

The following design approaches and recommendations from the research literature were taken into consideration in the design of the survey.

Statistical analysis performed on the Picker Patient Experience questionnaire - as well as its abridged version, the PPE-15 - yielded results that indicated that the length of survey (up to 12 pages) does not impact upon patients’ response rate. Further, this research suggests that the quality of the data (in terms of item completion, patient attrition and internal consistency) is not compromised by the length of an instrument.

As suggested in the research, questions in the EDPS should primarily seek to examine patients’ experiences, rather than their satisfaction or perception of performance. The rationale for this approach is that questions that ask patients about their level of satisfaction with their care tend to elicit positive responses, and are consequently unable to adequately distinguish between variable clinician and practice performance. Such responses are not useful for the generation of
actionable plans aimed at improving hospitals’ services and patient satisfaction. However, despite the general use of experience questions, the survey was designed to include one or more overarching questions examining the extent of patients’ satisfaction with their care, or key aspects of their care. The inclusion of these satisfaction questions is recommended by the Care Quality Commission because of these questions’ amenability to key driver analysis.\textsuperscript{85}

\textbf{Distribution of the survey}

Research has demonstrated that consideration of the timing of the distribution of patient surveys is important to their success. A level of bias is introduced when patients are distributed surveys long after their discharge, with ratings on certain scales becoming less positive over time.\textsuperscript{86} However, evidence for the effect of delays on patients’ responses to satisfaction/experience surveys is far from unequivocal: other research has indicated that responses are more positive as time elapses in patients whose acute problem has resolved.\textsuperscript{87} Hence, it was recommended that the timing of survey distribution is considered by the survey sampling methods working group.

It is also important to be aware of any effects of survey medium upon patient responses. Until recently, it was thought that mail surveys introduce an element of non-response bias into survey results, because only those patients who have had a particularly bad or good experience tend to respond.\textsuperscript{88} However, research performed by the NHS indicated that this may not be the case and found that patients’ on web-based surveys were highly correlated with results on more traditional paper based surveys.\textsuperscript{89}

Additionally, according to survey research, the response rates for general mailed surveys (not specifically ED patient experience surveys) range between 25-40%.\textsuperscript{90,91} Typically, response rates for online patient experience surveys are lower;\textsuperscript{92} however, when used in conjunction with mail surveys, evidence suggests that the response rate may be improved.\textsuperscript{93} Hence, for the EDPS the approach recommended was a combination of mail and online surveys.
List of potential question areas

The following question areas were considered for inclusion in the EDPS. Question areas were informed by the documents included in the rapid review above, including the standards and policies, research papers and other jurisdictions’ surveys.

Arrival at the ED

- time of visit
- point of referral to the ED
- mode of travel to the ED
- time taken/distance to get to the ED
- signposting of the ED/ease of getting to the ED
- availability of parking

Ambulance

- whether the patient arrived by ambulance or not
- whether the paramedics were reassuring
- whether the paramedics explained the patients’ treatment clearly
- provision of pain medication by the paramedics
- perceived level of collaboration between paramedics
- efficiency of handover between paramedics and ED staff
- overall performance of the paramedics

Reception and physical environment

- design of the ED service environment
- level of privacy at the reception counter
- courtesy of reception staff
- level of information provided by the reception staff
- general hygiene/cleanliness of the ED
- cleanliness of the ED toilets
- presence of posters/leaflets in the ED asking patients and visitors to wash their hands/use hand sanitisers
- presence of hand sanitisers in the ED
- level of privacy during examination/treatment
- ability to sit in the waiting area/overspill
- comfort of the seats in the waiting area
- facilities for dispensing food and drink in the waiting area
- quietness of the ED
- patients’ perception of safety of the ED
Waiting

- time before the patient first spoke to a nurse or doctor
- total waiting time (standard)
- nature of early interactions during the wait period
- level of occupation throughout the wait
- level of staff disclosure regarding the anticipated wait
- level of disclosure regarding the reason for the wait/provision of information about the triage procedure
- patients’ expected waiting time
- whether the waiting period was problematic for the patient

Doctors and nurses

- explanation of the reason for admission
- discussion of patients’ anxieties or fears (standard)
- whether patients noticed the nurse/midwife in charge (standard)
- whether patients were familiar with staff’s names (standard)
- staff’s use of name badges (standard)
- perceived efficacy of staff handovers (standard)
- whether clinicians knew enough about patients’ condition or treatment
- hand hygiene/infection prevention (standard)
- communication with patients’ family and/or friends
- provision of understandable results
- interpersonal manner of staff/staff courtesy
- level of explanation of condition and treatment
- level of clinician competence
- patients’ level of confidence and trust in doctors and nurses?
- whether doctors and nurses listened to the patient
- whether doctors and nurses had enough time for the patient
- whether doctors and nurses talked in front of the patient as if they were not there
- whether any contradictory information provided to the patient by clinicians
- perceived level of collaboration between clinicians
- patients’ expectations of staff treatment
- whether patients’ family and friends had the opportunity to talk to a doctor

Care and treatment

- receipt of respect and dignity in care (standard)
- timely communication (standard)
- involvement in decisions and choices about care (standard)
• privacy and confidentiality\textsuperscript{198} (standard)
• medication safety\textsuperscript{199} (standard)
• whether an interpreter was made available to the patient if necessary\textsuperscript{200}
• information provided in a language that the patient could understand\textsuperscript{201}
• assistance with meals\textsuperscript{202} (standard)
• proactive response patients’ deterioration (standard)\textsuperscript{203}
• level of staff responsiveness/ability to get staff’s attention\textsuperscript{204,205}
• whether contradictory information was provided to the patient\textsuperscript{206}
• amount of information provided to the patient\textsuperscript{207}
• whether patients were asked if medical students could be present during examination\textsuperscript{208}

Tests

• availability of diagnostic tests\textsuperscript{209,210}
• provision of an explanation about why the test(s) was/were necessary\textsuperscript{211}
• waiting time for the test(s)\textsuperscript{212}
• waiting time for the results of the test(s)\textsuperscript{213}
• provision of understandable test results\textsuperscript{214,215,216,217,218,219,220}

Pain

• patients’ level of pain\textsuperscript{221,222}
• experience of chronic pain\textsuperscript{223}
• level of pain management/medication provided\textsuperscript{224,225,226,227}
• patients’ perception of the amount of pain relief provided\textsuperscript{228,229}
• timeliness of pain management\textsuperscript{230,231}
• whether healthcare professionals asked about level of patients’ pain\textsuperscript{232}

Leaving the ED

• whether the patient was transferred from the ED or went home\textsuperscript{233,234,235}
• whether there was any delay in discharge\textsuperscript{236}
• reason for the delay in discharge\textsuperscript{237}
• length of the delay in discharge\textsuperscript{238}
• whether new medication was provided to the patient\textsuperscript{239}
• whether the care provider explained the aim and side effects of this new medication\textsuperscript{240,241}
• whether the patient was told about what to look out for following their departure from the ED, including side effects of the new medication\textsuperscript{242,243,244}
• whether the patient was told when they could resume their usual activities\textsuperscript{245,246,247}
• whether the patient was told who to contact if they were worried about their condition following discharge\textsuperscript{248}
whether staff considered the family or home situation of the patient in planning their discharge,
communications with the patients’ GP/provision of a letter to the patients’ GP,
follow-up appointments with the hospital’s polyclinic,
clear instructions for discharge.

