

BUREAU OF HEALTH INFORMATION

Level 11, Sage Building, 67 Albert Avenue
Chatswood NSW 2067
Australia
Telephone: +61 2 9464 4444
bhi.nsw.gov.au

This work is copyrighted. It may be reproduced in whole or in part for study or training purposes subject to the inclusion of an acknowledgement of the source. It may not be reproduced for commercial usage or sale. Reproduction for purposes other than those indicated above requires written permission from the **Bureau of Health Information**.

© Copyright Bureau of Health Information 2015

State Health Publication Number: (BHI) 150340
ISBN 978-1-76000-203-9

Suggested citation:

Bureau of Health Information.

Patient Perspectives – Exploring aspects of integration for hospital patients. Volume 2, Emergency Department Patients.
Sydney (NSW); BHI; 2015.

Further copies of this document can be downloaded from the Bureau of Health Information website:
bhi.nsw.gov.au

Published May 2015

Please note that there is the potential for minor revisions of data in this report.
Please check the online version at **bhi.nsw.gov.au** for any amendments.

Table of contents

Foreword	2
Summary	3
Setting the scene	6
Exploring aspects of integration	7
About this report	9
Data and methods	11
Thematic results	14
Aspects of integration for ED patients: Detailed responses	15
Aspects of integration for ED patients: Seven themes	17
Coordination and continuity of care when arriving at the ED	19
Coordination and continuity of care in the ED	21
Coordination and continuity of care when leaving the ED	23
Provision of information	25
Responsiveness to ED patients' needs and expectations	27
Involvement of ED patients in decisions	29
Self-management support	31
Making comparisons	34
Peer groups and themes	35
LHDs and themes	37
Comparisons by different care needs: triage categories	39
Comparisons by different care needs: discharged, admitted or transferred	41
Comparisons by different patient populations: Aboriginal people	43
Comparisons by different patient populations: People who mainly speak a language other than English	45
Comparisons by different patient populations: People with long-standing conditions	47
NSW results compared with England	49
Appendices	
Appendix 1: Emergency Department Patient Survey questions reported upon	51
Appendix 2: LHDs and hospitals covered in the Emergency Department Patient Survey	53
Appendix 3: Sensitivity analysis of LHD results	55
Appendix 4: Hospitals with significantly higher or lower results compared to NSW	57
Appendix 5: Exploring variation in NSW results – 17 LHDs, 75 hospitals	59
Appendix 6: Reasons for delay in leaving the ED	61
Appendix 7: Comparable questions from the NHS Accident and Emergency Survey 2014	63
References	65
Acknowledgements	67

Foreword

For patients, particularly those with multiple health problems, navigating the healthcare system is increasingly complicated. Care is provided in different settings, from within the community to primary care clinics and hospitals. Health professionals provide a vast array of treatment options, often on a long-term basis for patients living with chronic conditions.

At the same time, healthcare systems face important challenges related to how effectively different sectors and providers of care interact; how well healthcare professionals work together; and whether patients and their caregivers are supported and encouraged to be meaningfully involved in their care. There is an increasing need for the various providers of care to ensure smooth transitions for patients and to deliver efficient use of available resources. Integrated care is one of the solutions that healthcare systems are using to meet goals of better care experiences, improved care outcomes and better value for money.

NSW Health is currently piloting and implementing various initiatives to provide more integrated care for patients. These include health information systems and clinical governance tools to support clinical decision-making for complex problems, as well as innovation and change in the composition of healthcare teams and patient pathways. Many initiatives explicitly involve patients in decisions about their care and encourage active participation in their treatment and management of ongoing conditions when they are able and willing to do so.

Patients and their carers are the primary participants and witnesses of integration, often being the main connection between various providers and sectors. They have first-hand experience of transitions from the community to hospital settings, between specialised medical care and primary care, and between allied health services and community-based support organisations.

Giving voice to patients about these transitions is therefore one of the keys to understanding integration of care. This report seizes the opportunity that flows from a large state-wide patient survey about the experience of patients during their recent visit to an emergency department. It is the second volume in the series focused on aspects of integration. The first related to the experiences of patients admitted to hospital.

Given the strong system emphasis on integrated care, its measurement is crucial. Understanding how integrated care is embedded, its effect on processes and outcomes of care, and how it evolves over time will guide quality improvement efforts.

Patients and their carers are the primary participants and witnesses of integration, often being the main connection between various providers and sectors. ””

Integrated care is a broad concept – its delivery involves system-wide, organisational, intra-professional, inter-professional and patient-level activities and processes. Contextualised in terms of NSW Health policy and strategic direction and drawing on an internationally recognised framework, this report uses patients' perspectives to reflect on the delivery of certain aspects of integration. It provides new information that complements analyses using administrative information systems.

Dr Jean-Frédéric Lévesque
Chief Executive

Summary

Exploring aspects of integration for hospital patients, Volume 2 is the latest edition of *Patient Perspectives* – a series that draws on patient survey data to examine different themes or elements of performance in the NSW public healthcare system.

The theme for this edition is integration. The extent to which care is well integrated can affect patients' experiences, outcomes, and quality of life and impact services' efficiency and sustainability. This report focuses on one element of healthcare shaped by integration – patient experiences – and one patient group – those who attended a NSW emergency department (ED) from April 2013 to March 2014. It is complementary to Volume 1, released in December 2014, which focused on the experiences of hospitalised patients.

Integrated patient care in a NSW context encapsulates three key dimensions. These dimensions were used to identify relevant data from almost 26,000 responses to the Emergency Department Patient Survey (EDPS), addressing seven themes. Altogether, 22 questions were analysed, and results are clustered into dimensions and themes:

Dimension 1: Care that is seamless, effective and efficient

- Coordination and continuity of care when arriving at the ED
- Coordination and continuity of care in the ED
- Coordination and continuity of care when leaving the ED.

Dimension 2: Care that responds to all of a person's health needs

- Provision of information
- Responsiveness to ED patients' needs and expectations.

Dimension 3: Care provided in partnership with the individual, their carers and family

- Involvement of ED patients in decisions
- Self-management support.

What were the results?

Care that is seamless, effective and efficient

- 74% of ED patients said they did not receive contradictory information from ED health professionals
- 52% said the way ED health professionals worked together was 'very good'
- 51% said doctors 'always' knew enough about their medical history (as given to triage nurse or ambulance crew)
- 80% said they were told who to contact if worried about their condition or treatment after discharge
- 82% said they were not delayed when leaving the ED (before admission, transfer or discharge).

Care that responds to all of a person's health needs

- 56% of ED patients said they received understandable answers from ED health professionals 'all of the time'
- 84% received a 'completely' understandable explanation of the purpose of their new medication
- 76% received a 'completely' understandable explanation of their test, x-ray or scan results
- 58% said staff 'completely' took their family or home situation into account when planning their discharge.

Care provided in partnership with the individual, their carers and family

- 63% of ED patients said they were ‘definitely’ involved in decisions about their care or treatment
- 86% received the ‘right amount’ of information about their condition or treatment
- 83% said their family, or carer was given the ‘right amount’ of information about their condition or treatment
- 65% were given ‘completely’ enough information on how to manage their care at home.

Across almost all of the included questions, a majority of patients gave the most positive answer (with a range of 48% to 86%). For the questions that offered more than one positive response option (e.g. ‘yes, completely’ and ‘yes, to some extent’), merging the top two responses showed 72% to 98% of patients responded positively.

Making comparisons

Comparing results across hospitals, a higher proportion of smaller hospitals (peer group C) recorded results that were significantly more positive than the NSW average. This was most notable for the theme of ‘coordination and continuity of care when leaving the ED’.

The two hospitals with the largest number of questions rated more positively than the NSW average were both peer group C hospitals: Bulli District Hospital (13 questions) and Narrabri District Hospital (11 questions). Two hospitals had results that were less positive than the NSW average for more than half the questions: Blacktown Hospital (16 questions) and Campbelltown Hospital (12 questions).

For local health districts (LHDs):

- The highest number of favourable results was recorded in Northern NSW and Northern Sydney LHDs (significantly higher than NSW for seven and eight of the questions, respectively)

- The highest number of less favourable results was seen in South Western Sydney and Western Sydney LHDs (significantly lower than NSW for 14 and 11 of the questions, respectively)
- Patients triaged in more urgent categories were more positive for around one-third of the questions
- Patients admitted or transferred immediately following their ED attendance were less positive than those who were discharged home for around one-third of the questions. However, they were more positive about some aspects of integration, particularly those addressing coordination between the healthcare professionals.

Sub-populations within NSW, such as Aboriginal people, people who mainly speak a language other than English at home, and those with long-standing health conditions, reported less positively on many aspects of integration:

- Aboriginal people were less positive than non-Aboriginal people for half the questions, particularly those about responsiveness to their needs and self-management support
- People who mainly speak a language other than English at home were less positive for almost half the questions. The difference was seen in all themes except ‘self-management support’
- People with a long-standing health condition reported less positively than those without, for half the questions. However, they reported more positively for some questions, particularly regarding the coordination between the healthcare professionals.

Comparison with England

England’s National Health Service (NHS) also conducts a survey that focuses on the experiences of ED patients. For questions where comparisons were possible, NSW results were generally more positive.



Setting the scene

Exploring aspects of integration

International and NSW perspectives

Healthcare systems around the world face significant challenges delivering care to populations that are ageing and to patients who increasingly suffer from multiple chronic diseases, frailty and disability.^{1,2} At the same time, healthcare services that seek to meet these demands draw on increasing levels of medical specialisation and technical knowledge.^{2,3}

Together, pressures of escalating demand and complexity in supply can lead to fragmentation. Activity and information silos that centre on single specialties or particular providers can result in a lack of cohesiveness, coherence and coordination in healthcare. This is particularly the case for the growing number of patients with multiple diseases or complex healthcare needs. In response to this, many healthcare systems are implementing programs that aim to secure more integrated care.⁴⁻⁶

Why is integrated care important?

Integrated care has been associated with a range of benefits including better patient experiences and outcomes; improved adherence to treatment; improved quality of life; and greater efficiency.⁷

Conversely, poorly integrated care can result in a variety of problems – duplication of services and infrastructure, under- and over-use of resources, medical errors and adverse events, poor access to services, discontinuity in care, or unmet healthcare needs.^{8,9}

Integrated care provides a means to improve care for patients who can often become lost in the system.

Integrated care in NSW

Modern healthcare is complex. In NSW, it consists of countless interactions and relationships – between people, technologies, organisations, processes, regulations, and structures. Connections occur over time, across distances, and in different organisational units or settings. In NSW, the system that supports and structures these interactions is a mixed one. The NSW healthcare system has different funders –

both public and private; different policy responsibilities – Commonwealth, state and local; different sectors – primary, secondary, tertiary, quaternary and community; and different specialisations across preventive, curative, palliative, mental and physical healthcare domains. On a daily basis, this pluralist system provides to the people of NSW an average of:

- 7,700 hospitalisations (public and private hospitals)
- 6,300 emergency department presentations
- 60,000 outpatient and other non-admitted visits (public hospitals)¹⁰
- 125,000 visits to a primary care service.¹¹

In response to this complexity and to the imperative to provide patients with high quality healthcare, NSW Health has developed a strategy to bring together different elements of the system in an integrated way.

The NSW Integrated Care Strategy 2014–2017 is a \$120m initiative. Founded on a wide-ranging conceptualisation of integrated care (see Box 1), the strategy encapsulates: support for statewide

Box 1 Defining integrated care in NSW

From the NSW Health Integrated Care Strategy, 2014–2017⁴

*Integrated care involves the provision of **seamless, effective and efficient** care that **responds** to all of a person's health needs, across physical and mental health, in **partnership** with the individual, their carers and family. It means developing a system of care and support that is based around the needs of the individual, provides the right care in the right place at the right time, and makes sure dollars go to the most effective way of delivering healthcare for the people of NSW.*

‘enablers’ (such as patient feedback systems and decision support tools); the establishment of a Planning and Innovation Fund to support innovation in integrated care at a local level; and support for three local health district demonstrator sites.⁴ This report is based on data that predates the implementation of these programs.

Integrated care – common themes in different contexts

Across different contexts, integrated care has been developing over four decades, with varying emphasis on enhancing coordination and developing multidisciplinary care; disease management approaches and managed care; and shared decision-making and patient-centredness (see Box 2).^{12,13}

Integration and the emergency department

Emergency departments (EDs) are an important element in many patient journeys. As well as describing aspects of integration experienced during an ED visit, patients can report about different sectors of the system. In describing their experiences immediately preceding and following an ED visit, patients provide insights into transitions in care. For example, they can describe their interactions with the ambulance service, and the extent to which arrangements were made for follow-up care in the community.

Utilisation of the ED can reflect poor integration within primary care. The Emergency Department Patient Survey asked *When you visited the ED, was it for a condition that you thought could have been treated by a general practitioner (GP)?* Across NSW, 12% of patients said yes, definitely and 17% yes, probably.

Box 2 Defining integrated care in the literature

*Integrated care includes the methods and strategies for linking and co-ordinating the various aspects of care delivered by different care levels, of primary and secondary care.*¹⁴

*It is most frequently equated with managed care in the US, shared care in the UK, transmutal care in the Netherlands, and other widely recognised formulations such as comprehensive care and disease management.*¹⁵

*Integrated Care describes care in which there is one treatment plan with behavioural and medical elements, rather than two treatment plans.*¹⁶

*Integrated health care, often referred to as interdisciplinary health care, is an approach characterized by a high degree of collaboration and communication among health professionals.*¹⁷

*The methods and type of organization that will provide the most cost-effective preventative and caring services to those with the greatest health needs and that will ensure continuity of care and co-ordination between different services).*¹⁸

*...the creation of a modernized, cost-effective system characterized by closer working relationships between hospitals, long-term care facilities, primary health care, home care, public health, social welfare agencies, schools, police and others whose services have implications for the determinants of health.*¹⁹

*...a concept bringing together inputs, delivery, management and organization of services related to diagnosis, treatment, care, rehabilitation and health promotion. Integration is a means to improve the services in relation to access, quality, user satisfaction and efficiency.*²⁰

*(Integrated care is) ... person-centred co-ordinated care.*²¹

*Patient care that is coordinated across professionals, facilities, and support systems; continuous over time and between visits; tailored to the patients' needs and preferences; and based on shared responsibility between patient and caregivers for optimizing health.*¹³

About this report

Experiences of emergency department patients relate to some, but not all, aspects of integration

Aspects of integration

Exploring aspects of integration for hospital patients, Volume 2 is based on survey data from almost 26,000 people who attended a NSW hospital emergency department (ED) between April 2013 and March 2014.

Patients provide valuable insights into the integration of care – acting both as witnesses and active participants. Patients are uniquely placed to reflect first-hand experiences of coordination and the continuity of services provided to them. They can relate the extent to which communication was effective in terms of the information they received from healthcare professionals, and can report about the extent of engagement and support they experienced.

Integration of care is multifaceted, reaching outside the hospital setting and beyond the gaze of the patient. While survey data cannot provide a comprehensive account of integrated care, it can harness the perceptions and reflections of patients about aspects of integration across different specialties, settings, providers, and over time.

Measuring integrated patient care

In a NSW context, integrated care encompasses three key dimensions:

- Seamless, effective and efficient care
- That responds to all of a person's health needs
- In partnership with the individual, their carers and family.

The data source for this report, the Emergency Department Patient Survey (EDPS), elicits the views of patients who attended an ED in NSW public hospitals on a wide range of topics relevant to their ED attendance. A deliberative exercise that mapped the available questions from the EDPS to these key dimensions identified seven themes (Figure 1) encompassing 22 questions (Appendix 1).

This set of questions provides information on patients' ED experiences that are relevant to some, but not all, aspects of integration.

An internationally recognised conceptual framework informs the work

Conceptual frameworks are analytical tools that structure an area of research or assessment, define the scope of enquiry, identify key concepts and organise them into a logical structure.

The conceptual framework that underpins this report was informed by the work of an expert group convened in an Integrated Patient Care Roundtable at Harvard University in 2009 and published in 2011.²²

The framework was purpose-built to aid the assessment of patients' experiences of integrated care via a patient survey. It identifies key constructs of integrated patient care including coordination (within care teams; across care teams; between care teams and community resources), continuity (familiarity with patient over time; continuous, proactive and responsive action between visits), patient-centredness, and shared responsibility.

Report structure

Results are presented in two sections. The first section explores the results using the seven themes in Figure 1, describing survey responses to the different questions within each theme. The second section focuses on patterns and variation in results between peer groups, between local health districts (LHDs), between patients with different care needs, between different population subgroups, and between NSW and England.

Figure 1 Aligning dimensions of integrated patient care and report themes

Dimensions of integration	Report themes	Description
Seamless, effective, efficient care	Coordination and continuity of care when arriving at the ED	Care teams effectively share relevant information and interact together in a coordinated way during handover of patients to the ED. Patients are effectively monitored while waiting for care.
	Coordination and continuity of care in the ED	Healthcare professionals and care teams effectively share relevant information and interact together in a coordinated way to deliver care during patients' treatment in the ED.
	Coordination and continuity of care when leaving the ED	Care teams coordinate departure processes and ongoing arrangements for patients being discharged, admitted or transferred.
Responsive care	Provision of information	Patients are provided with information about the treatments or tests they are about to or have already received. The information is clear, understandable and provided in an appropriate amount of detail.
	Responsiveness to ED patients' needs and expectations	Patients have their individual circumstances and expectations considered, and their particular concerns or questions are addressed by healthcare professionals.
Partnership in care	Involvement of ED patients in decisions	Patients and their carers are involved, to the extent they want to be, in decisions about their care and treatment.
	Self-management support	Patients are provided with information about their condition and supported to manage their own health and healthcare.

Data and methods

Analysing results, measuring variation

This edition of *Patient Perspectives* is the second of two volumes focusing on the experiences of hospital patients relative to aspects of integration in NSW public hospitals. It includes data from patients who attended an emergency department in a NSW public hospital between April 2013 and March 2014.

Results are reported for NSW, local health districts (LHDs), peer groups and hospitals. Hospital facilities with 30 or more respondents are included in hospital level reporting (see Appendix 2). When reporting at the aggregate levels of LHD and NSW, all hospitals are included.

To place the NSW findings in a broader context, the report takes the opportunity to compare the data to the results of a similar survey being run in England — the NHS Accident and Emergency Survey.

Data and methods

The Emergency Department Patient Survey (EDPS) is part of the NSW Patient Survey Program.

The program includes a suite of surveys that collect information on the experiences of patients receiving care in public hospitals and other public healthcare facilities across NSW.

The NSW Ministry of Health managed the NSW Health Patient Survey (as it was then known) from 2007 until 2011. Since 2012, the Bureau of Health Information (BHI), working with Ipsos Social Research Institute, has overseen the redesign, implementation and reporting of the program.

NSW hospitals vary in size and type and in the complexity of clinical services that they provide. To enable valid comparisons to be made between hospitals, it is important to compare similar or like hospitals. To do this, BHI uses a NSW Health classification system called 'peer group'. The main hospital peer groups are described in Figure 2.

Survey instrument

The 2013-14 EDPS included 95 questions covering a range of previously validated and new questions determined through a process of stakeholder engagement and cognitive testing with patients.

Respondents were offered the choice of completing the survey using the provided paper survey or through an online option. Most respondents (91%) completed the survey on paper.

Sample

Surveys were mailed to a random sample of more than 80,000 people who had attended a NSW ED between April 2013 and March 2014. Almost 26,000 valid surveys were completed and returned.

The sampling frame included public facilities with a hospital peer group of A1, A2, A3, B, C1 and C2 (i.e. tertiary, major and district hospitals) as listed in Appendix 2.

Each eligible hospital was sampled separately. The target sample size was calculated after accounting for expected response rate, and was selected proportionately to the patient numbers in six strata based on age (under 17, 17–49, 50+ years) and service category (admitted vs non-admitted).

Overall the EDPS had a response rate of 30%. At a hospital level, response rates ranged from 20% to 41%. Statewide, there were 34 hospitals with a response rate between 20% and 29% (see Appendix 2). There were five local health districts and one health network for which a majority of their hospitals' results were based on response rates between 29% and 30%. They were Far West (1 out of 1 hospital); Hunter New England (9 out of 15 hospitals); South Western Sydney (5 out of 6 hospitals); St Vincent's (1 out of 1 hospital); Western NSW (6 out of 7 hospitals) and Western Sydney (4 out of 4 hospitals).

For further information regarding the sample please see the related *Technical Supplement – Sampling Overview* for the EDPS available on the BHI website.

Analysis

Results for patient experience questions were weighted so that the proportion of responses from each of the age and service category strata were adjusted to match the actual proportions in each hospital.

Analysis was performed on the data using the SURVEYFREQ procedure in SAS V9.3.

Data presented are not standardised by patient mix. To assess the impact of socio-demographic characteristics on patient experience across LHDs, a sensitivity analysis was undertaken. The results after controlling for age group, gender, education and main language at home were compared with pre-adjusted results. The impact was modest – the two sets of results showed similar LHD rankings, particularly for those that received the less positive ratings (Appendix 3).

Statistically significant results between LHDs and NSW or hospitals and NSW for each question were obtained. For each question, the percentage of

patients providing the most positive response for a hospital, LHD and NSW, together with its 95% confidence interval, was obtained using the SURVEYFREQ procedure.

If the confidence interval around the percentage for a hospital or LHD overlapped with the confidence interval for the state, the difference between that hospital or LHD and the state was not deemed to be significant. If the confidence intervals did not overlap, then the result for the hospital or LHD was deemed to be significantly different from that of the state.

Although a conservative method, the use of overlapping 95% confidence intervals around the proportion is often used in routine reporting.

Statistically significant results between demographic subgroups (e.g. results for Aboriginal and non-Aboriginal people) were also detected based on this method.

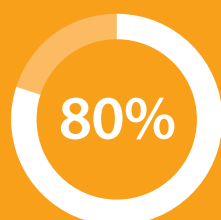
For more detail on the analysis of results more generally, including the weighting of results and response inclusions and exclusions, please see the *Technical Supplement – Weighting and Statistical Analysis* for the EDPS available on the BHI website.

Figure 2 Description of the main peer groups in NSW public hospital system*

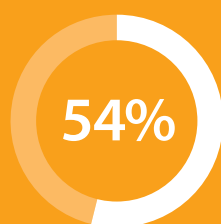
Group	Name	Description
A1	Principal referral	Very large hospitals providing a broad range of services, including specialised units at a state or national level.
A2	Paediatric specialist	Specialist hospitals for children and young people.
A3	Ungrouped acute – tertiary referral	Major specialist hospitals that are not similar enough to any other peer group to be classified with them.
B	Major	Large metropolitan and non-metropolitan hospitals.
C1	District group 1	Medium sized hospitals treating between 5,000–10,000 patients each year.
C2	District group 2	Smaller hospitals, typically in rural locations.

* Peer groups are based on admitted patient activity measures.

Care that is **seamless, effective** and **efficient** among emergency department patients:



said the way ambulance crew and ED staff worked together was 'very good'



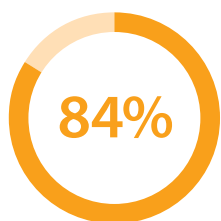
said 'completely' adequate arrangements were made for post-discharge services



Responsive care



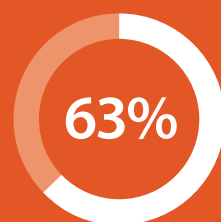
of patients said ED staff 'completely' took account of family and home situation when planning their discharge



said ED staff 'completely' explained the purpose of new medications



Care provided in **partnership** with the individual, their carers and family



of ED patients were 'definitely' involved in decisions about their care and treatment (as much as they wanted to be)



were given the 'right amount' of information about their condition or treatment



said they were 'completely' given enough information about how to manage their care at home

Thematic results

This section details results for each of the seven thematic areas:

- **Coordination and continuity of care when arriving at the ED**
- **Coordination and continuity of care in the ED**
- **Coordination and continuity of care when leaving the ED**
- **Provision of information**
- **Responsiveness to ED patients' needs and expectations**
- **Involvement of ED patients in decisions**
- **Self-management support**

For questions within each theme, the range of results are provided both at LHD and hospital level.

Aspects of integration for ED patients: Detailed responses

Presentation of survey results

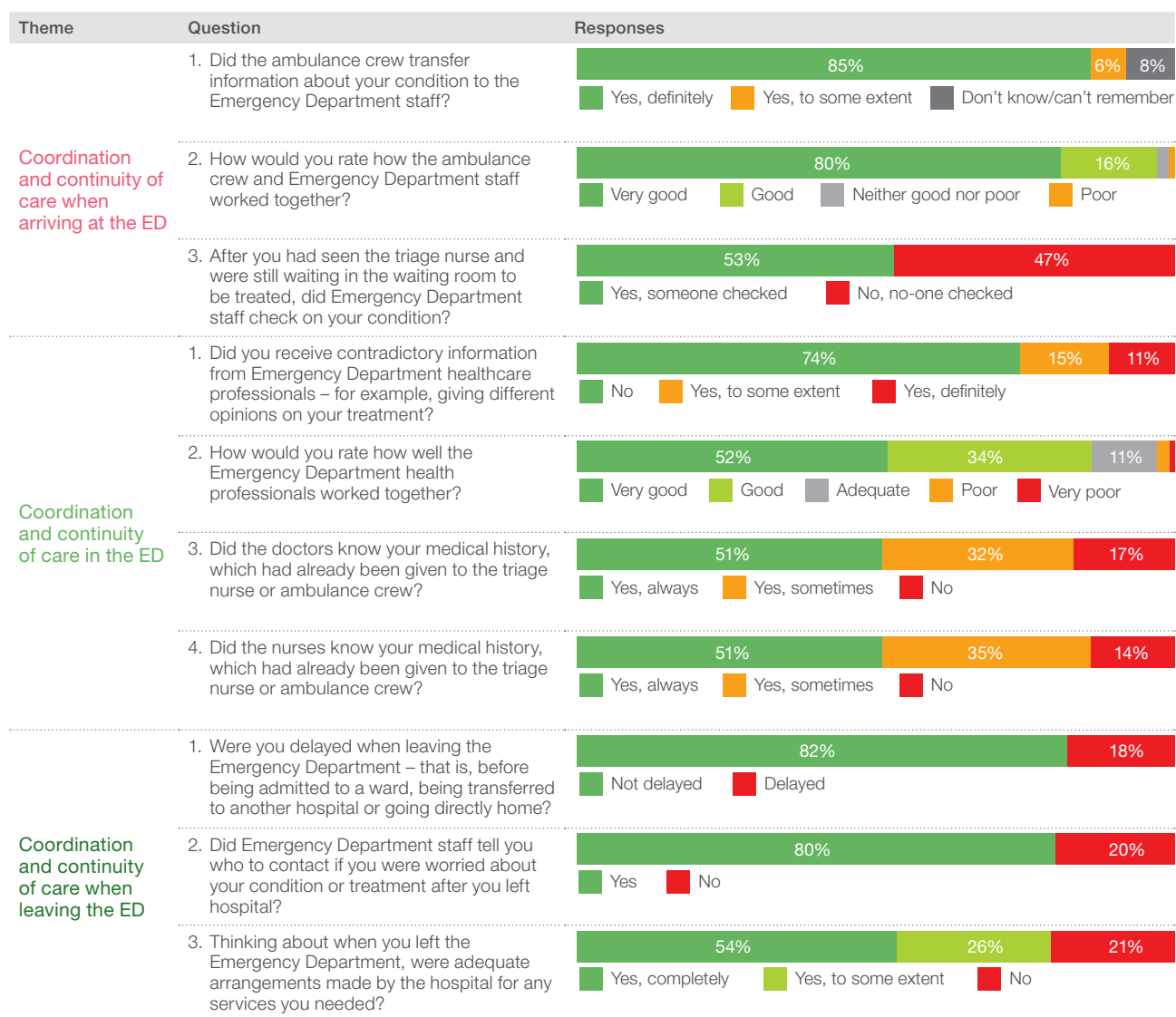
Questions contained in the Emergency Department Patient Survey (EDPS) focus on different aspects of patient experiences. Questions also differ in the number and type of response choices that are provided. Interpretation of survey results is informed by understanding the number and formulation of response options available.

The full range of valid responses for the questions included in this report are provided in Figure 3 (see Appendix 1 for more detail on question wording and responses included in analysis).

A focus on the most positive response option (e.g. 'very good' or 'yes, always') supports improvement efforts and highlights excellence. Across all questions, the percentage of patients who gave the most positive answer ranged from 48% to 86%.

However, broader interpretation of results can be helped by looking at the two most positive categories. For the questions that offered more than one positive response option (e.g. 'yes, completely' and 'yes, to some extent'), merging the top two responses showed 72% to 98% of patients responded positively.

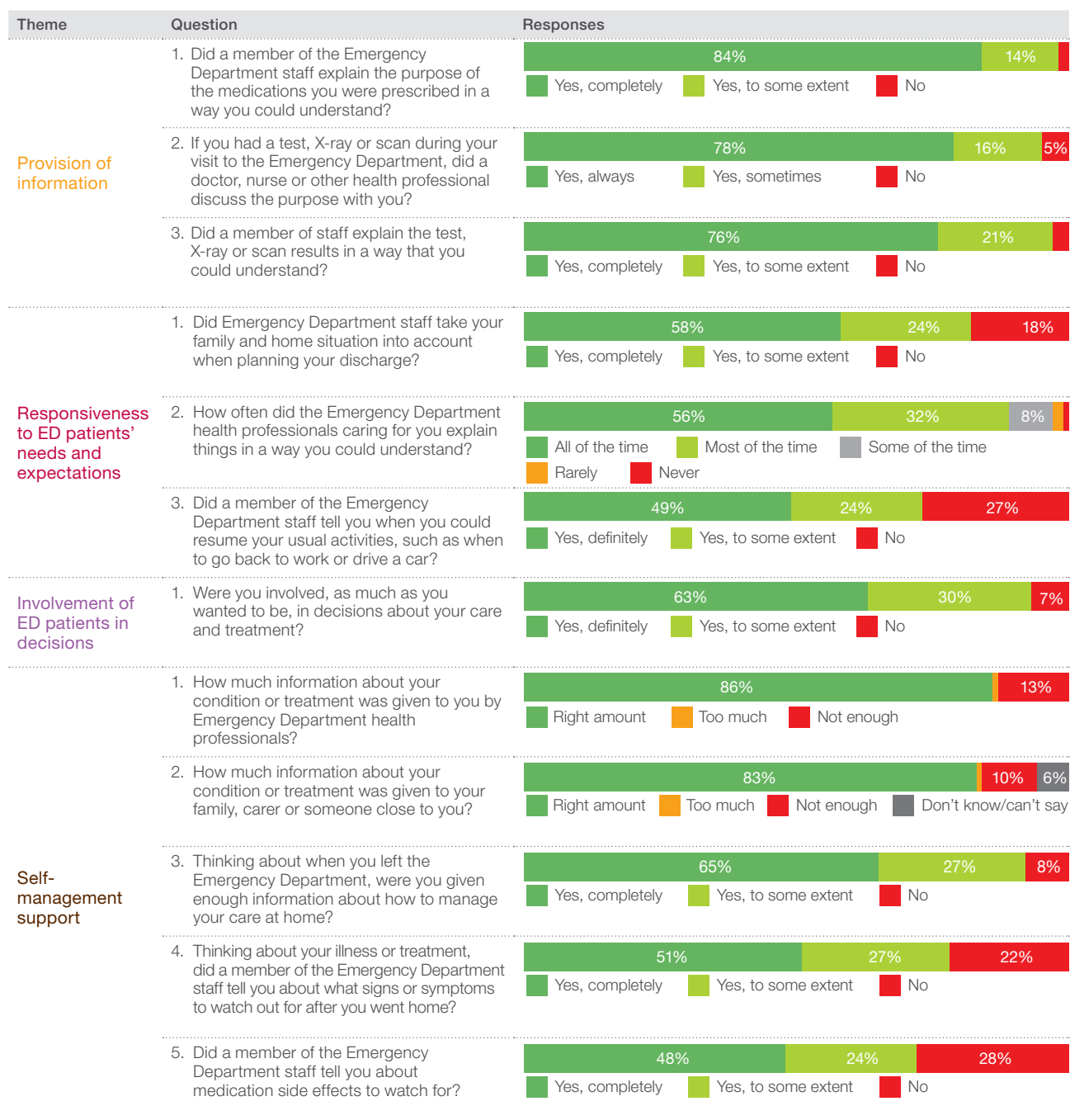
Figure 3 Aspects of integration, percentage of patients selecting each response option: NSW



In line with current best practice, the remainder of the report makes comparisons across themes and between organisational units on the basis of the percentage of patients providing the most positive response.

Results for all response options for NSW, LHDs, peer groups and individual hospitals can be found on BHI's reporting portal *Healthcare Observer*, at www.bhi.nsw.gov.au

Figure 3 (Continued)



Aspects of integration for ED patients: Seven themes

Coordinating care and providing responsive care are challenges in the ED

NSW level results, displayed in thematic clusters, provide an overview of relative performance across different aspects of integration in the state's EDs.

Looking across the 22 questions included in the analysis, the most positive results were recorded for questions focused on information flow and communication. Almost nine in ten patients (86%) said they received the 'right amount' of information about their condition or treatment; a similar proportion (85%) said information about their condition was 'definitely' transferred from the ambulance crew to the ED staff; and 84% said the purpose of their new medications was explained in a way that was 'completely' understandable.

Communication plays an important role in many aspects of integration. Patients receive different types of information from healthcare professionals, from routine, scripted or 'codified' information;²³ through more tailored, dynamic communication; and ultimately to communication that enables and supports active participation and engagement of patients in their own care.