Overall

patients’ overall satisfaction with care (standard)
if there was opportunity to comment on or complain about their care (standard)
patients’ perception of whether the main reason for their attendance was dealt with well.

Demographics

age,
gender,
education,
social status,
self-reported health status,
etnicity/culturally and linguistically diverse status,
Aboriginal status,
any long-standing conditions,
mental illness,
whether the survey was filled out by the patient themselves or a somebody on behalf of the patient.
3.2 Emergency department patient focus groups

**Findings**

This section summarises the aspects of the emergency department patient experience that were most important to those who took part in the focus groups, and indicates the areas that are flagged for potential inclusion in the survey. On balance, patients were broadly positive about their experience, and the key themes emerged as relevant to both good and bad aspects of their ED visit, as outlined in the following. More detail about this process can be found in Appendices A and B.

**Arrival**

The mode by which patients in the focus groups arrived at the emergency department tended to set the tone for their experience. Those brought in by ambulance universally praised paramedic staff. They were seen as compassionate, competent and caring. The urgency of the service was in itself reassuring to patients who were highly anxious about their condition, or in considerable pain. The fact that paramedic staff remained with patients for the hand-over to hospital staff added to that reassurance, and gratitude that was felt for these staff members.

In contrast, those who brought themselves to ED, or who were brought by friends or family, reported a number of frustrations. Many raised parking as a concern; that it was difficult to find, poorly signposted, poorly lit (when arriving after dark), sometimes necessitating that the patient be separated from their family member or friend at a moment of considerable anxiety, and, given the likely emergency of the situation, a moment when many did not have the necessary change to buy a parking ticket or found having to think about payment an extra source of stress. Other patients – particularly in rural areas - mentioned that the entrance to the ED was located next to a smoking area used by staff and the general public. This served as an additional source of stress, particularly given the often acute nature of their condition at this time.

A further frustration was the experience of dealing with staff on ED reception. Patients were critical that this member of staff did not provide them with a 'roadmap' for their experience while in ED. While the patient journey varied for each and every patient, they felt the staff on reception could outline the likely next steps, give an indication of the workload within ED at that time (for example, let patients know if a more urgent emergency was occupying staff), and provide an idea of how long patients would be waiting. As the first step on this patient journey, they felt the receptionist should provide a greeting, be friendly and empathic, but the opposite was sometimes the case. Focus group participants appreciated that any indication of waiting time would be only a rough estimate, but any information would be helpful to them, and communication was central to patient satisfaction with their ED experience.
Waiting

Patients who took part in the focus groups had an expectation that they would need to wait to be treated, and this was further tempered by an acceptance that those patients in greater need go first. However, even with these lowered expectations, the length of waiting time was a key focus of concern.

“A lot of it boils down to luck though. I mean, if it’s a quiet morning and there hasn’t been a road accident or heart attacks, there will be good service.”

Most patients in the focus groups were seen promptly by the triage nurse, either straight away or within 15-20 minutes of arrival. This speed of attention was reassuring, and patients were generally positive about the triage nurse’s knowledge, competence and communication. They also praised the way triage staff interacted with children and put them at their ease. However, there was real concern among patients that after triage you wait and many hours may pass before you are seen, or another member of staff checks on your health. This raised worries among patients that their condition may have deteriorated, or that they may simply have been forgotten and their name may have ‘dropped off the list’ somehow.

“Because you’ve got children and you are worried about your child, you want to be seen quickly and you need to be informed what the process is, and the situation, to make you feel more at ease as a parent.”

Participants were keen that a member of staff be assigned to regularly review the status of patients in the waiting room. They felt this could serve a number of purposes; provide/update pain relief, help make patients more comfortable (for example, bringing blankets when necessary), help family/friends support patients (for example additional nappies for a baby with gastroenteritis), and most importantly provide updated information on how long patients were likely to wait. Patients in the focus groups believed that EDs are generally understaffed, and that those medics working there are under considerable pressure, but nevertheless felt it was important to know what was going on. Patients with minor injuries reported that had they had accurate waiting time information, they may have chosen to go home and present the following day, or go to their GP, rather than continue to wait in ED. Similarly, some were frustrated to have waited for a long period, only to be told that they needed to go to a different facility for that type of condition/injury, or that they only required minor treatment that could have been dealt with elsewhere.

“I think what they need is a benchmark of saying no person is allowed to be in (the) emergency department without somebody speaking to them say at least every half an hour.”

“I actually had to go to the desk twice and say ‘Are you still dealing with me?’”
"You feel bad as well by going up (to the reception desk) and saying, 'How's things going?' because if you do it two or three times, you get the mindset of 'well if I go up again, she might bump me back down to the end of the queue'."

There was interest in a ticketing system, or screen, to indicate length of wait, but it was also acknowledged that this was inherently difficult because of the need to prioritise certain cases. Given how busy the ED tended to be, patients were critical that others were attending the hospital when their condition was not serious, or could be dealt with at a health centre, or GP.

There was general, low-level criticism of the facilities in the waiting area by participants; boring and uncomfortable were common descriptions; some also felt it was grimy or dirty. Patients in the focus groups found it helpful when a television was on in the waiting room area, as long as it was at a volume where it could be heard (without being too loud), and showed genuine entertainment rather than promotional material. Parents in the focus groups were critical of the toys and play areas provided in the ED waiting area. While they appreciated that there was a need to occupy children while they waited, they preferred to bring laptops, or toys with them from home, as play areas within the ED were seen as 'germ factories'.

Security within the waiting area was also a concern for some focus group participants. Some were fearful of drunken patients and patients exhibiting obvious symptoms of mental illness. There was also some concern about sharing the room with prisoners.

**Interaction with staff**

There was widespread agreement and recognition of the difficulties facing medical staff – with a perception that facilities are understaffed, and there is a heavy, constant workload – but on balance, they were generally perceived as doing a good job. However, while some would like staff to be more friendly and empathic; others were less concerned with this, as long as they were polite and professional.

"The timeframe was the bad side to it, but just the way they treated our daughter was sensational so you've got to take the good with the bad, I guess. You can't get angry. It's nobody's fault."

"They're just brilliant people who are patient and fantastic."

Patients in the focus groups valued staff who communicated with them openly and as equals, avoiding jargon or talking over their heads to other staff. While most were confident of having the opportunity to ask questions of staff, there was concern that nurses often lacked the knowledge to answer the question effectively.
"The ability to get to someone who may have the answers I thought was difficult."

There was concern that some medical staff did not have sufficiently fluent English to communicate effectively with patients. Participants commented that some clinicians were hard to understand, diminishing their ability to adequately communicate with them, or that poor English undermined their confidence or trust in the individual. Similarly, those who encountered student doctors disliked hearing their condition discussed before them, finding it a dehumanising experience.

Privacy concerns were considered less relevant given the emergency of the situation, with patients in the focus groups seeing it as relatively unimportant factor, compared to timely, competent treatment.

**Treatment and pain management**

With the caveat of a lengthy waiting time, and perception of lower than desirable staffing levels, patients in the focus groups were generally positive about their treatment and pain management in ED. Most felt their health problem was resolved successfully, and that they were given timely medication to deal with the pain they experienced. Those in smaller hospitals or more regional/rural locations recognised that referrals or transfers were necessary as their local facility had limited capacity or clinicians with the requisite skills.

There was some concern among patients in the focus groups about the range of differing medical opinions expressed, and as a consequence, the time taken to agree on an appropriate course of treatment. A few reported waiting too long for pain medication while a small number reported being over-medicated for their pain, or receiving pain medication to which they were allergic. There was concern by some about staff training or competence in inserting a cannula or taking blood, as several patients observed nurses experiencing difficulties when this was attempted.

When considering treatment and pain management, patients in the focus groups raised the need to have a family member or friend to advocate on their behalf. Many patients felt they had not been sufficiently lucid to adequately describe the situation in which their injury occurred, or, to accurately recount their medical history. In these situations, having an ‘advocate’ with them who could not only communicate with staff effectively, but also help make them more comfortable and be assertive when necessary, was an advantage. Examples of help provided by family or friends, included providing information during examinations by medical staff, or finding an appropriate member of staff when the patient needed more pain relief.

While tests were required for many patients in the focus groups, staff did not always explain why these tests were necessary, which, given the need to wait for the results, tended to result in frustration. A few patients in the focus groups indicated that they or their GPs never received test results, or mentioned that they had to ‘push’ to get copies of test results.
Communication in the ED was considered important by patients in the focus groups. One patient explained how, while they were being assessed and treated, they appreciated being kept informed about what would happen next, what was going on behind the scenes and how long it might be before the doctor or nurse returned.

**Hygiene and cleaning**

Patients in the focus groups were frequently critical of the cleanliness of the facilities, often saying that treatment spaces were dirty, with visible signs/smells of blood or vomit. As mentioned above, there was concern among parents that any toys, or play areas, in the ED waiting room were unhygienic.

"People had bled out, and thrown up in there and it smelt."

"I do worry about when I sit there what germs there could be. I think 'the longer I'm here, I'll probably catch something from here'."

Most participants did report seeing hand sanitizers, and mentioned that they noticed staff regularly washing or sanitising their hands, or using new disposable gloves.

**Discharge**

The wait to be discharged was not seen as distinct from the general wait required for, and during, treatment, and as such, patients did not tend to be critical of having to wait to leave. While patients in the focus groups expected to be given information on their treatment, medication, referrals, or follow-up after their visit to ED, their experience in this area was variable. While some felt the information for their aftercare, or follow-up care, was comprehensive and easy to understand, others were given no or little information. Some reported a failure to pass on the requisite paperwork to GPs or facilities to which they had been referred. Participants generally seemed satisfied with the outcome of their visit to the ED, with a couple of exceptions, as noted, where patients waited for a long period, only to be referred elsewhere (the next day) or only needing very minor treatment that could have been performed elsewhere.

**List of potential question areas from patient focus groups**

Based on the findings outlined above, the following areas were identified for potential inclusion in the EDPS, alongside those indicated from the other stages of the development process.

**Arrival**

- Mode of arrival
- Ease of parking and finding the ED
- Attitude of paramedic staff – politeness, empathy, concern
• Attitude of reception staff – politeness, empathy, a friendly greeting, concern
• Information on ED process and approximate waiting time from reception staff, and how busy the ED was at that time
• Waiting time to be triaged
• Attitude of triage staff - politeness, empathy, concern
• Whether had a family member/friend with them for support

Waiting

• Length of wait to triage and treatment
• Whether anyone checked on patients’ condition (after triage) while waiting to be treated
• Whether the patient received updated information on waiting time to treatment
• Appropriateness of patients’ visit to ED
• Comfort and cleanliness of the waiting room
• Whether efforts were made by staff to make people more comfortable while they were waited
• Facilities available in the waiting area
• Security/safety in the waiting room

Doctors and nurses

• Attitude of doctors and nurses – politeness, empathy, concern
• Ability to communicate effectively

Treatment, tests and pain management

• Effective pain management
• Accuracy of diagnosis/incidence of contradictory information
• Confidence in the ability of doctors/nurses
• Cleanliness of treatment areas
• Family/friends provided support and could advocate on patient’s behalf
• Privacy considerations
• Explanation of necessity for tests
• If tests undertaken, receipt of results by patient or GP

Discharge

• Waiting time for discharge
• Provision of referral information, if required
• Provision of copies of test results
• Transfer of paperwork to GP or other facilities
• Provision of information to patient on how to take care of self when at home, including medication and what to watch out for
• Whether patient’s injury/condition was dealt with or whether they were transferred or referred to a different facility to conclude their treatment
• Whether patients felt they received the treatment/outcome they required
3.3 Stakeholder engagement

To ensure the EDPS meets the needs of key stakeholders who will use the results to monitor and improve patient services, a range of stakeholders were invited by BHI to suggest areas for inclusion in the questionnaire by completing a pro forma and/or participating in a telephone interview.

Stakeholders expressed interest in a wide range of question areas. Areas of particular interest included: perceived adequacy of ED facilities; patterns of ED use by the Indigenous population; suitability of ED care for the paediatric population; clarity of staff communication; and patients’ expectations of care provided in the ED. While the majority of suggestions were for types of questions related to patients’ experiences in the ED, several stakeholders recommended the inclusion of questions regarding patients’ satisfaction with their care (including overall satisfaction, satisfaction with the care provided by nurses, and satisfaction with the outcome of ED treatment).

Commonly listed reasons for recommendation included: quality control/monitoring of ED care (particularly with regard to aspects of care such as communication with patients and provision of information); generating performance information to feed back to Local Health Districts (LHDs) and specific hospitals; monitoring level of compliance with standards for ED care; service planning; and informing the future training needs of ED staff.

Suggestions made by stakeholders were collated and consolidated into a list of question areas, which can be seen in the ‘List of potential question areas from stakeholder engagement’ section of this chapter. More information about this process can be found in Appendices C, D and E.

Findings

Waiting times

Several stakeholders recommended the inclusion of questions relating to waiting times, as well as the overall timeliness of care provided in the ED. The stakeholders who requested the inclusion of this question area generally indicated they are not only interested in waiting times and patients’ perceptions of the time they spent waiting - including the waiting time to triage, assessment and treatment in the ED - but also whether patients were provided with information on the triage prioritisation process or an explanation for the delay in their care.

This question area was deemed integral for inclusion by stakeholders because it is a constant subject of patient complaints and often attracts criticism and negative attention from the media. Information generated by the inclusion of this question could be fed back to individual LHDs or specific facilities and subsequently utilised to improve the timeliness of assessment and treatment and the explanation given to patients regarding the reason(s) for their wait.
Further, as some stakeholders noted, specific aims for the efficiency of ED care exist as Australian Government priorities, amongst the most prominent of which is the National Emergency Access Target. While data generated by inclusion of this question area in the survey would not be the primary source of evidence for hospitals’ performance in this area, they would serve as a supplementary source of information.

Although it was noted that formal data on the timeliness of care is available in hospitals’ system records, there is no current source of information on patients’ perceptions on the acceptability of waiting times. As one stakeholder put it:

“To provide a balanced view, we need to hear what the patients have to say about [waiting].”