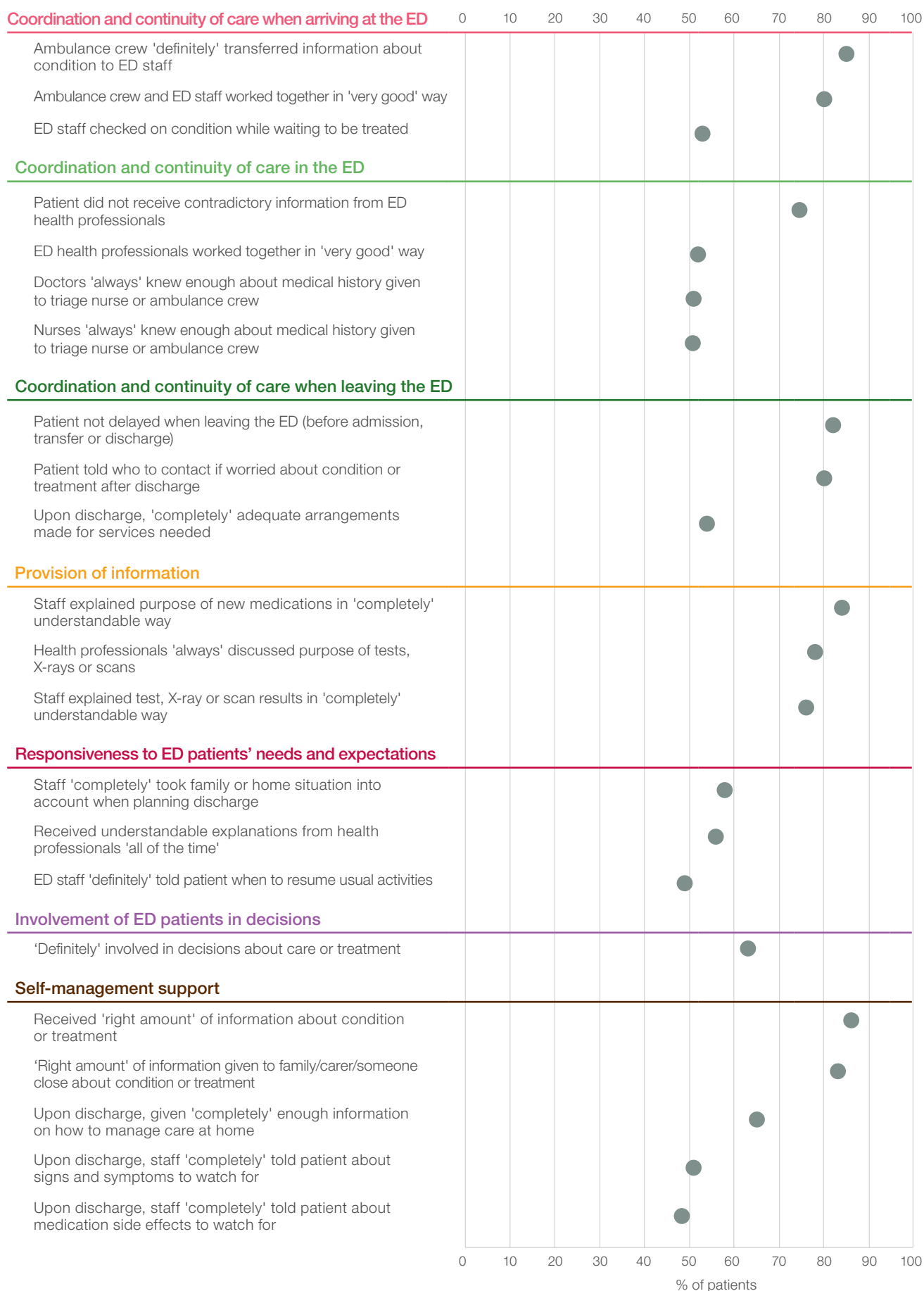
Communication between healthcare professionals is particularly important in the ED where medical history may not be available and there are multiple transfers of information about patients' current medical status.

In the ED — an environment often characterised by periods of high stress, high workloads, overcrowding and time constraints — effective communication can be a particular challenge.^{24,25} Poor communication during handovers can contribute to errors and inefficiency of care.²⁶

Across the seven themes, questions addressing "responsiveness to ED patients' needs and expectations" had the least positive responses (ranging from 49% to 58%) (Figure 4).

Responsive care requires tailored, patient-centred communication and involves eliciting and reacting to patients' values, circumstances and preferences. In NSW EDs, a customised approach to communicating important information to patients, along with consideration of individual circumstances when the patient departs, is mandated.²⁷ However, the same pressures that can affect communication between ED staff may also challenge responsiveness to patients' needs.

Figure 4 Aspects of integration, percentage of patients selecting most positive option: NSW



Note: 'Ambulance crew and ED staff worked together in very good way', 'ED health professionals worked together in very good way' and 'Got understandable explanations from health professionals 'all of the time' are from five point response scale questions, while others have fewer response options.

Coordination and continuity of care when arriving at the ED

Patients report good coordination of care between ambulance and ED staff

Delivering well informed, coordinated and consistent care within and between the different healthcare teams involved in treating patients is central to integrated care.¹³ Seamless care is organised across a spectrum of services before, during and after ED visits.

A key transition point for patients who arrive by ambulance is the transfer of care from paramedic to ED staff. Coordination and continuity of care at transfer is critical to safe, high quality patient care.²⁸

Regardless of mode of arrival, patients who are required to wait for treatment should be reassessed regularly.²⁹

Questions on coordination between the ambulance crew and ED staff generally were positively rated. Among patients who arrived by ambulance, the majority (85%) said the ambulance crew 'definitely' transferred information about their condition to ED staff. A similar proportion (80%) reported that the ambulance crew and ED staff worked together in a 'very good' way.

Results were less positive for continuity of care, particularly for patients who were not treated immediately. Of the patients who waited for treatment, just over half (53%) said the ED staff checked on their condition while they waited (Figure 5).

Across LHDs and hospitals, results were most variable for the question on whether ED staff checked on the condition of patients waiting for treatment (Figures 6 and 7). Significant differences for the other measures were not apparent at an LHD level, which may reflect smaller sample size; in this case, those who reported they came to the ED by ambulance (20% of patients). Hospital level results ranged from 34% to 82% of patients (Figure 7). Among the 17 hospitals that recorded significantly higher results for this question, eight were smaller C group hospitals (see Appendix 4 for individual hospital results).

Figure 5 **Coordination and continuity of care when arriving at the ED, percentage selecting most positive option: NSW, LHD range and hospital range**

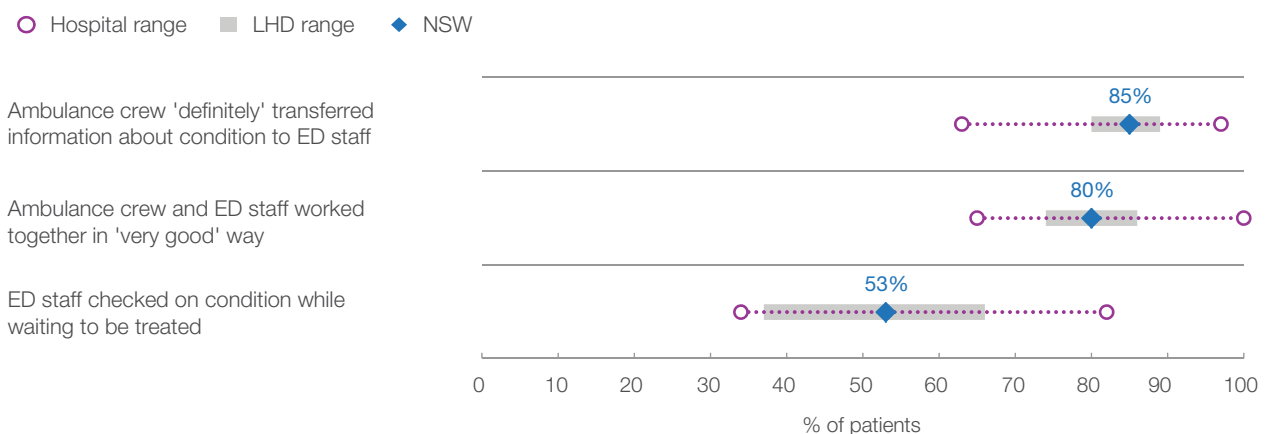
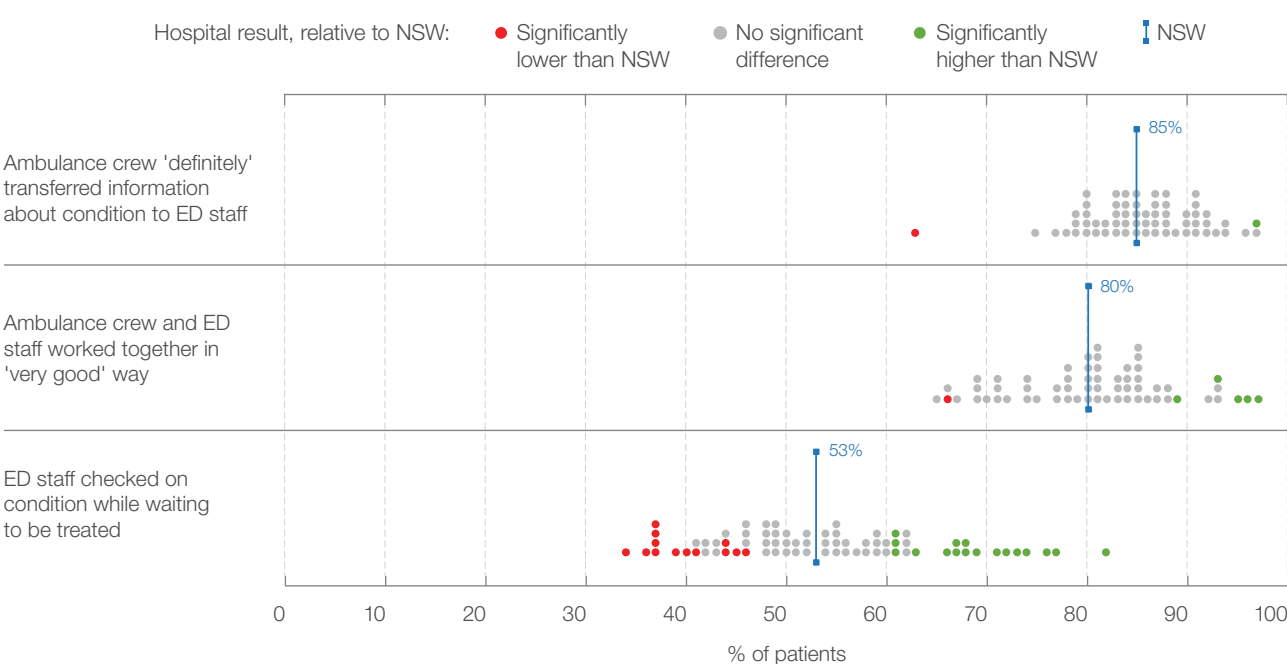


Figure 6 **Coordination and continuity of care when arriving at the ED, percentage selecting most positive option: LHD results relative to NSW**



Figure 7 **Coordination and continuity of care when arriving at the ED, percentage selecting most positive option: hospital results relative to NSW**



Coordination and continuity of care in the ED

Half of ED patients report good teamwork within ED

Communication between patients and ED staff, and among health professionals, is key to coordination. ED staff often have to treat patients without the benefit of a full medical history. This presents a challenge to delivering coordinated, continuous care and makes the timely transfer of relevant patient information particularly important in the ED setting.³⁰ For ED patients who are clinically unstable and who require monitoring and frequent observations, there is an additional information load to be shared between ED health professionals.³¹

In NSW, around seven in 10 ED patients (74%) said they did not receive contradictory information from ED health professionals. However, only around half of ED patients (52%) said the professionals worked together in a 'very good' way.

Half of ED patients (51%) said that doctors and nurses 'always' knew enough about the medical history they had given to another health professional during their ED visit (Figure 8).

Across LHDs, Mid North Coast, Northern NSW, Northern Sydney and St Vincent's Health Network had significantly more positive results than the NSW average for two of the four questions on coordination and continuity of care in the ED. South Western Sydney had significantly less positive results for three of the four questions, while Sydney Children's Health Network and Western Sydney had significantly less positive results for two of the four questions (Figure 9).

At a hospital level, variation was widest for the question regarding whether or not patients received contradictory information – with results ranging from 48% to 86% of patients (Figure 10).

The greatest concentration of hospital-level results higher than the NSW average was also seen for the question on whether patients received contradictory information, with 16 hospitals recording significantly higher results (Figure 10). Of these, smaller hospitals dominated, with seven peer group C hospitals (see Appendix 4 for individual hospital results).

Figure 8 **Coordination and continuity of care in the ED, percentage selecting most positive option: NSW, LHD range and hospital range**

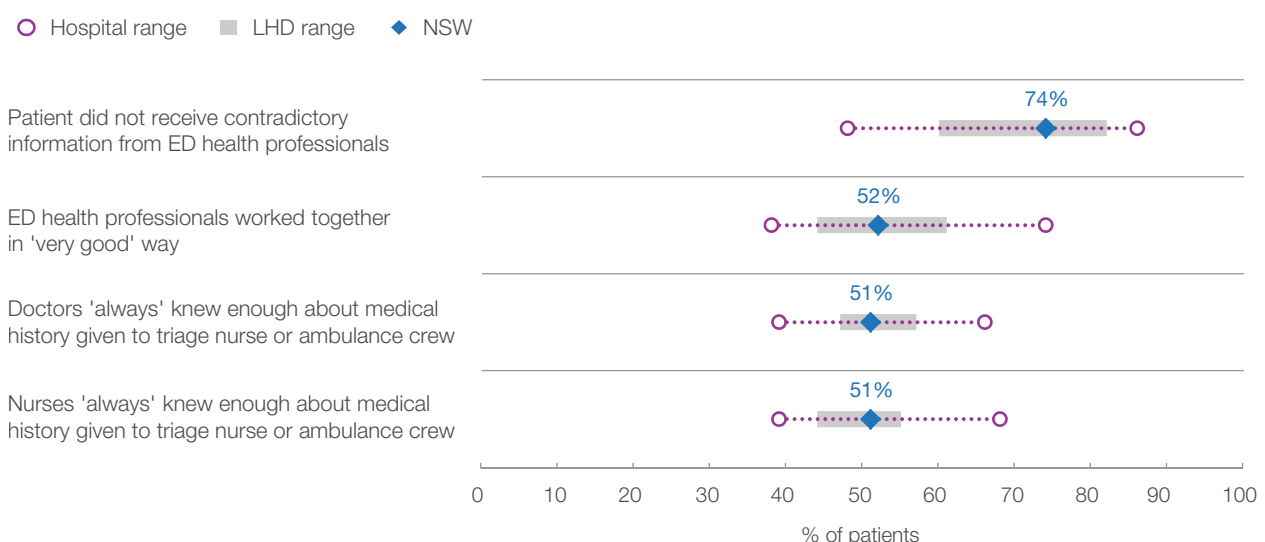


Figure 9 **Coordination and continuity of care in the ED, percentage selecting most positive option: LHD results relative to NSW**

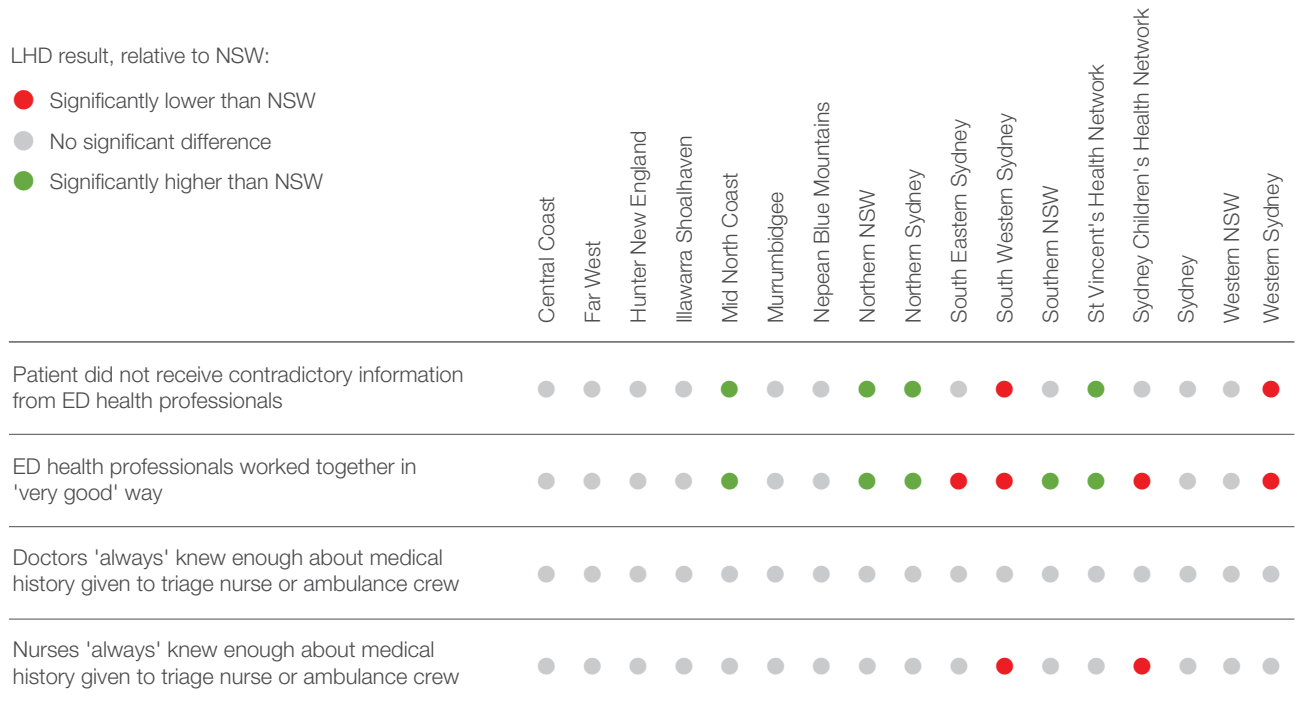
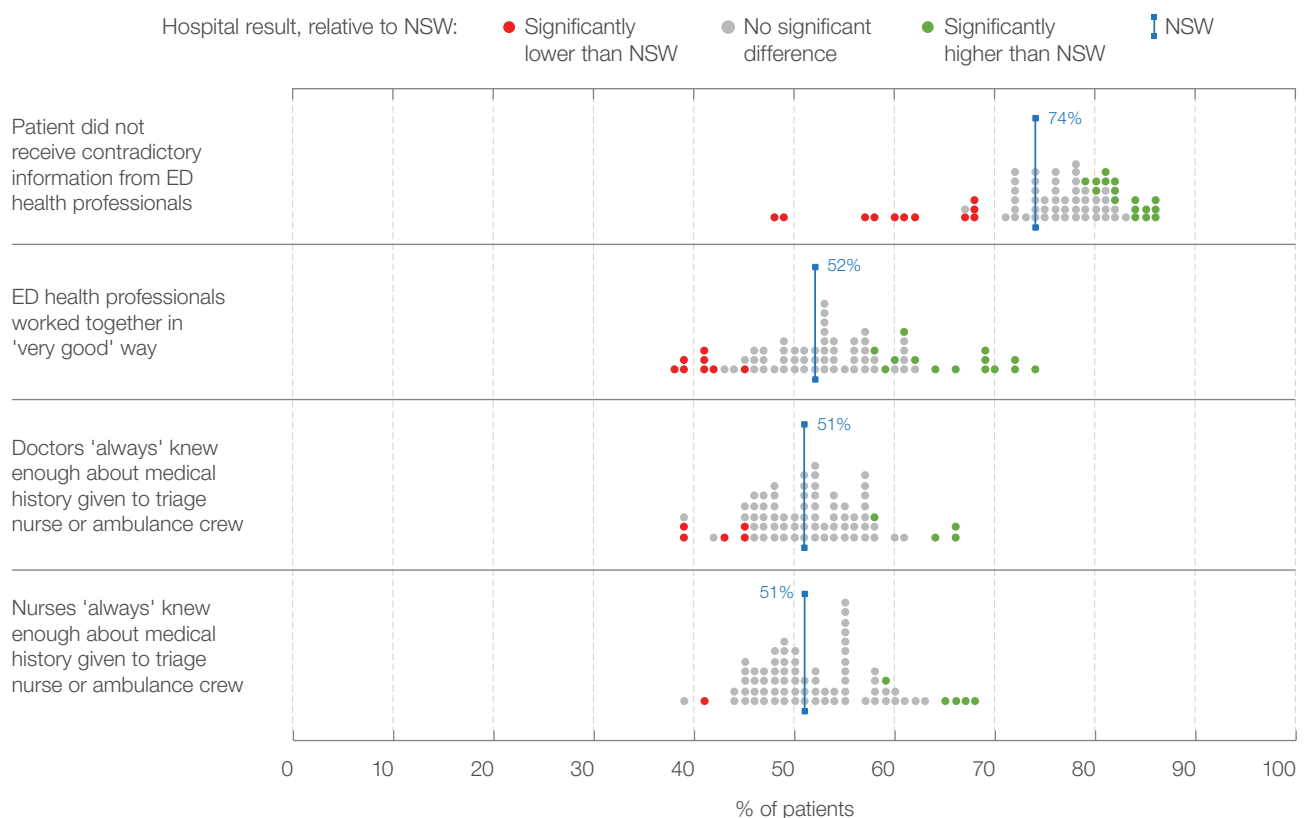


Figure 10 **Coordination and continuity of care in the ED, percentage selecting most positive option: hospital results relative to NSW**



Coordination and continuity of care when leaving the ED

Few delays, but many patients report incomplete arrangements for follow-up

Better coordinated care around ED discharge processes has been linked to increased patient and provider satisfaction, improved follow-up with other healthcare providers and stronger linkage to community care. In contrast, poor coordination has been associated with patients returning to the ED within 72 hours; or poor compliance with, or lack of comprehension of, follow-up instructions.³²

A high quality ED discharge: informs and educates patients (diagnosis, prognosis, treatment plan, etc.); supports patients in receiving post-ED care (medications, home care, further tests, etc.); and facilitates coordination of post-ED care (sharing records, appointments with other providers, etc.).³²

Well coordinated care is timely and minimises delays. Whether discharging, admitting or transferring patients, EDs in NSW are required to follow a standardised approach to minimise the risk of harm and work towards avoiding unnecessary delays for departing patients.²⁷

The majority of patients (82%) said they were not delayed when leaving the ED. Among those who were delayed, the most common reasons given were having to wait for a bed in a ward (41% of delayed patients)

and waiting to see a doctor (33% of delayed patients) (Appendix 6).

Most patients (80%) said they were told who to contact if they were worried about their health after discharge. Among those patients who needed services after discharge, only about half (54%) said the hospital had made 'completely' adequate arrangements (Figure 11).

Across LHDs, Mid North Coast had significantly more positive results than the NSW average for two of the three questions. Western Sydney had significantly less positive results for all three questions and South Western Sydney for two of the three (Figure 12).

At a hospital level, variation was widest for the question regarding whether adequate arrangements were made for services needed post-discharge (40% to 81% of patients) (Figure 13).

The greatest concentration of hospital-level results higher than the NSW average was seen for the question on delayed discharge, with 27 hospitals recording higher results (Figure 13). Of these, 23 were smaller (peer group C) hospitals (see Appendix 4 for individual hospital results).

Figure 11 **Coordination and continuity of care when leaving the ED, percentage selecting most positive option: NSW, LHD range and hospital range**

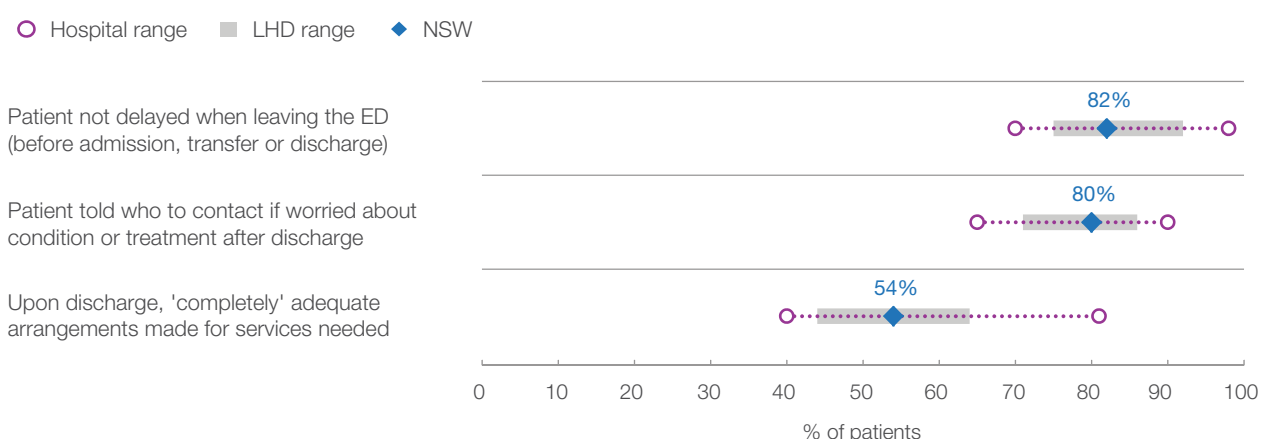


Figure 12 **Coordination and continuity of care when leaving the ED, percentage selecting most positive option: LHD results relative to NSW**

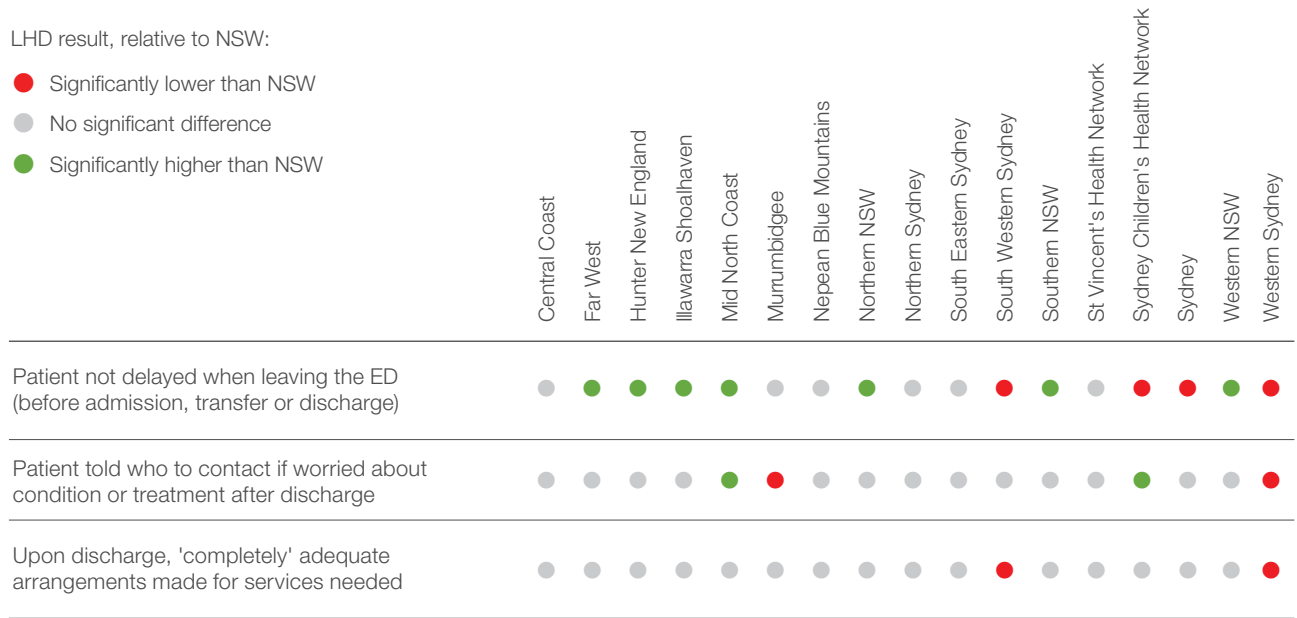
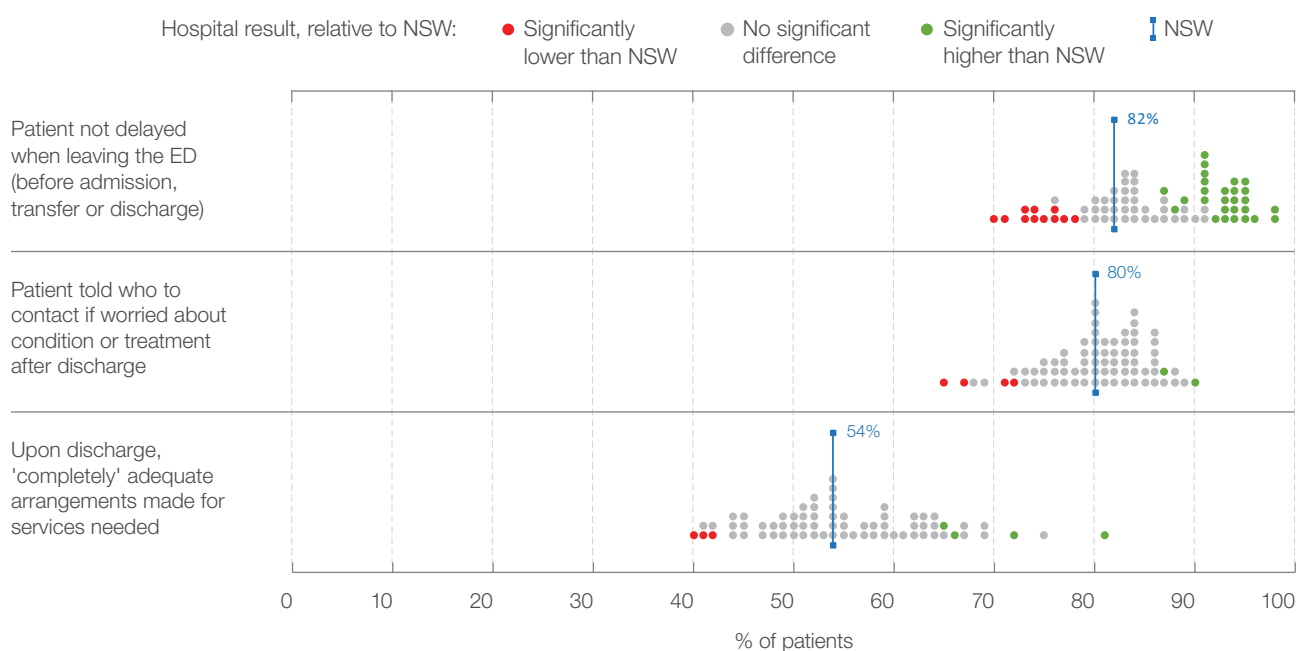


Figure 13 **Coordination and continuity of care when leaving the ED, percentage selecting most positive option: hospital results relative to NSW**



Provision of information

Most patients receive understandable information about their care

Information provision is crucial to integrated care and should be a feature of an ED visit.³³ The ED can be an unfamiliar environment for patients and the provision of information about events and interventions taking place can reassure and facilitate engagement.^{34,35}

For the three questions addressing provision of information, results were positive overall. Across NSW, more than eight in 10 patients (84%) said they received 'completely' understandable explanations about the purpose of the new medication they were prescribed; around three-quarters (78%) of patients who had tests and scans said health professionals 'always' discussed their purpose; and a similar proportion (76%) said staff explained the results in a 'completely' understandable way (Figure 14).

Across LHDs, Northern Sydney had significantly more positive results than the NSW average for two of the three questions. No LHDs had significantly less positive results for two or more questions (Figure 15).

At a hospital level, variation was widest for the question about whether staff had discussed the purpose of tests, x-rays or scans – with results ranging from 61% to 95% of patients (Figure 16).

The greatest concentration of hospital-level results higher than the NSW average was also seen in the question regarding whether health professionals discussed purpose of tests, x-rays or scans, with five hospitals recording significantly higher results (Figure 16). Of these, three were smaller (peer group C) hospitals (see Appendix 4 for individual hospital results).

Figure 14 **Provision of information, percentage selecting most positive option: NSW, LHD range and hospital range**

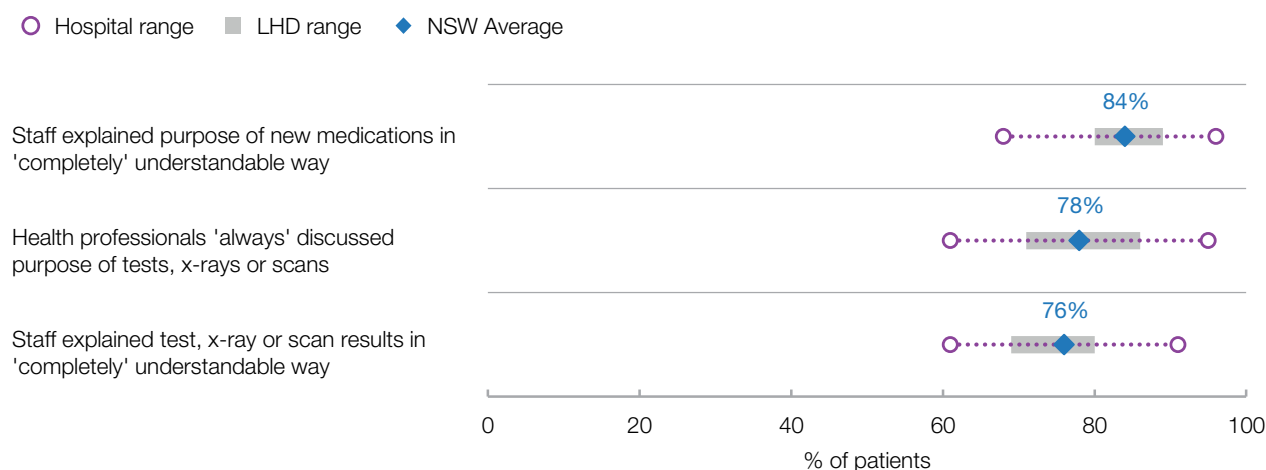
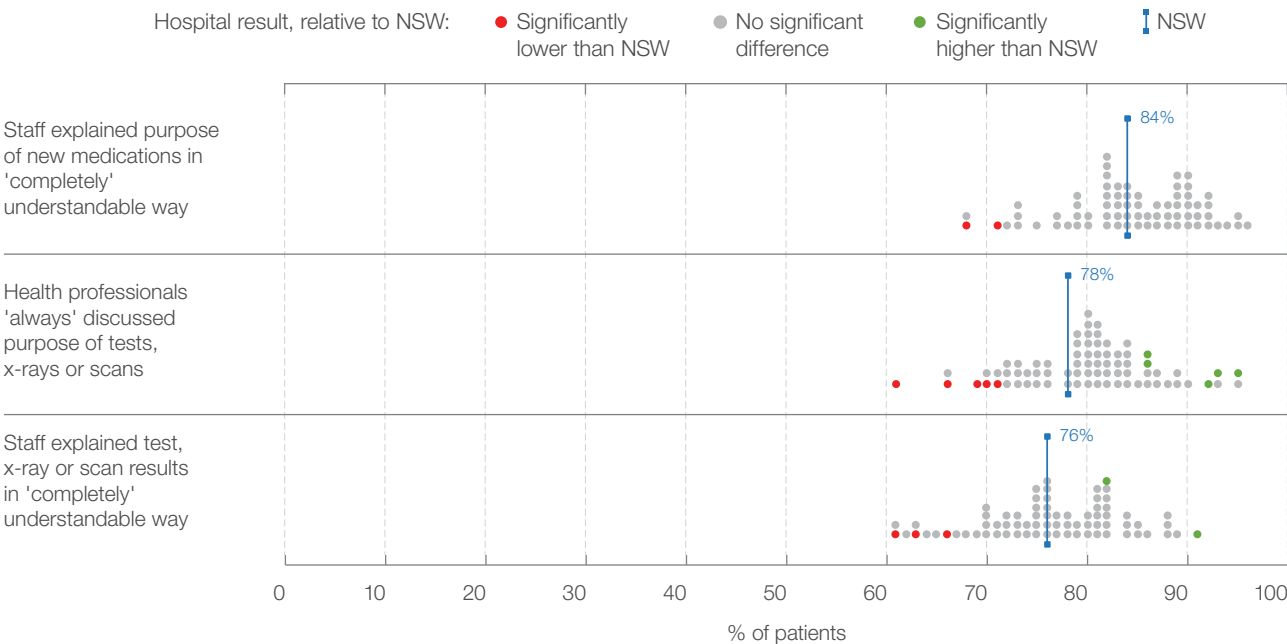


Figure 15 **Provision of information, percentage selecting most positive option: LHD results relative to NSW**



Figure 16 **Provision of information, percentage selecting most positive option: hospital results relative to NSW**



Responsiveness to ED patients' needs & expectations

Responsiveness is a challenge in the ED

Integrated care in a NSW context is organised for, by and with the patient. It rests on flexibility in arrangements with patients, and responsiveness to individual patient needs, values and capabilities.