**Communication**

Communication with patients was amongst the most salient of the question areas recommended by stakeholders for inclusion in the EDPS. Stakeholders emphasised that a variety of facets of communication (with doctors, nurses and waiting room staff) should be contained in the survey, including: whether staff introduced themselves to patients; whether explanation of the reason for waiting was provided; whether patients knew who was responsible for their care; whether patients were given the opportunity to ask questions of staff or talk about their concerns; whether patients were kept informed about the progress of their condition; and whether staff talked about patients as if they were not there.

Another recurring theme in stakeholders’ recommendations was the necessity to include questions pertaining to the clarity of clinicians’ communications with patients. Stakeholders articulated that questions relating to the simplicity of ED staff’s provision of information, particularly at discharge – including explanations of follow-up plans and how to take new medication – should be incorporated in the survey.

Questions addressing communication about waiting times were considered essential by stakeholders, as perceived inadequacy in this area is the impetus for a large number of patients’ complaints regarding their ED care. Further, as mentioned by one stakeholder, the provision of understandable information, particularly at discharge, is a recommendation listed in the Garling Inquiry Report. Such a recommendation was viewed as especially imperative by this stakeholder because of the perceived danger associated with incomprehensible or jargon-filled instructions for patient self-care following discharge.

“A lot of coroner’s cases for example… where patients are treated in the ED and then discharged home and then had some adverse event after they were discharged; often that involves an element of the patient not understanding [the instructions given by clinicians].”
As several stakeholders mentioned, information generated by the inclusion of these question areas could be utilised to measure the level of communication in EDs. If necessary, this information could subsequently be used to inform training and future communication strategies.

**Information provision**

On a similar note, questions relating to the provision of information by ED clinicians were similarly emphasised by stakeholders as being integral additions to the EDPS. Question areas recommended by stakeholders included: whether clear and succinct information regarding diagnosis, treatment and on-going care was provided to patients; whether patients were given enough information about their condition and treatment; whether understandable answers were given to patients’ questions; whether patients were provided with information regarding the purpose and results of any tests performed in the ED; whether patients were made aware of their rights and responsibilities; whether patients’ families and/or carers were kept informed about the patients’ treatment; whether information was provided to patients’ General Practitioners by the ED; whether the patient was informed about the next steps in treatment; and whether a clear plan for discharge (including follow-up treatment) was provided to patients.

“*Some of the presentations to the ED are not organised properly in discharge referral...how many people have some sort of a discharge plan that they can follow, and how many people don’t?*”

These question areas were deemed crucial by stakeholders for several reasons. Firstly, the provision of information is often the source of patient complaints. However, when done properly, information provision helps to minimise anxiety and ensure patient safety following discharge. Secondly, stakeholders highlighted that for patients to be properly involved in decisions about their care, or be able to provide informed consent, they require the provision of understandable information.

Several different potential uses for the data generated by the inclusion of these question areas were suggested by stakeholders, including comparisons with data from previous NSW ED surveys to analyse how information provision practices change over time, and further use of the data to inform government initiatives in safety and quality.

**Staff competence**

Competence of staff was also mentioned as a question area that should be included in the EDPS. In particular, questions relating to the reliability of diagnosis, efficacy of treatment and the occurrence of adverse events due to ED treatment were suggested. Further, if adverse events did occur, stakeholders expressed interest in patients’ perception of the extent of staff disclosure regarding the incident.
Stakeholders emphasised that these topics should be included as questions in the EDPS because of the inherent pressures – amongst the most prominent of which are time constraints - associated with diagnosis and treatment (by both doctors and nurses) in the ED. As one stakeholder put it:

"[The] ED represents the most time poor, potentially rushed diagnostic setting."

Further, as new technologies, including those used for diagnosis, are further incorporated into use in EDs state-wide, stakeholders indicated that it is important to establish whether patient safety is proportionately improving.

**Attitude of staff**

The attitude of staff is another question area recommended for inclusion in the EDPS by multiple stakeholders. Commonly suggested topics for these questions included: whether patients thought ED staff - including doctors, nurses and reception staff - treated them with dignity and respect; whether staff respected patients’ religious and cultural beliefs, or ‘spiritual’ needs; whether patients were able to participate in decisions made about their care; and whether patients felt that ED staff were courteous and helpful to them.

Stakeholders emphasised the importance of incorporating these question areas in the EDPS due to the salience of principles regarding ‘dignity and respect’ in prominent policy and standard documents, such as the Australian Charter of Healthcare rights. These documents tend to focus on the general principle of dignity and respect, as well as respect of religious, spiritual and/or cultural beliefs.

**Collaboration between staff**

Stakeholders were also interested in the patients’ perceptions of the level of collaboration between ED clinicians. In particular, stakeholders suggested the inclusion of questions relating to: patients’ impression of the level of communication between ambulance paramedics and the ED staff; whether the ED staff worked as a team to deliver the best care possible; general perception of coordination of care; and whether handovers happened in front of patients. Stakeholders indicated that information generated by the inclusion of these questions could be used to evaluate and improve the provision of service in EDs, particularly in the handover of patients from paramedics to ED staff.

**Levels of staffing**

One stakeholder articulated that the EDPS could provide an opportunity to examine patients’ perceptions on the adequacy of levels of staffing in EDs. This stakeholder mentioned that data from this question could contribute to research into the problem of ED overcrowding, and work that could result in the generation of “effective solutions” for hospitals across NSW.
**Staff responsiveness**

Responsiveness of ED staff, particularly in relation to pain management, was recommended as a question area for the survey. Stakeholders suggested the inclusion of questions relating to the timeliness of the initial review of the condition of patients upon arrival, and the perceived adequacy of the management of patients’ pain.

These questions were deemed as necessary inclusions in the EDPS due to the high proportion of patients that present to the ED in pain. Further, effective pain management was accentuated by stakeholders as a patient right and a particularly vital component of ED care.

**Patients’ confidence in staff**

Several stakeholders expressed interest in the inclusion of a question relating to the extent of patients’ confidence and trust in clinicians. The rationale for the incorporation of such a question is that the data generated could be utilised to gauge staff’s “customer service” performance, as well as the success or failure of implemented communications strategies. Further, as one stakeholder pointed out, a lack of confidence in clinicians often results in patient (and sometimes media) complaints.

**Patient knowledge**

Questions pertaining to patients’ level of knowledge regarding when they should present at an ED were also recommended by stakeholders. Specifically, stakeholders indicated that the EDPS should include questions that ask patients about the reason for their presentation at the ED and why they did not visit the GP instead.

These question areas were considered to be important primarily because of the lack of information regarding patients’ perceptions of their reason for presentation at the ED. Several stakeholders expressed concern that patients, particularly those with minor injuries, often present to the ED rather than alternative services such as the GPs which can have negative ramifications for ED waiting times. If the survey yielded data from this question that indicated a deficit in patient knowledge on when to present to the ED, this evidence could be used to inform future service planning or even mount the case for the provision of funding for patient education campaigns.

"[Inclusion of this question area would provide] a full picture from the patient’s perspective; whether they had access to alternative care, or why they came to the Emergency Department."