ED-based health professionals are required to deliver reliable and standardised information, to be flexible in this delivery, communicating effectively to patients with different literacy levels and cultural backgrounds.²⁷

Responsiveness to a patient's needs extends beyond factors that are immediately apparent in the ED. ED staff are expected to assess a patient's readiness for departure alongside arrangements for care after their discharge from the ED.²⁷

For the three questions in the survey on responsiveness to ED patients' needs and expectations, results were generally less positive than those seen for most other themes (Figure 17). Around half of patients said that staff 'completely' took their family or home situation into account when planning their discharge (58%); that they received understandable explanations from health professionals 'all of the time' (56%); and that staff 'definitely' told them when to resume their usual activities (49%).

Across LHDs, Northern NSW had significantly more positive results than the NSW average for two of the three questions. South Western Sydney had significantly less positive results for all three questions and Western Sydney for two of the three questions (Figure 18).

At a hospital level, variation was widest for the question about whether ED staff 'completely' took patients' family or home situation into account when planning discharge. Hospital results ranged from 37% to 88% of patients (Figure 19).

The greatest concentration of hospital-level results higher than the NSW average was seen for the question on whether patients received understandable explanations from health professionals, with 19 hospitals recording significantly higher results (Figure 19). Of these, 10 were smaller (peer group C) hospitals (see Appendix 4 for individual hospital results).

Figure 17 **Responsiveness to ED patients' needs and expectations, percentage selecting most positive option: NSW, LHD range and hospital range**

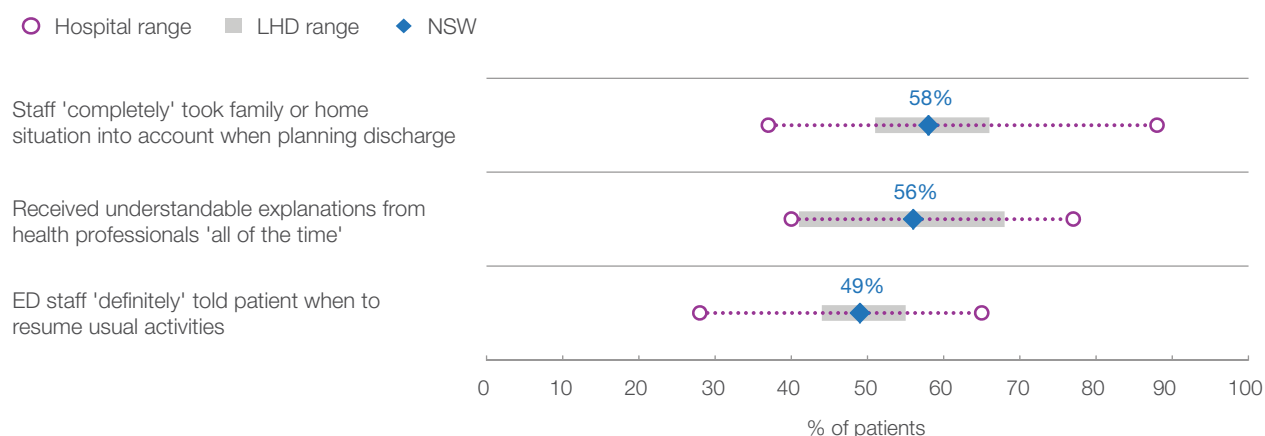


Figure 18 **Responsiveness to ED patients' needs and expectations, percentage selecting most positive option: LHD results relative to NSW**

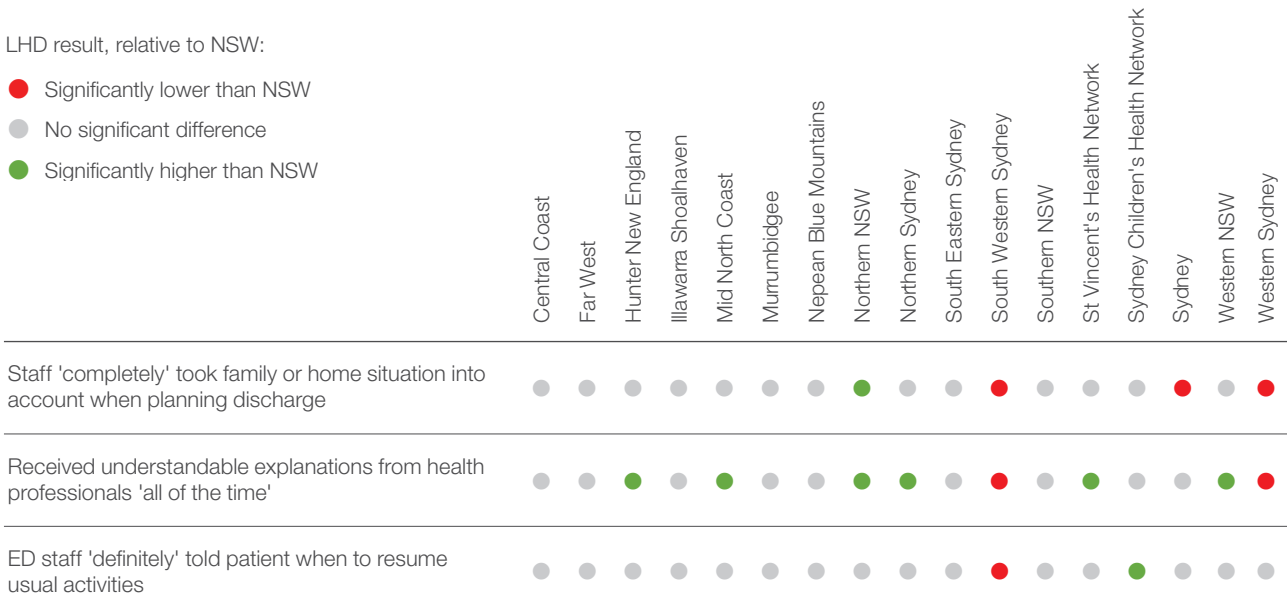
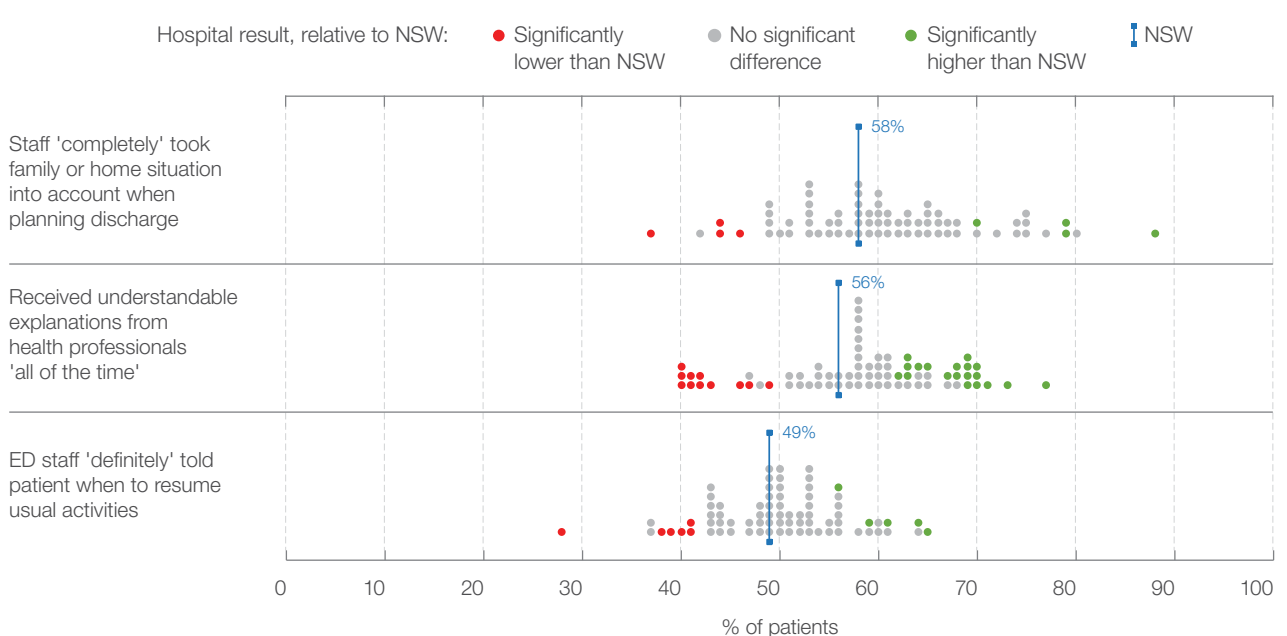


Figure 19 **Responsiveness to ED patients' needs and expectations, percentage selecting most positive option: hospital results relative to NSW**



Involvement of ED patients in decisions

Few patients did not feel involved in their care and treatment

Integrated patient care requires engagement and shared decision-making between patients, their carers and families, and healthcare professionals.¹³

Patients who are not incapacitated by acute illness generally want greater involvement in decision-making. Research has identified benefits of using shared decision-making techniques in the ED, including increased patient knowledge and satisfaction, reduced hospitalisations and fewer adverse events.³⁶

However, the ED is often described as the healthcare setting least conducive to shared decision-making and patients can feel like 'outsiders' in the ED.^{36,37}

Statewide, around six in 10 ED patients (63%) said they were 'definitely' involved in decisions about their care or treatment, as much as they wanted to be (Figure 20). When all responses are considered, a further 30% felt involved to 'some extent' but 7% said they were not involved as much as they wanted to be (see Figure 3, page 16).

At a hospital level, results ranged from 45% to 79% of patients (Figure 22).

There were nine hospitals that recorded significantly higher results than the NSW average (Figure 22). Of these, four were smaller (peer group C) hospitals (see Appendix 4 for individual hospital results).

Figure 20 **Involvement of ED patients in decisions**, percentage selecting most positive option: NSW, LHD range and hospital range

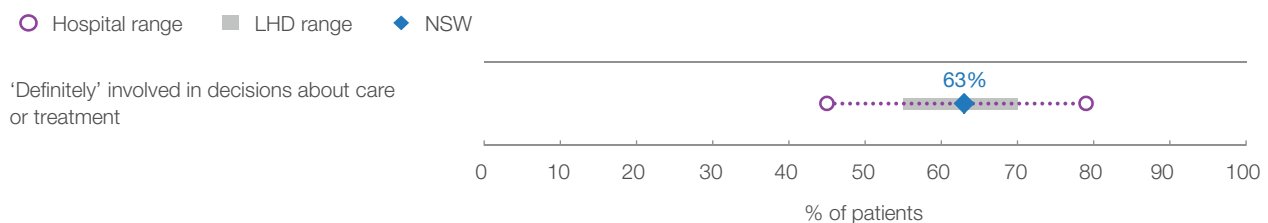


Figure 21 **Involvement of ED patients in decisions, percentage selecting most positive option:**
LHD results relative to NSW

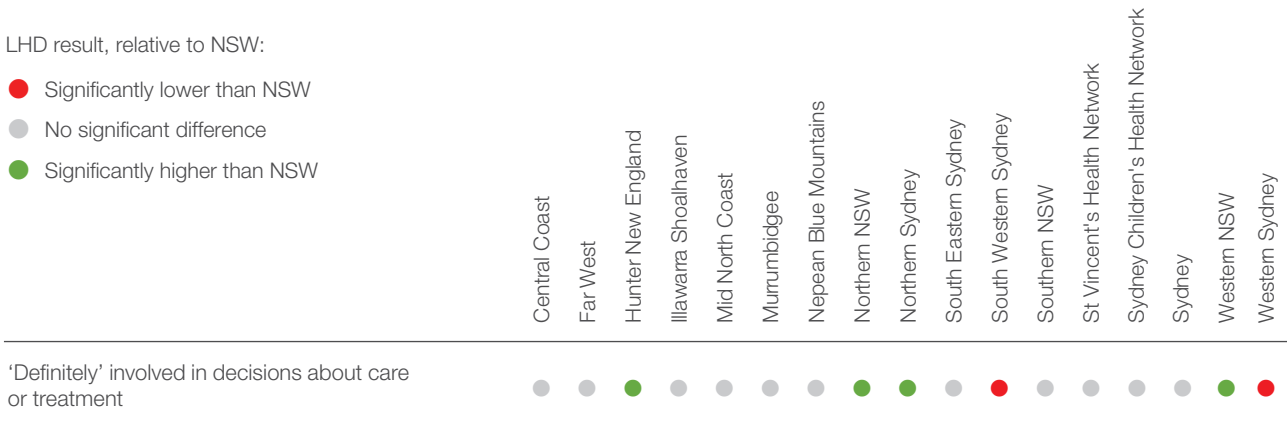
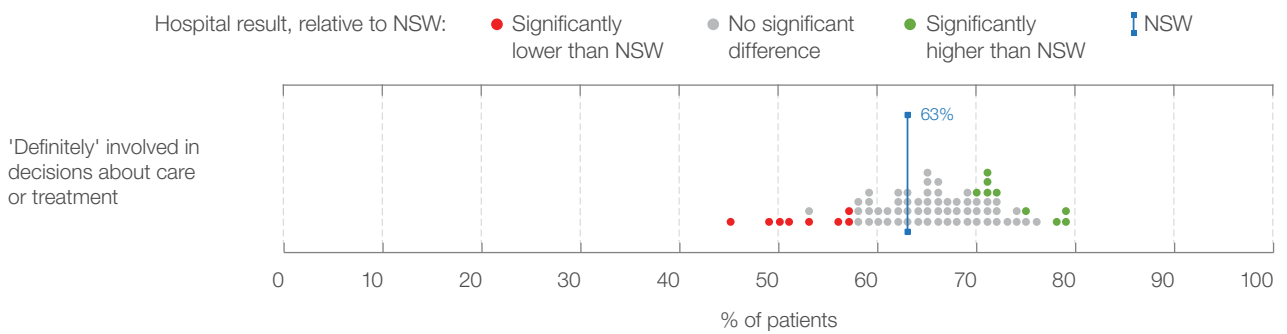


Figure 22 **Involvement of ED patients in decisions, percentage selecting most positive option:**
hospital results relative to NSW



Self-management support

Information for self-management at home is often less than complete

There is growing recognition that patients should be actively involved in their own care.²⁴

Empowering patients with the knowledge to self-manage their health extends beyond the role of the ED. However, ED staff can play an important role in ensuring their patients are supported and receive appropriate care after leaving the ED, including home care of their injury or illness.³²

Statewide, almost nine in 10 patients (86%) said they received the 'right amount' of information about their condition or treatment and 83% said their family or carer received the 'right amount' of information. Less positively, only around half (48%) of the patients who were prescribed new medication said they were 'completely' told about side-effects to watch for (Figure 23).

No LHD had results significantly higher than NSW for three or more questions. South Western Sydney had significantly less positive results for four of the five questions (Figure 24).

At a hospital level, variation was widest for the question about whether patients were 'completely' told about medication side-effects to watch for. Results ranged from 23% to 70% of patients (Figure 25).