**Patient expectations**

Some stakeholders recommended that the EDPS should contain questions relating to the expectations of patients for their ED treatment. Specific questions suggested included: whether patients felt their expectations for care were met; whether patients read about their condition on
the internet prior to visiting the ED; whether patients anticipated the use of their Personally Controlled Electronic Health Record; whether patients expected after-care instructions for post-discharge; whether patients felt their medical complaint was adequately dealt with in the ED; and what could have been done to improve their care in the ED.

Stakeholders articulated that these questions should be included in the survey predominantly because patients’ expectations of care are intrinsically linked to their satisfaction with their care. If patients’ expectations are generally unreasonable, clinicians could be made aware of and prepared to address these expectations, and plans for patient education materials could be developed.

**Facilities**

Patients’ perception of the suitability of the ED facilities was another area of interest for stakeholders. In particular, stakeholders were interested in: whether patients felt they had enough privacy, especially when revealing and discussing the nature of their condition with clinicians; cleanliness of the facilities (including the toilets); the impact of other patients/safety and security concerns; comfort, including whether there was overcrowding in the waiting area, and enough space for their treatment; whether patients were able to securely store their valuables; whether patients were offered/received an interpreter; whether facilities were conducive to easy access by all patients; and whether there was adequate signage denoting the entrance of the ED.

These questions were recommended for inclusion in the survey to ensure EDs are sufficiently comfortable, and meet the required standards of care for all patient groups (including those from culturally and linguistically diverse backgrounds and those with disabilities). One stakeholder also remarked that these question areas (particularly hygiene and comfort) are the source of many patient and media complaints. Further, they stressed the importance of hygiene in ED infection control.

One stakeholder indicated they are interested in questions relating to the provision of food in the ED. Specifically, patients’ level of access to food and drink in the ED and satisfaction with meals provided in the ED. This stakeholder indicated the importance of the role of food and nutrition in the recovery of ED patients. They highlighted that the aforementioned questions could identify and monitor instances where patients’ needs are not being met with regard to food.

If these question areas were incorporated in the survey, stakeholders indicated that they would be used to highlight areas for improvement in ED facilities and care, and potentially inform staff training or service improvement (such as frequency of cleaning).
Special populations:

Paediatrics

Several stakeholders accentuated the need for the inclusion of questions pertaining to patient groups with particular treatment needs and priorities. Of these, paediatric patients were amongst the most commonly mentioned group. As highlighted by one stakeholder, paediatric patients make up approximately 25%-30% of the emergency caseload. Due to this high frequency of presentations, as well as the consumer involvement directive in the National Safety and Quality Health Service Standards, one stakeholder suggested that different versions of the survey be produced for children to fill out themselves. This stakeholder envisaged that these versions would contain appropriate language and content for the relevant age groups.

“If there was a good tool available, why not ask the children themselves in an appropriate way using appropriate language about things that matter to them.”

While it may not be possible to develop age-specific versions of the EDPS due to the need to work within allocated resources, it was considered important that the survey contains questions that aim to depict the unique experiences of paediatric ED patients. Such a section was suggested by another stakeholder.

The stakeholder indicated that this paediatric section should attempt to collect information that is relevant to children’s care in EDs and is unavailable from alternative sources. Questions suggested included: whether the patient/carer feels that the medical condition could have been handled by a GP; the distance travelled to the ED, whether there is another ED closer to their home, and the reason they chose that particular ED; whether the patient/carer found the ED (including the waiting room and treatment area) to be appropriate for use by children; and whether the staff provided understanding and care appropriate for the needs of children and their family.

These questions were flagged for inclusion by this stakeholder for several reasons. Firstly, there is a trend in consumer choice in paediatrics where patients drive past their local ED to secure care in other EDs that they perceive as providing more appropriate, or specialised care. However, little is known about this phenomenon, including its drivers or how widespread it is. The suitability of ED facilities for children was recommended as a question area in order to clarify the appropriateness of care in EDs for children. If information yielded from the results of these question areas indicated a deficiency in paediatric care in EDs, it could be used to plan approaches to improve this facet of ED care.

Indigenous patients

Stakeholders also expressed interest in the inclusion of questions specifically aimed at examining Indigenous patients’ ED experience. Question areas recommended included: whether the ED
environment was perceived as being culturally appropriate; whether the patient waited for treatment, and if not, why they did not wait; and whether the patient was asked if they are of Aboriginal or Torres Strait Islander origin.

These question areas were suggested for inclusion to further clarify the discrepancy in ED usage between Indigenous and other patients. Stakeholders remarked that the rate of Aboriginal patients who leave the ED without receiving treatment is higher than non-Aboriginal patients.

“[This question] would be very useful because as I said, there has been lots of research done on Aboriginal people having difficulty with access, but as for the reasons why that is...I don't think anyone really knows.”

Further, as one stakeholder observed, questions relating to patients' reasons for leaving the ED without treatment are applicable to the experiences of the entire ED patient population. With regard to the question relating to whether patients were asked if they are of Aboriginal or Torres Strait Islander origin, one stakeholder indicated that while it is a policy directive for clinicians to ask this of patients, anecdotal accounts indicate that not all patients are asked. Incorporation of this question into the survey would allow analysis of the extent to which this question is being asked.

Another stakeholder requested a 'boost' of the Indigenous sample in the survey. This would render the data amenable to a longitudinal analysis at the LHD level. It was felt that such an analysis could be fed back to LHDs to improve service provision to the Indigenous population.

**Oncology patients**

The inclusion of a section for ED oncology patients was recommended by one stakeholder. Question areas suggested included: the reason for presentation at the ED/choice of ED over primary care (e.g. GPs); whether oncology patients feel they have sufficient information on when they should attend the ED; and whether those with cancer disclosed that they were oncology patients, as well as the status of their treatment.

One reason provided to support the inclusion of these questions in the EDPS was the observation that oncology patients sometimes present at EDs when they should be presenting to their GP.

"We feel that in some instances, cancer patients are presenting inappropriately to Emergency Departments; that perhaps, their care could be better, or more efficiently or effectively treated in the community by their GP, reducing the cost and the unnecessary utilisation of [ED] services”

The addition of these questions to the survey would help to identify how widespread this trend is and, if necessary, highlight the need for "effective targeted strategies that would enable patients to manage their own care".
Patient demographics

Certain patient demographics were recommended for inclusion by stakeholders. As these stakeholders generally articulated, the inclusion of questions asking patients to list their age, gender, and language primarily used at home would facilitate a more tailored analysis of data. For example, levels of satisfaction with care received in ED could be examined for patients from a range of different age groups. The results could be used to identify the subgroup for which EDs could improve their service (for example, in their provision of care to the elderly), resulting in the generation of easily actionable recommendations.

While not directly suggested by stakeholders, it follows from their potentially different experience of care (see the ‘special populations’ section on page 39) that questions or information in the sample file that identifies if patients are of Aboriginal or Torres Strait Islander origin, paediatric patients (or parents or guardians of paediatric patients) and oncology patients was considered.

Overall ratings of care

Stakeholders also expressed interest in the inclusion of measures of patient satisfaction with aspects of their ED care in the survey. Suggestions included: overall satisfaction with the ED; whether patients would recommend the ED; whether the patient would return to the ED if they had the choice; whether patients were satisfied with the outcome of their treatment; the area of care that impressed patients the most; any exceptional staff members encountered; and satisfaction with the care provided by nurses, doctors, and administrative staff. One stakeholder also recommended a space for general comments in the EDPS.

The data generated by the inclusion of these questions was considered to serve several purposes. Firstly, questions related to patient satisfaction (with overall care, as well as care provided by doctors and nurses) could be tracked longitudinally, highlighting strengths and areas requiring improvement in ED care across LHDs and facilities. Secondly, questions pertaining to likelihood of recommendation measure patient advocacy which, as one stakeholder commented, is very important in performance benchmarking. Thirdly, the question relating to exceptional staff could be used to provide positive feedback to staff at certain facilities; an important gesture given the inherent pressures of working in an ED. The stakeholder who suggested this question noted that it may not be possible to include a space in which patients could list the name of the member of staff, but indicated that even a question in which patients could highlight positive aspects of the care from either nurses or doctors would be helpful. Lastly, the space for general comments was recommended for inclusion to:

"identify specific areas of improvement, and to monitor trends throughout the department."
List of potential question areas from stakeholder engagement

The potential EDPS question areas that were generated by stakeholder feedback are as follows.

**Waiting times**
- waiting time until transfer from the ambulance
- waiting time until triage
- waiting time until assessment
- waiting time until treatment
- patients’ perceptions of waiting times (satisfaction with the timeliness of care)
- provision of information regarding the triage process
- provision of explanation for any delays experienced

**Communication**
- whether staff introduced themselves
- whether patients knew who was responsible for their care
- whether patients were given the opportunity to ask questions of staff
- whether patients could talk with staff about their concerns
- whether patients were kept informed about the progress of their condition
- whether staff talked about patients as if they were not there

**Information provision**
- whether understandable explanations were given about the diagnosis
- whether patients were given enough information about their condition and treatment
- whether understandable explanations were given about the treatment
- whether understandable explanations were given about on-going care
- whether patients were provided with information regarding the purpose of tests
- whether patients were provided with information regarding the results of tests
- whether understandable answers were given to patients’ questions
- whether patients were made aware of their rights and responsibilities
- whether patients’ families and/or carers were kept informed about their treatment
- whether an understandable discharge plan was provided to patients
- whether the patient was informed about the next steps in treatment
- whether information was provided to patients’ GPs by the ED

**Staff competence**
- reliability of staff’s diagnoses
- efficacy of treatment
• occurrence of treatment-related adverse events
• level of disclosure regarding adverse events
• patients’ confidence and trust in the ED clinicians

Attitude of staff

• courtesy of ED staff
• whether doctors treated patients with dignity and respect
• whether nurses treated patients with dignity and respect
• whether administrative staff treated patients with dignity and respect
• whether staff respected patients’ spiritual needs
• whether staff respected patients’ religious and cultural beliefs
• whether patients were able to participate in decisions about their care
• whether ED staff were helpful

Collaboration between staff

• level of communication between ambulance officers and ED staff
• coordination of care in the ED
• patients’ perception of whether the ED worked as a team to deliver the best care possible
• whether handovers took place in front of patients

Levels of staffing

• patients’ perceptions of levels of staffing in the ED

Staff responsiveness

• timeliness of the initial review of patients upon arrival at the ED
• perceived adequacy of pain management

Patient knowledge

• patients’ reason for presentation at the ED
• why the patient went to the ED rather than the GP

Patient expectations

• whether patients read about their condition on the internet prior to visiting the ED
• whether patients expected the use of their Personally Controlled Electronic Health Record
• whether patients expected post-discharge care instructions
• whether patients felt their expectations for care were met
• whether the patient felt their medical complaint was adequately dealt with
• what could have been done to improve care in the ED
**Physical environment**

- whether patients generally felt they had enough privacy in the ED
- whether patients felt they had enough privacy in the ED when discussing their condition
- whether patients felt there was enough space for them in the ED
- cleanliness of the ED facilities
- cleanliness of the ED toilets
- comfort of the ED
- whether the ED was easily able to be accessed
- whether signage for the ED was adequate

**Facilities and food**

- whether patients felt the ED facilities were appropriate
- access to food and drink
- impact of other patients/safety & security concerns
- whether patients were able to securely store their valuables
- whether patients were offered/received an interpreter
- satisfaction with meals in the ED

**Special populations**

**Paediatric patients**

- whether the [paediatric] patient/carer feels that their medical condition could have been handled by a GP
- distance travelled to the ED
- whether there is an ED closer to the patients’ home than the one they attended
- why the patient chose to attend that particular ED
- whether the waiting room was appropriate for children
- whether the treatment area was appropriate for children
- whether the staff provided understanding and care appropriate for the needs of children and their family

**Indigenous patients**

- whether the ED environment was perceived as being culturally appropriate
- whether the patient waited for treatment
- The main reason for not waiting for treatment
- whether the patient was asked if they are an Aboriginal or Torres Strait Islander

**Oncology patients**
• the reason for presentation at the ED
• whether they have sufficient information on when to attend the ED
• whether they disclosed that they are oncology patients
• whether they disclosed the status of their treatment

Patient demographics and health status

• gender of the patient
• age of the patient
• language primarily used by the patient/country of birth of patient
• whether the patient presented at the ED with members of their family
• whether the patient is an Aboriginal or Torres Strait Islander
• whether the patient is a child
• whether the patient is an oncology patient

Overall ratings of care

• overall satisfaction with the ED
• satisfaction with doctors
• satisfaction with nurses
• satisfaction with administrative staff
• whether patients would recommend the ED to others
• whether the patient would return to that ED if they had a choice
• whether patients were satisfied with the outcome of their treatment
• the area of care that impressed patients the most
• any exceptional staff members encountered
• a space for general comments
3.4 Statistical analyses of previous surveys

Survey results from the 2007-2011 NSW Non-Admitted Emergency Patients Surveys were analysed using 'key drivers’ analysis, factor and reliability analysis, analysis of respondent comments relating to the survey itself, and analysis of non-response and possible ceiling and floor effects. Although a new survey is being developed, this analysis is useful to provide an additional indication of the question areas likely to be most important for inclusion, question areas where particularly careful consideration should be given to the wording/response scales and question areas that could potentially be removed. The results of these analyses are as follows. More details can be found in Appendix F.

**Key drivers analysis**

NSW Health performed key driver analyses on the Emergency Patients Surveys from 2007-2009 to clarify the aspects of emergency care most closely associated with patients’ rating of overall satisfaction.

The following aspects of care were identified as key drivers in each of the surveys across these years.

- Courtesy of ED doctors was the most influential aspect of care in all three years, followed by courtesy of ED staff.\(^{289,290,291}\)

- Other important drivers included how well ED doctors and nurses worked together, the explanation of what the ED did (in treatment) and the completeness of care provided by the ED.\(^{292,293,294}\)

**Factor analysis**

The factor analysis generally provided consistent results across this range of ED patients - general patients (with no pain or tests), patients who experienced pain and patients who had tests performed on them. For all these groups of patients, the Waiting Times factor accounted for the most variance (ranging from 10-12%). This factor also demonstrated high reliability for all three patient groups, suggesting that the questions that compose this factor are measuring the same latent construct. Other factors that accounted for substantial proportions of the variance across all the patient groups included Nurses and Facilities. Generally speaking, the questions that made up these factors were similar across the groups, and their alpha levels indicate that their reliability is good.