The greatest concentration of hospital-level results that were significantly higher than the NSW average was seen for questions on information provision to the patient's family or carer and about how to manage care at home. In each case, six hospitals recorded significantly higher results (Figure 24) and five of these were smaller (peer group C) hospitals (see Appendix 4 for individual hospital results).

Figure 23 **Self-management support, percentage selecting most positive option: NSW, LHD range and hospital range**

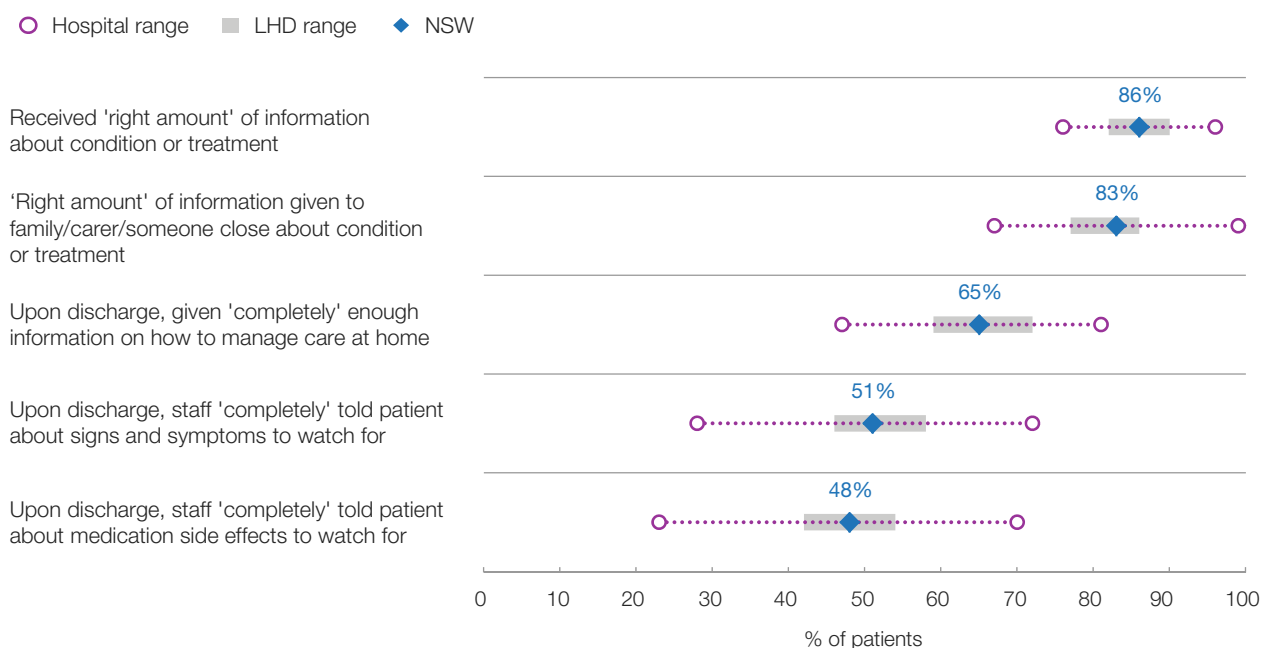
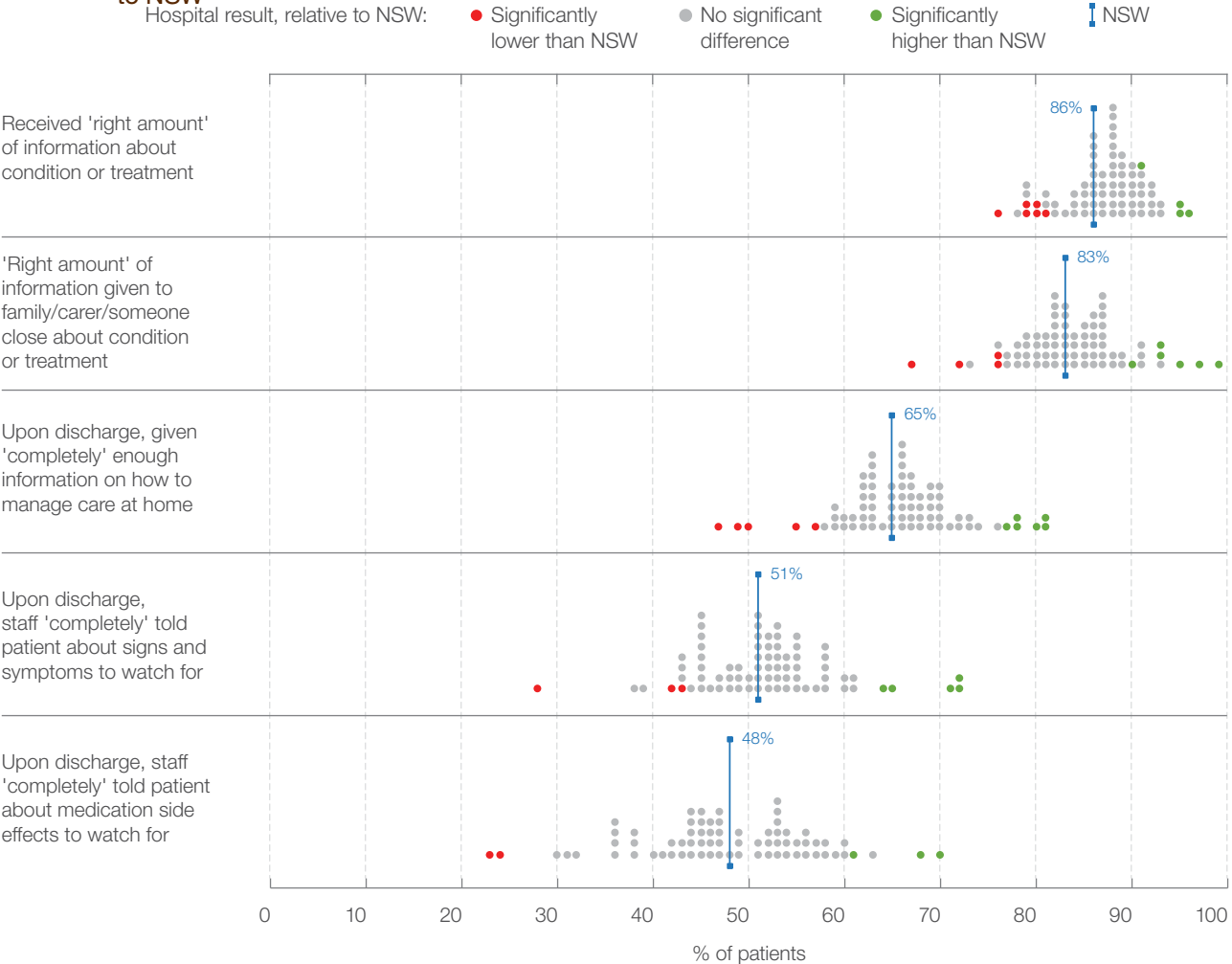


Figure 24 **Self-management support, percentage selecting most positive option: LHD results relative to NSW**



Figure 25 **Self-management support, percentage selecting most positive option: hospital results relative to NSW**



Peer group comparisons



Smaller hospitals
(peer group C) recorded
more positive results

Local health district comparisons

Across the 22 questions included in this report:

- South Western Sydney
- Western Sydney

had **significantly less positive results** for 11+ questions

- Northern Sydney
- Northern NSW

had **significantly more positive results** for 7+ questions

Sub-population comparisons



Aboriginal people



People who mainly
speak a language
other than English



People with long-standing
health conditions

All reported **less positively** on
many aspects of integrated care

Groups of patients who were
more positive included:



Those triaged
in more urgent
categories



Those who were
treated and discharged

Making comparisons

This section details patterns of variation in results:

- **By peer groups**

- **By local health districts (LHDs)**

- **By different care needs**
Patients triaged in more urgent triage categories (2 and 3) and less urgent categories (4 and 5); patients who were subsequently admitted or transferred and those who were discharged home.

- **By different patient populations**
Aboriginal and non-Aboriginal people; people who speak English and those who speak a language other than English at home; and those with and without long-standing conditions.

- **Between NSW and England**

Peer groups and themes

Patients in smaller hospitals are generally more positive about integration

Peer groups provide a way of clustering similar hospitals together in order to make fair comparisons. In NSW there are three main peer groups:

- **Peer group A:** large referral hospitals
- **Peer group B:** major metropolitan and non-metropolitan hospitals
- **Peer group C:** district hospitals.

The distribution of the peer group A to C hospitals varies across LHDs (Figure 26).

Across most of the thematic areas, the greatest concentration of hospital-level results higher than the NSW average was seen in smaller (peer group C) hospitals. Conversely, the greatest concentration of results lower than the NSW average was seen for major (peer group B) hospitals (Figure 27).

Compared to the corresponding analyses reported in Volume 1 of this series, which focused on hospitalised patients, Figure 27 shows a lower proportion of hospitals with results that are significantly higher or lower than NSW. While the emergency department survey showed more variation across hospitals than the admitted patient survey, smaller sample sizes reduce the probability that differences reach statistical significance.

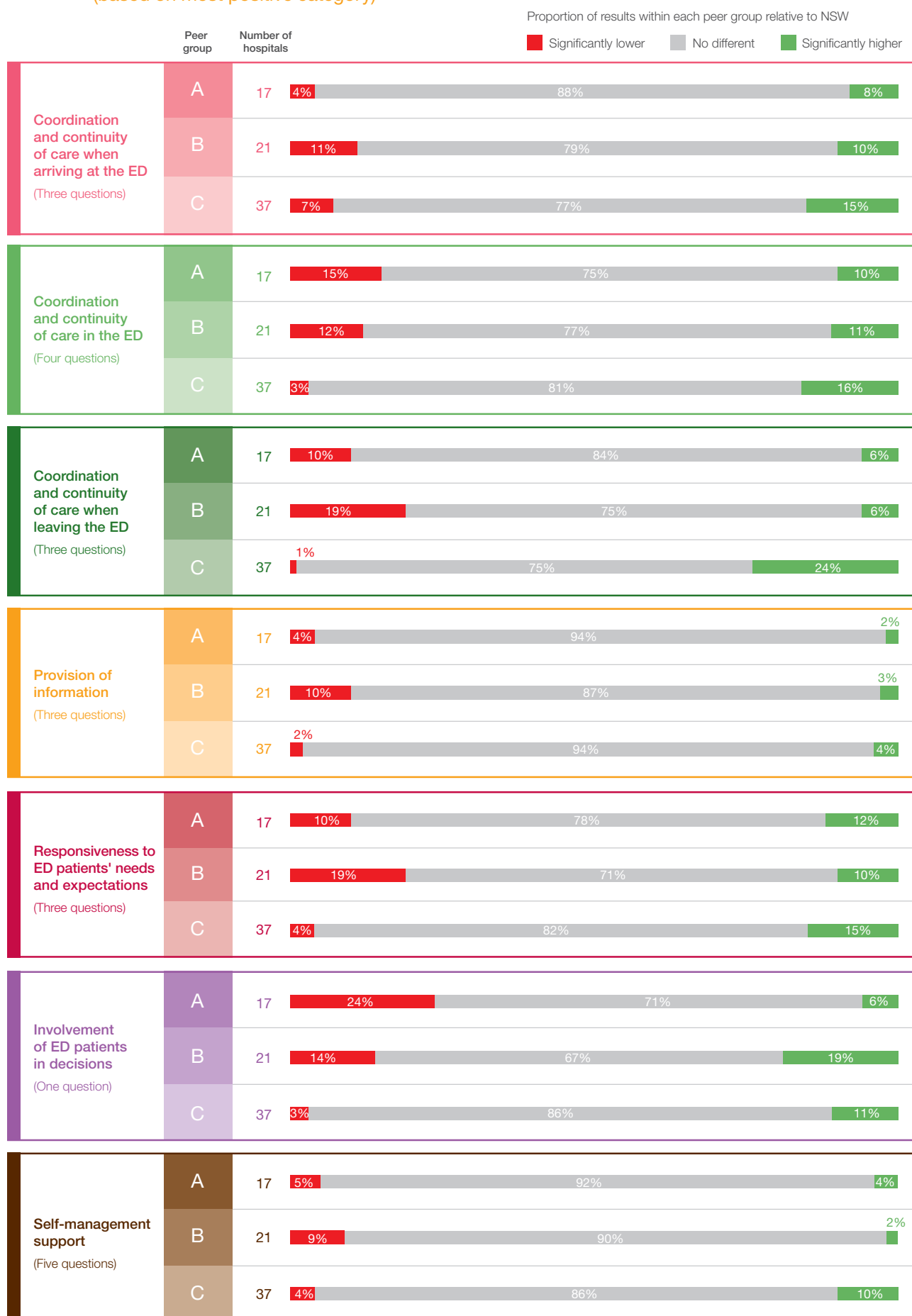
There were two hospitals, Bulli District Hospital and Narrabri District Hospital, with significantly more positive results than NSW for at least half the questions (higher for 13 and 11 questions respectively). Both are peer group C hospitals (Appendix 4).

Two peer group B hospitals, Blacktown Hospital and Campbelltown Hospital, had results lower than the NSW average for a majority of questions (16 and 12 questions respectively) (Appendix 4 for individual hospital results)).

Figure 26 Distribution of peer group hospitals A to C, NSW local health districts

	Central Coast	Far West	Hunter New England	Illawarra Shoalhaven	Mid North Coast	Murrumbidgee	Nepean Blue Mountains	Northern NSW	Northern Sydney	South Eastern Sydney	South Western Sydney	Southern NSW	St Vincent's Health Network	Sydney Children's Health Network	Sydney	Western NSW	Western Sydney
Peer group A	1	-	2	1	-	-	1	-	1	3	2	-	1	2	2	-	1
Peer group B	1	-	3	1	2	1	-	2	3	1	2	-	-	-	1	2	2
Peer group C	-	1	10	3	1	1	3	5	1	-	2	4	-	-	-	5	1

Figure 27 Proportion of hospital results within each peer group that differed from the NSW average (based on most positive category)



LHDs and themes: high and low results

Northern NSW and Northern Sydney had most favourable results, South Western Sydney and Western Sydney had least favourable results

Local health districts (LHDs) are key organisational entities in the NSW public healthcare system – managing and coordinating the provision of healthcare and public health services for their populations.

The analysis depicted summarises results at an LHD level. Each numbered segment within a circle corresponds to a question. Questions are grouped into integrated care themes (as outlined in Figure 28 below). Segments corresponding to questions for which an LHD's result was significantly more positive than the NSW average are coloured green; while

those for which results were significantly less positive than NSW are coloured red. Aggregating survey results at an LHD level in this way reveals patterns of performance across integrated patient care themes as well as across geographies.

Northern NSW and Northern Sydney had the highest number of favourable results – for seven and eight out of 22 questions, respectively. In contrast, South Western Sydney and Western Sydney results were significantly lower than NSW for 14 and 11 (out of 22) questions, respectively (Figure 28).

Figure 28 Summary of LHD results relative to NSW average (based on most positive category)



The populations served by the LHDs vary in terms of social, economic and health characteristics (see Appendix 5). However, a sensitivity analysis that compared pre-adjusted LHD results with those adjusted for age group, gender, education and main

language spoken at home, found that the impact of the adjustment was modest, particularly for LHDs with less positive results. This suggests that sociodemographic factors are not substantively confounding the LHD level results (see Appendix 3).



Comparisons by different care needs: triage category

Patients triaged in more urgent categories report better coordination and continuity of care

Patients arriving at an ED are allocated to one of five urgency (triage) categories; with triage 1 being the most urgent and triage 5, the least urgent (Box 3).

While patients from all triage categories are included in the EDPS, results for those in triage category 1 are not shown in this comparison due to the small number of patients in this group and the very different nature of their experience.

The survey results show that patients in triage categories 2 and 3 responded more positively than those in categories 4 and 5, particularly for questions in the theme of 'coordination and continuity of care in the ED'.

In the EDPS analysis, 48% of respondents were triaged in categories 2 or 3; and 52% in categories 4 or 5. This distribution is a slight over-representation of the more urgent triage categories seen in the state's EDs. Administrative data show that overall, 44% of ED patients are triaged in categories 2 and 3; and 55% are triaged in categories 4 and 5 (see Healthcare Observer www.bhi.nsw.gov.au).

Patients who were more seriously ill, as indicated either by a higher urgency triage category or by admission to hospital immediately following their ED visit (see pages 41-42), reflected positively on coordination and continuity of care in the ED. The relative strength of associations between positive results and the two markers of severity (triage category and admission) have not been determined.

Overall, compared with less urgent patients, a higher proportion of patients triaged to categories 2 and 3 reported that:

- ED staff checked on their condition while they waited for treatment (67% vs 44%)
- ED health professionals worked together in a very good way (55% vs 49%)
- Doctors always knew enough about their medical history (55% vs 48%)
- Nurses always knew enough about their medical history (54% vs 47%)
- Their home situation was completely taken into account upon discharge (61% vs 56%)
- They were told which signs and symptoms to watch for after discharge (53% vs 49%)
- They were told who to contact if worried about their condition or treatment after discharge (82% vs 80%).