Despite the general consistency between patient groups, there were some differences observed. For patients who experienced pain and those who had tests, a Medication Information factor was
observed. Whilst it only accounted for 6-7% of the variance, its presence in the analysis for these groups indicates the relative importance of this information for these patient groups.

For patients who had tests in the ED, a Medical Explanations factor was also important, accounting for the second highest amount of variance. This factor, which had strong reliability, was composed of questions pertaining to explanations surrounding patients’ condition, the need for tests, and answers to patients’ questions. The presence of this factor for this group emphasises the importance of communication in the ED, particularly for test patients.

Further differences in the experiences of patient groups can be observed in the Doctors factors. The Doctors factors comprised different questions for general patients than for pain-experiencing patients and patients who had received tests. For general and pain-experience patients, questions in the factor included waiting time for the doctor, communication and continuity of care. For patients who had received tests, questions in the factor included continuity of care, waiting and doctor courtesy. However, in contrast to the factor for general and pain-experiencing patients, this factor accounted for little variance and had unacceptable reliability, perhaps suggesting that other facets of care, such as nurses and provision of medical information, as more important to patients who receive tests.

**High correlations between variables**

As part of the reliability analysis, inter-item correlation matrices were produced for each factor. These matrices were examined to identify redundant questions within factors. Follow-up Pearson correlations were conducted to check the correlation across patient groups. It is important to note that high correlations between variables can be an artefact of participants’ response patterns. Therefore, the questions mentioned below are those that possess strong correlations\textsuperscript{\textdagger} with each other as well as similarity in question wording or topic.

In the 2007-2011 Emergency Patient Surveys three pairs of questions fulfilled the aforementioned criteria:

- Q47. Did someone explain how to take the new medications? and Q48. Did someone on the hospital staff explain the purpose of the medicines you were to take at home in a way you could understand?
- Q38. Did you get pain medicine in the emergency room? and Q40. Overall, how much pain medicine did you get?
- Q42. Did your healthcare providers/staff wash or clean their hands before providing care for you? and Q43. Did your healthcare providers/staff wash or clean their hands after providing care for you?

\textsuperscript{\textdagger} Pearson correlations that exceeded 0.7
This analysis suggests that each of these question pairs could potentially be redeveloped as a single question without reducing insight into ED patient’ experience.

Other questions with slightly lower correlations\textsuperscript{III} and less similarity in question wording or topic included:

- Q15. When you had important questions to ask a doctor, did you get answers you could understand? and Q17. Did you have confidence and trust in the doctors treating you?
- Q17. Did you have confidence and trust in the doctors treating you? and Q21. How would you rate the courtesy of your doctors?
- Q26. Did you have confidence and trust in the nurses treating you? and Q28. How would you rate the courtesy of your nurses?
- Q13. Did you have to wait too long to see a doctor? and Q62. How would you rate your waiting time?
- Q3. Do you feel you had to wait an unnecessarily long time to go to a bed or room? and Q62. How would you rate your waiting time?
- Q22. How would you rate the availability of your doctors? and Q62. How would you rate your waiting time?
- Q28. How would you rate the courtesy of your nurses? and Q29. How would you rate the availability of your nurses?
- Q24. When you had important questions to ask a nurse, did you get answers you could understand? and 26. Did you have confidence and trust in the nurses treating you?

The above questions’ position in the survey should be considered. While they may not be measuring the same construct, they appear to be measuring similar constructs. If additional succinctness is needed, these questions could possibly be redeveloped or combined.

\textsuperscript{III} Pearson correlations that exceeded 0.5
Missing response analysis

A missing response analysis was performed on the 2007-2011 Non-Admitted Emergency Patient Surveys to determine if any questions in the survey were prone to participants’ non-response.

Question 73 - ‘What areas of the emergency room were not clean?’ - exhibited extremely high rates of non-response (73%). The most likely reason for this low response rate is the lack of an opt-out response option or filter question. While the preceding question (Q72) asks about the cleanliness of the ED, it does not act as a filter for the following question. Therefore, patients who experienced a clean hospital (approximately 94% of respondents) were still asked to answer (or not answer) Q73, resulting in a high rate of non-response.

In the 2007-2011 survey, two questions in the demographic section – Q76. ‘How many times in the last six months have you been in a hospital overnight or longer?’ and Q78. ‘What was the highest level of education you completed?’ also exhibited high rates of non-response (21% and 11%, respectively). One possible explanation for these elevated rates is that patients did not see these questions as relevant to their most recent hospital experience, and consequently did not choose to answer them. Alternatively, in the case of Q76, some patients may have found it difficult to recall the number of hospital visits in that specific time period.

Other questions with high rates of non-response included Q4. ‘If you had to wait to go to a bed or room, did someone from the Emergency Department explain the reason for the delay?’ (11%) and Q9. ‘Was there someone in the emergency room who could interpret for you?’ (11% of those who wanted an interpreter). It seems probable that the reason for the high levels of non-response for these questions is that respondents initially overlooked the skip instructions.

One crucial point surrounding the patterns of non-response is that levels of non-response did not increase over the course of the survey. This means that there is no systematic survey attrition on the basis of survey length.

Ceiling and floor effects

The questions from the 2007-2011 Emergency Patient Surveys with a ceiling effect (i.e. indicating that the majority of patients gave a positive rating), according to the ceiling and floor effect criteria were as follows (no floor effects were identified):

- Q64. Sometimes in the hospital, one doctor or nurse will say one thing and another will say something quite different. Did this happen to you in the Emergency Department?
- Q40. Overall, how much pain medicine did you get?
- Q27. Did nurses talk in front of you as if you weren’t there?
- Q43. Did your healthcare providers/staff wash or clean their hands before providing care for you?
- Q18. Did doctors talk in front of you as if you weren’t there?
- Q43. Did your healthcare providers/staff wash or clean their hands after providing care for you?
- Q56. Did each hospital staff person treat you with dignity and respect?
- Q47. Did someone explain how to take the new medications?
- Q48. Did someone on the hospital staff explain the purpose of the medicines you were to take at home in a way you could understand?

The identification of ceiling effects for these questions indicates that they might be less useful in terms of informing service improvement, which should be one consideration when prioritising potential question inclusions. However, these questions were not automatically excluded from the survey as: while the overall picture is positive, there may be problems with some of these aspects of care at the hospital or LHD level; patients should feel the survey covers areas of importance to them; positive feedback is likely to be important for staff morale; and the survey is one avenue for facilities to provide evidence of compliance with standards and for accreditation.

**Patient comment analysis**

The 2007-2011 Emergency Patient Surveys included an open question, which asked ‘If you could change one thing about the hospital what would it be?’. Comments made by survey respondents in 2010 and 2011 were coded into thematic categories. All comments coded as ‘other mentions’ and/or containing the keyword ‘survey’ were manually reviewed for content relating to the actual conduct of the survey.

Recommendations based on this analysis included:

- consideration should be given to the date at which the survey is sent out to patients (as some respondents mentioned that they had difficulty answering survey questions due to time that had elapsed between their hospital experience and the receipt of the survey)
- the sample frame should be examined to ensure that the survey is only sent to patients with ED experiences relevant to the survey (as some respondents mentioned that the survey content was not applicable to their hospital experiences due to brief stays or repeated treatments such as dialysis)
- the survey should include a question that establishes if it was completed by the patient (as some respondents indicated that they completed the survey for a family member)
- the survey length should be given careful consideration (as number of respondents made comments suggesting they felt the survey was protracted)
- the information accompanying the survey should clearly explain which specific visit to the ED the patient should be basing their survey responses on (as some respondents’ indicated that their responses were based on a different hospital visit to the one sampled for).
Summary of implications for the design of the EDPS

Based on the results of the statistical analyses of the 2007-2011 NSW Non-Admitted Emergency Patient Surveys, the following recommendations were made:

- Question areas identified as key drivers for ED patients’ overall satisfaction with their care should be included in the survey. Specifically:
  - courtesy of ED doctors
  - courtesy of ED staff
  - how well ED doctors and nurses worked together
  - the explanation of what the ED did
  - completeness of care provided by the ED.

- The survey should include questions that examine the waiting time at every stage of the ED treatment pathway, due to the prominence of the Waiting Times factor in the factor analyses.

- Key factors (question areas) in the survey should include: waiting times, doctors, nurses, facilities, hygiene, communication, medication information, pain management, and medical explanations.

- Pairs of questions that correlate highly should be amalgamated to ensure that redundancy of questions is minimised. Specifically:
  - Q47. Did someone explain how to take the new medications? and Q48. Did someone on the hospital staff explain the purpose of the medicines you were to take at home in a way you could understand?
  - Q38. Did you get pain medicine in the emergency room? and Q40. Overall, how much pain medicine did you get?
  - Q42. Did your healthcare providers/staff wash or clean their hands before providing care for you? and Q43. Did your healthcare providers/staff wash or clean their hands after providing care for you?

- Patient experience questions with elevated levels of non-response (for example, Q73. ‘What area of the emergency room were not clean’) should be taken into consideration when prioritising questions for the survey.

- The presence of ceiling effects should be taken into consideration when prioritising questions for the survey.

- Consideration should be given to the timeframe in which the survey is sent out to patients.

- The sample frame should be examined to ensure that the survey is only sent to patients with ED experiences relevant to the survey (as some respondents mentioned that the survey content was not applicable to their hospital experiences due to brief stays or repeated treatments such as dialysis).

- A balance must be sought between ensuring the survey provides sufficiently detailed feedback and minimising the burden on respondents in terms of survey length.
The survey should include a question that establishes if the survey was completed by the patient or someone on behalf of the patient.

The information accompanying the survey should clearly explain which specific visit to the ED the patient should be basing their survey responses on.
4. QUESTIONNAIRE DEVELOPMENT

This section summarises how the various stages of the development process were brought together - the rapid literature review, the statistical analyses, the stakeholder consultation and patient focus groups.

This process involved:

- Applying parameters/rules to guide the questionnaire development
- Creating a list of potential question areas for inclusion in the survey instrument
- Consideration of other implications arising from each stage of the development
- Extensive consultation between BHI and Ipsos
- Multiple rounds of cognitive testing

Potential question areas

The potential question areas indicated by each stage of the development process were brought together to create a comprehensive list of possible topics. This included a range of issues relating to:

- means and experience of arrival at the ED
- availability and cost of parking
- experience of ambulance and paramedics
- waiting times and delays (between arrival, triage, treatment and discharge)
- attitude of staff
- responsiveness of staff
- organisation and communication between staff
- information provision and communication with patients efficiency of handovers
- privacy
- complaints
- pain relief
- cleanliness and hygiene
- food/diet
• competency of staff and quality of treatment
• discharge/care transition
• overall ratings of care
• patient suggestions for improvements
• demographics and health status information (including questions required for standardisation purposes)
• data linkage permission.

The full list of potential question areas can be found in Appendix I.

This comprehensive list, drawn from all developmental stages, was used as the basis of the initial questionnaire design, and then refined through consultation and testing.

**Development of rules/design parameters for the questionnaire design**

The design of the EDPS built on the rules and design parameters established in the development of the Adult Admitted Patient Survey (AAPS). The same planned approach – of consultation with patients and stakeholders, and review of ‘best practice’ patient surveys – was adopted. ‘Tried and tested’ questions as a design starting point, were also used where appropriate. Similarly, the design was a process of extensive discussion between BHI and Ipsos, and finalised through cognitive testing.

These common rules and design parameters included: that the primary focus should be the patients’ experience of care and factual rather than judgemental assessment; inclusion of an overall rating question; use of balanced rating scales; avoidance of double-barrelled questions (wherever possible); avoidance of leading or biased question wording; using a limited suite of question formats and response options for ease of completion; using plain English throughout; and providing ‘don’t know’ and ‘not applicable’ options only where essential.

To align with and allow comparison with the AAPS, the questionnaire includes the set of national core, common patient experience questions, on behalf of Patient Experience Information Development Working Group (PEIDWG). This meant that these questions could only be amended if agreed by PEIDWG, resulting in some inconsistency in relation to the design parameters outlined above.

**Cognitive testing**

An essential part of the development process was the undertaking of cognitive testing to ensure the validity of the questionnaire. As with AAPS, the aim of this is to ensure that participants were able to understand and answer the survey questions and that they were consistently interpreted in
the way intended. This stage of development was particularly valuable given the large variety in patient experiences and pathways that it highlighted.

The cognitive interviews were conducted in three rounds. The first two rounds provided an opportunity to assess whether the instrument successfully captured the full range of ED patient experiences. This was an iterative process with the findings from the first round informing the subsequent draft, and being tested in the second round until a final draft was achieved. This was then graphically designed and tested in the final round, to ensure that the layout of the questionnaire encouraged participation and supported successful completion of the survey.

A summary of the edits made as a result of the cognitive testing phase and subsequent discussion between BHI and Ipsos SRI, follows below:

- To reduce the length of the questionnaire, a number of questions were amalgamated to negate the need for a filter question.

- An opening question was added to clarify whether the ED visit related to the adult recipient, or their child, and additional text was included to remind respondents on whose behalf they were completing the questionnaire, (‘Please answer this survey from the patient’s point of view’). While the cover letter made this clear, the cognitive interviewing highlighted the need to reiterate this point.

- The variety of paths to, and through, the ED were revealed by the cognitive testing, and additional routing questions were inserted to address this breadth of experience. This related to whether or not a patient had arrived by ambulance, whether they waited in the waiting room or the corridor, and whether they were triaged or not. Additional text was also added at section headings to ensure routing was clear.

- Patients varied in their comprehension of what the term ‘triage’ meant, and whether or not they had experienced it. This term required clarification and was explained as an ‘initial assessment’.

- The testing highlighted that some patients were either unconscious or not in a state to remember their experience. In consequence, additional ‘Don’t know/Can’t remember’ response categories were included.

- Questions were added to establish whether patients felt their condition could have been treated by their GP, and if so, why they chose to attend the ED.

- Questions were also introduced to better understand whether or not effective handovers were taking place between health professionals in the ED.
Appendix J details the development process for every individual question in the final survey, including the primary reason for inclusion, the source question (where applicable) and changes made to the question during the development process (as a result of cognitive testing and discussion between BHI and Ipsos SRI). Appendix K outlines which questions in the final survey are relevant to the National Safety and Quality Service Standards and the Australian Charter of Healthcare Rights. The final questionnaire is included in Appendix L.
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