Urgency is an important factor that shapes patient experiences in the emergency department. However, experiences of care are also influenced by whether patients are subsequently admitted to hospital (see Figure 30 for a comparison of the responses of patients who were treated and discharged with those who were treated and admitted). Across all NSW EDs, less than two in 10 triage category 4 patients (18%) and a small proportion of category 5 patients (5%) are treated and subsequently admitted to hospital or transferred to another facility. In contrast, almost seven in 10 triage category 2 patients (65%) and four in 10 triage category 3 patients (44%) are admitted or transferred at the conclusion of their ED visit.³⁸

Box 3 Triage category classification system

Triage 1: Resuscitation

(e.g. cardiac arrest)

Triage 2: Emergency

(e.g. chest pain, severe burns)

Triage 3: Urgent

(e.g. moderate blood loss, dehydration)

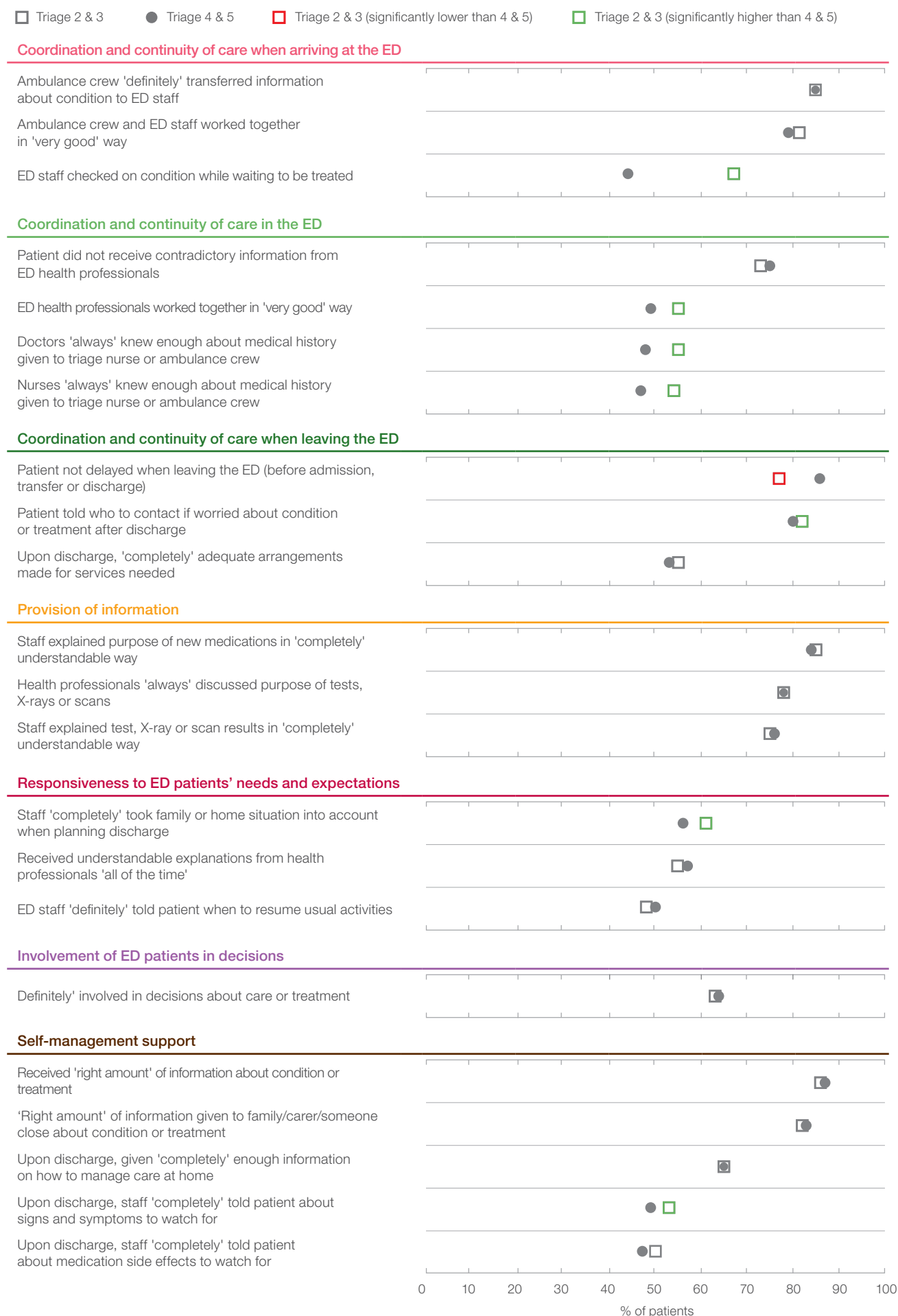
Triage 4: Semi-urgent

(e.g. sprained ankle, earache)

Triage 5: Non-urgent

(e.g. small cuts, abrasions)

Figure 29 Significant differences by triage categories (based on most positive category)



Comparisons by different care needs: discharged, admitted or transferred

Patients treated and discharged report some aspects of integration more positively

Patients leaving the ED are either discharged home, admitted to a short term Medical Assessment Unit or Emergency Medical Unit, admitted to a hospital ward, or transferred to another facility. Patients who require admission to hospital from the ED usually have more complex health needs than those who are treated in the ED and leave. In general, they spend a longer time in the ED. Accordingly, the experiences of patients who are admitted or transferred to another hospital can differ from those of patients who are treated and discharged home.

In the EDPS analysis, 34% of respondents said they were either admitted or transferred immediately following their ED visit; while 66% said they were treated and discharged. This distribution is a slight over-representation of the admitted and transferred group. Overall, administrative data show that 63% of visits to an ED ended in discharge home (see Healthcare Observer www.bhi.nsw.gov.au)

Comparing the survey responses of these two groups reveals that patients who were admitted or transferred responded less positively than those who were discharged for around a third of the questions.

An exception to this pattern was in the responses to questions about 'coordination and continuity of care in the ED', which from patients who were subsequently admitted to hospital, were more positive.

Patients who were more seriously ill, as indicated either by a higher urgency triage category (see pages 39-40) or by admission to hospital immediately following their ED visit, reflected positively on coordination and continuity of care in the ED.

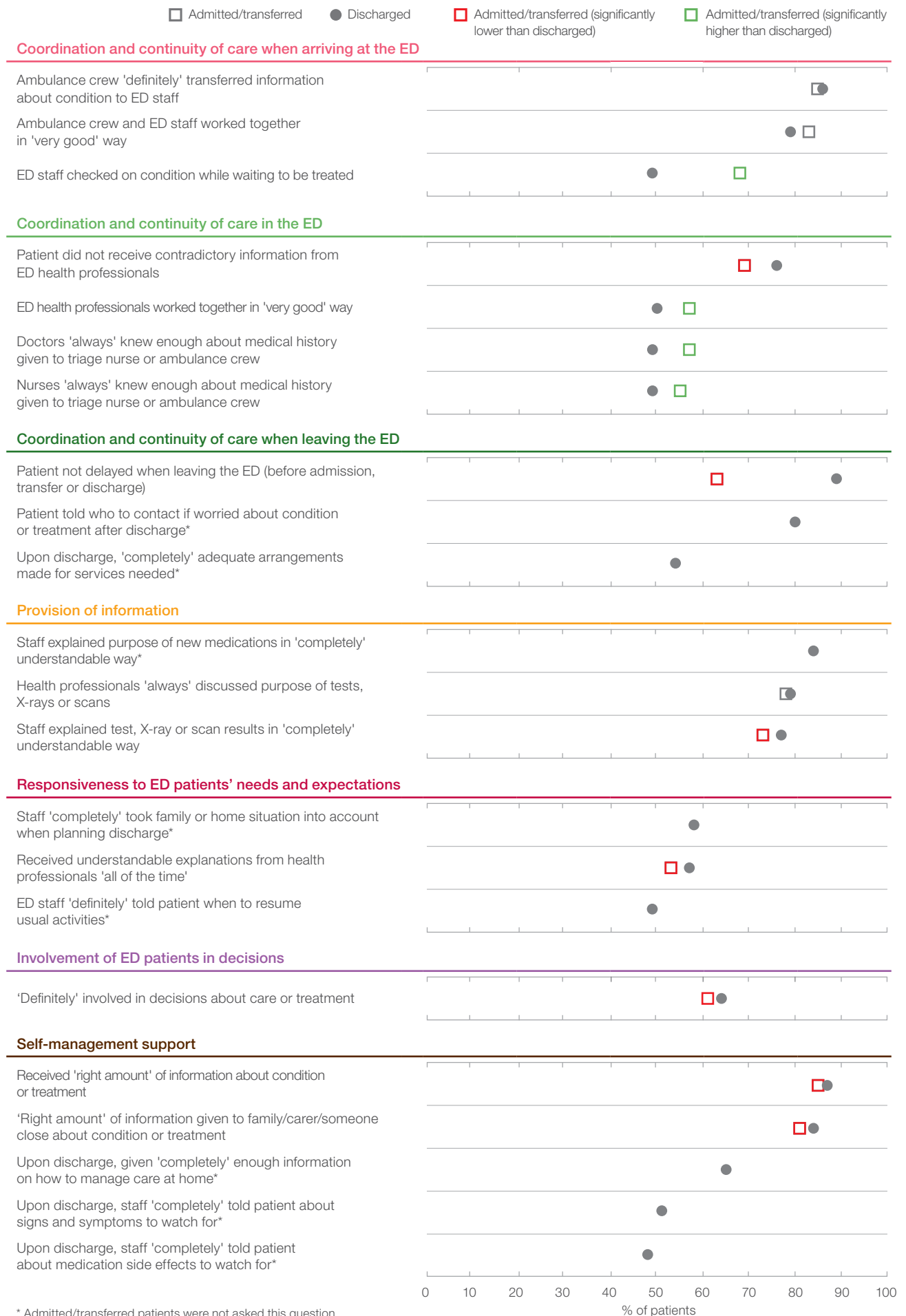
Relative to patients who were treated in the ED and discharged home, a lower proportion of patients who were admitted or transferred said:

- ED health professionals gave them understandable explanations all the time (53% vs 57%)
- Staff explained test, x-ray or scan results in a completely understandable way (73% vs 77%)
- They did not receive contradictory information from ED health professionals (69% vs 76%)
- They received the right amount of information about their condition or treatment (85% vs 87%) and that their family or carers had received the right amount of information (81% vs 84%)
- They felt fully involved in decisions about their healthcare (61% vs 64%)
- They were not delayed when leaving the ED (63% vs 89%).

In contrast, patients who were admitted to hospital were more likely to say that:

- ED staff checked on their condition while they waited for treatment (68% vs 49%)
- ED health professionals worked together in a very good way (57% vs 50%)
- Doctors always knew enough about their medical history (57% vs 49%)
- Nurses always knew enough about their medical history (55% vs 49%).

Figure 30 Significant differences by whether patients were admitted/transferred (based on most positive category)



Comparisons by different patient populations: Aboriginal people

Aboriginal people generally report less integration

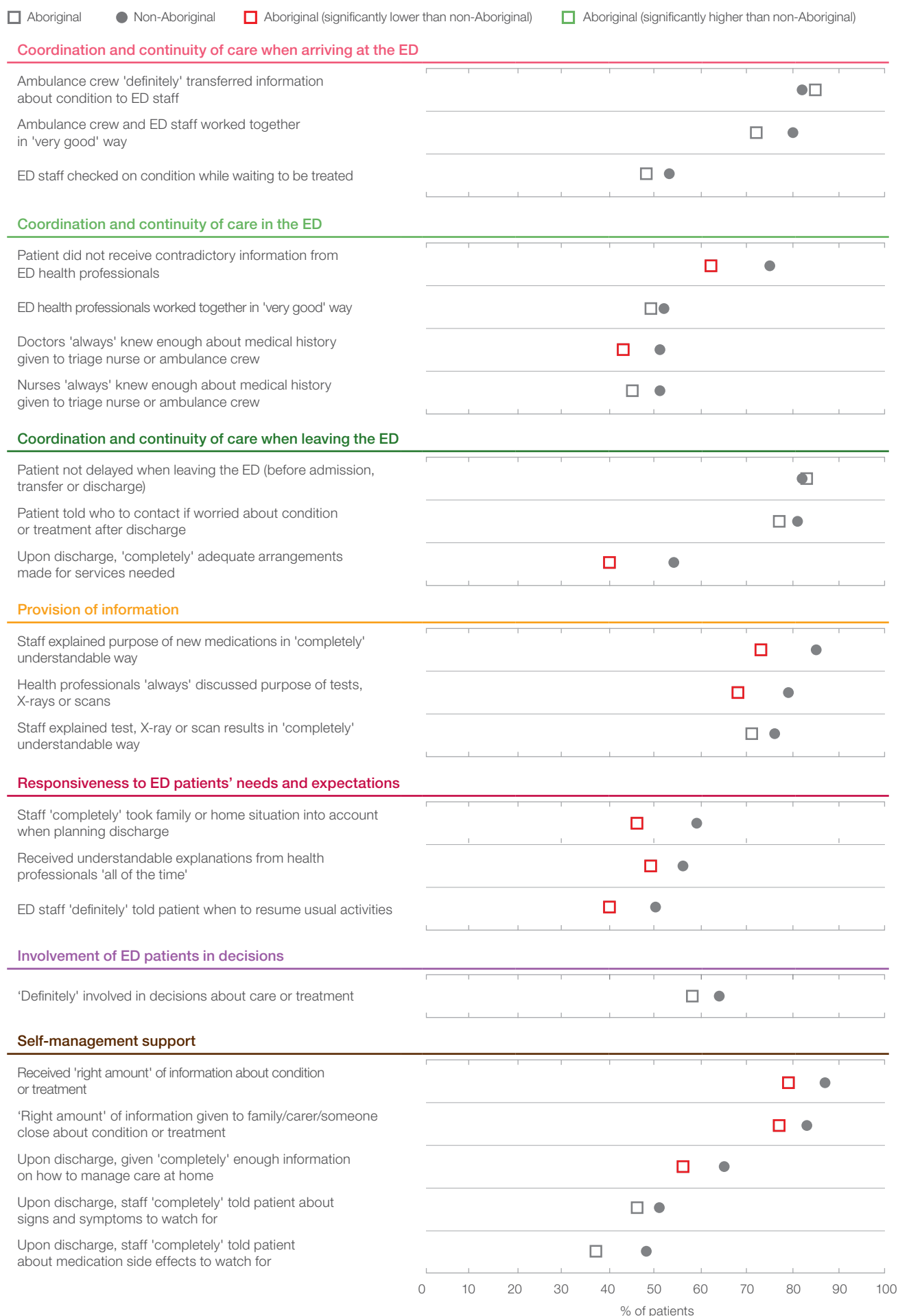
Disparities in healthcare for Aboriginal people are well documented.³⁹ For example, after controlling for the effect of age, Aboriginal people are more likely to have a chronic health condition, and to be living with a disability, and to be hospitalised more than non-Aboriginal people.^{40,41} Communication difficulties between Aboriginal patients and non-Aboriginal health professionals have been identified as a challenge in achieving good Aboriginal health outcomes.⁴² These challenges persist despite efforts to address them, such as policy around NSW ED staff connecting patients and their carers to Aboriginal Liaison Officers when the patient desires.²⁹

There were almost 800 people who identified as Aboriginal or Torres Strait Islander in the EDPS (3% of all respondents). Compared to non-Aboriginal people, Aboriginal people were significantly less positive on many survey questions, particularly those about responsiveness and self-management support (Figure 31). There were no questions for which they gave significantly more positive responses.

Overall, a lower proportion of Aboriginal than non-Aboriginal people reported that:

- Doctors always knew enough about their medical history (43% vs 51%)
- Health professionals always gave explanations they could understand (49% vs 56%)
- They did not receive contradictory information from ED health professionals (62% vs 75%)
- They received the right amount of information about their condition or treatment (79% vs 87%)
- Their family or carers received the right amount of information about their condition or treatment (77% vs 83%)
- Health professionals always discussed the purpose of tests, x-rays or scans (68% vs 79%)
- Staff explained the purpose of new medications in a completely understandable way (73% vs 85%)
- Their home situation was completely taken into account upon discharge (46% vs 59%)
- ED staff definitely told them when they could resume their usual activities (40% vs 50%)
- Completely adequate arrangements were made for healthcare services needed upon discharge (40% vs 54%)
- They were informed about how to manage their care at home (56% vs 65%).

Figure 31 Significant differences for Aboriginal people and non-Aboriginal people (based on most positive category)



Comparisons by different patient populations: people who mainly speak a language other than English

Those speaking a language other than English generally report less integration

The Australian Bureau of Statistics (ABS) provides four core measures considered necessary for identification of cultural and language diversity: country of birth, main language other than English spoken at home, proficiency in spoken English and Indigenous status.⁴³ Along with Aboriginality, the Emergency Department Patient Survey (EDPS) captures main language spoken at home.

Lack of responsiveness to the cultural or linguistic needs of patients can contribute to a range of problems including poor patient-provider communication, misdiagnosis, inappropriate treatment, poor patient adherence to treatment, patient distrust or dissatisfaction with healthcare and poorer health outcomes.⁴⁴

Internationally, a number of studies have pointed to ethnic background as a risk factor for problems in ED discharge.³² ED patients being discharged should be provided with adequate instructions as to their ongoing care requirements. Those delivering it must consider the patient's understanding of the information and any cultural, language or social requirements that will assist with understanding.²⁷

In the EDPS, there were just over 3,000 patients (12% of respondents) who said they mainly speak a language other than English at home (the 'non-English' group), although this does not necessarily indicate lack of proficiency in English. Only around two in 10 of the 'non-English' group said they needed or would have liked to use an interpreter during their ED visit.

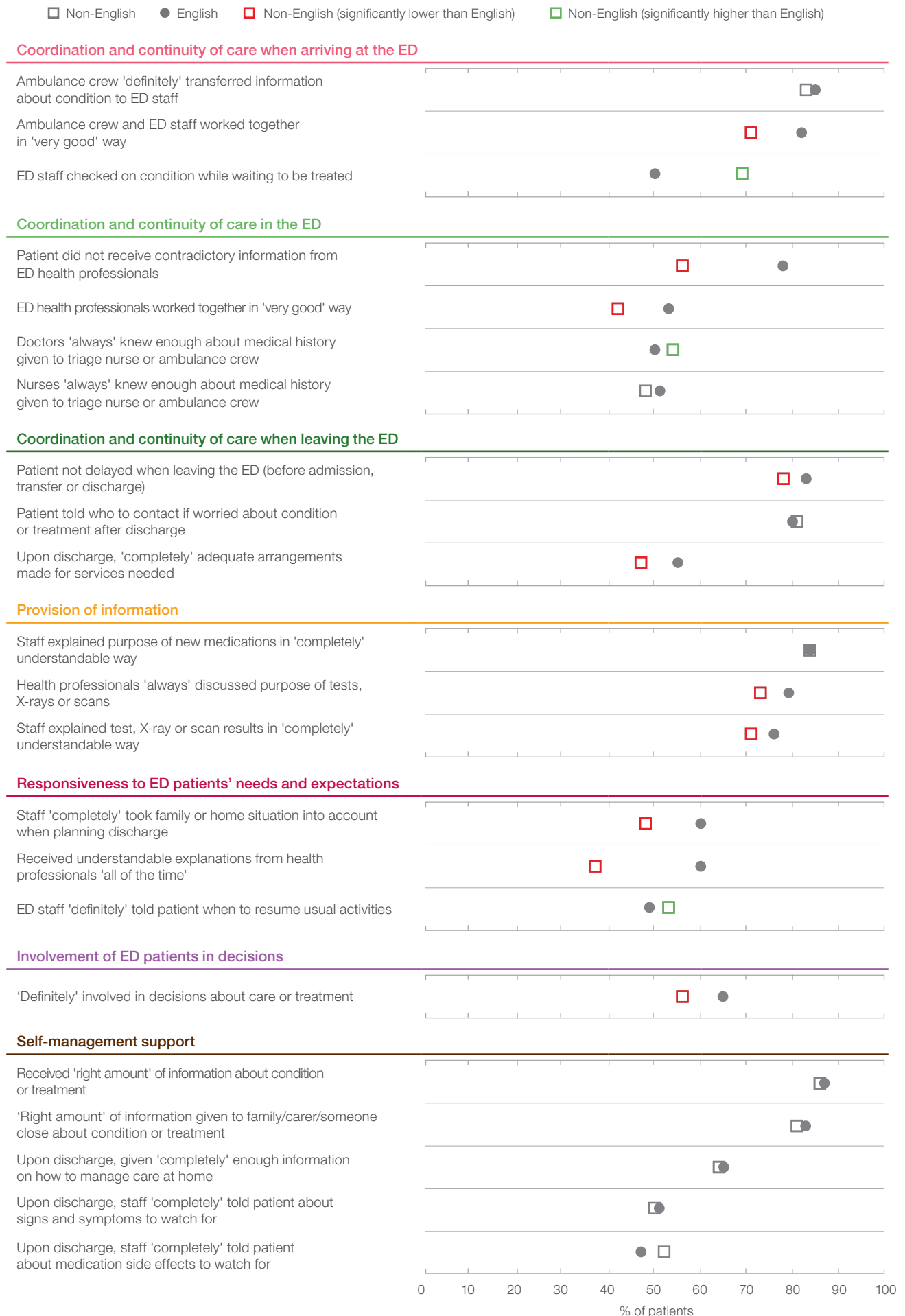
Overall, a lower proportion of the 'non-English' than the English group reported that:

- Ambulance crew and ED staff worked together in a 'very good' way (71% vs 82%)
- ED health professionals worked together in a very good way (42% vs 53%)
- ED health professionals gave them understandable explanations all the time (37% vs 60%)
- They did not receive contradictory information from ED health professionals (56% vs 78%)
- Health professionals always discussed the purpose of tests, x-rays or scans (73% vs 79%) and explained the results in a completely understandable way (71% vs 76%)
- They felt fully involved in decisions about their healthcare (56% vs 65%)
- Their home situation was completely taken into account upon discharge (48% vs 60%)
- Upon discharge, completely adequate arrangements were made for services they needed (47% vs 55%)
- They were not delayed when leaving the ED (78% vs 83%).

In contrast, a higher proportion of the 'non-English' than the English group reported:

- ED staff checked on their condition while they waited for treatment (69% vs 50%)
- Doctors always knew enough about their medical history (54% vs 50%)
- ED staff definitely told them when they could resume their usual activities (53% vs 49%).

Figure 32 Significant differences between 'non-English' and English speakers (based on most positive category)



Comparisons by different patient populations: People with long-standing conditions

Those with long-term needs report positively on coordination of care in the ED, less so on other aspects

Adults with serious disabilities, illnesses or chronic conditions receive a wide range of different healthcare services and for these patients, care is often poorly coordinated.²

Internationally, there has been a growing demand for more patient-centred, better coordinated approaches to providing care to patients with such conditions. Some elements necessary to achieve this include patient engagement in decisions about care, supported self-management and coordinated care.⁴⁵

Providing ED care to people with long-standing conditions presents some unique challenges, such as a lack of pre-existing knowledge about the patient and limited access to records about their medical history. Studies in the US suggest that people with long-standing conditions have a higher risk of return to ED within 72 hours, increased use of emergency medical services and for some patients, increased risk of death.³²

In the EDPS, there were around 9,000 people (35% of respondents) who identified as having one or more long-standing conditions (Box 4).

Patients with long-standing conditions were less positive than those without for many of the aspects of integration addressed by the survey, although there were exceptions to this pattern.

Differences in patterns of responses from these groups may appear to be marginal, however many of the results were statistically significant.

Among the differences (Figure 33), a lower proportion of patients with a long-standing condition than those without said:

- ED health professionals gave them understandable explanations all the time (53% vs 57%) and they received the right amount of information about their condition or treatment (83% vs 87%)
- Health professionals explained the results of tests, X-rays or scans in a completely understandable way (72% vs 77%)
- They felt fully involved in decisions about their healthcare (61% vs 64%)
- That upon discharge completely adequate arrangements were made for services they needed (50% vs 55%) and ED staff definitely told them when they could resume their usual activities (43% vs 51%)
- They were told who to contact if worried about their condition or treatment after discharge (77% vs 82%) and were told which signs and symptoms to watch for after discharge (46% vs 52%)
- They were not delayed when leaving (78% vs 84%).

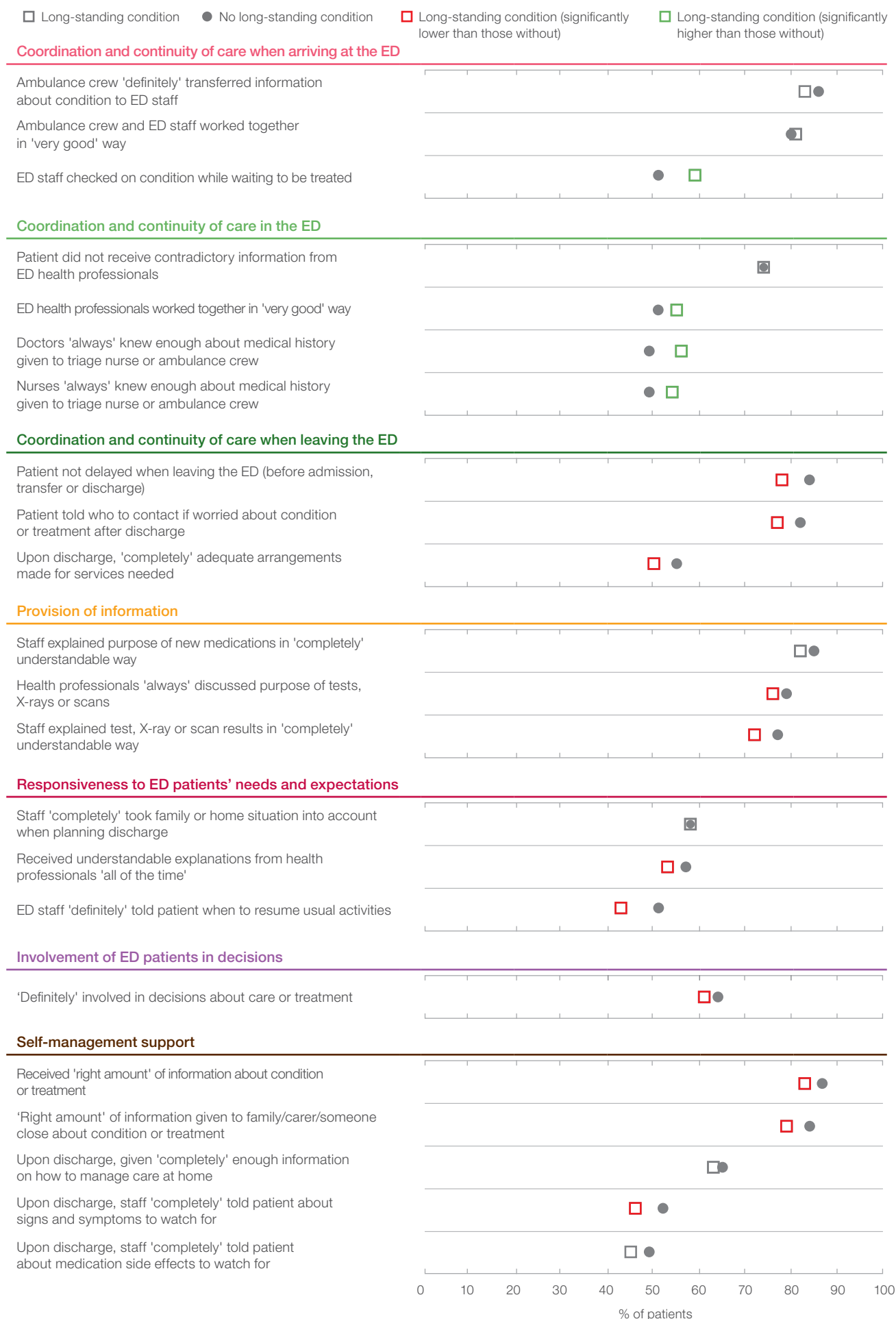
A higher proportion of patients with a long-standing condition than those without said:

- ED staff checked on their condition while they waited for treatment (59% vs 51%)
- ED health professionals worked together in a very good way (55% vs 51%)
- Doctors (56% vs 49%) and nurses (54% vs 49%) always knew enough about their medical history.

Box 4 Long-standing health conditions reported in the EDPS

- Deafness or severe hearing impairment
- Blindness or severe vision impairment
- A long-standing physical condition
- A learning disability
- A mental health condition (including dementia or Alzheimer's)
- A long-standing illness, such as cancer, HIV, diabetes, chronic heart disease or epilepsy.

Figure 33 Significant differences for patients with long-term health conditions (based on most positive category)



NSW results compared with England

Results for NSW similar to, or better than, England for most questions

Patient survey results from other healthcare systems can provide context and insight about the relative strengths and weaknesses of performance in NSW.

NHS England Accident and Emergency (A&E) Survey

England's 2014 NHS Accident and Emergency Survey included nine questions that are almost identical to those in the NSW Emergency Department Patient Survey, many of them about discharge from the ED.

These results provide an opportunity to compare results between the two jurisdictions (see Appendix 7 for more information on these questions).

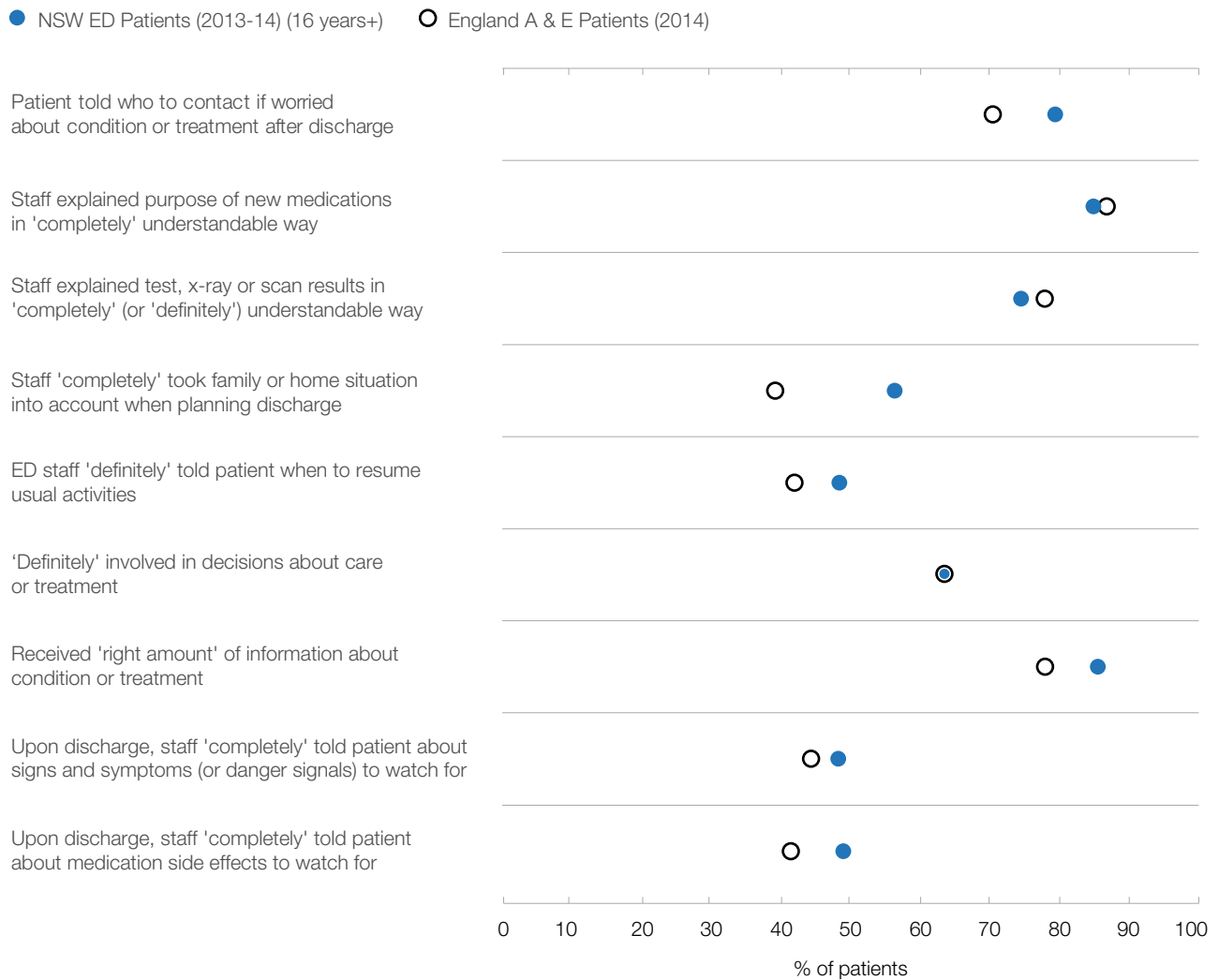
Patients in NSW provided more positive responses than those in England for many of these questions, particularly for the question about whether ED staff took the patient's family or home situation into account when planning discharge (Figure 34).

Interpretation of results should take into account any differences that may impact the results, such as differences in question wording, sampling criteria, patient case-mix and healthcare systems.

While all of these differences cannot be accounted for here, to aid comparability with the NHS results, only the results of questions that are either the same, or very similar, were compared and comparisons only include patients who are 16 years or older from NSW (to be comparable to NHS's sample).

For more information about the NHS Survey Program, visit www.nhssurveys.org

Figure 34 Aspects of integration, percentage of patients aged 16 and over selecting most positive option: NSW results relative to England



Note: Questions from these surveys have been rephrased to a statement that includes the most preferable response option. Some results exclude those patients who answered that the question was not applicable to them or that they did not know or couldn't remember. To view the original questions mapped against these statements, and see exclusions, please see Appendix 7.

Appendix 1

Emergency Department Patient Survey questions reported upon

✓ included in denominator ✗ not included in denominator (highlighted option used in measure)

Original Question Text	Reported Measure	Response Options	
Coordination and continuity of care when arriving at the ED			
Did the ambulance crew transfer information about your condition to the Emergency Department staff?	Ambulance crew 'definitely' transferred information about condition to ED staff	<div><div>✓ Yes, definitely</div><div>✓ Yes, to some extent</div></div>	<div><div>✓ No</div><div>✓ Don't know or can't remember</div></div>
How would you rate how the ambulance crew and Emergency Department staff worked together?	Ambulance crew and ED staff worked together in 'very good' way	<div><div>✓ Very good</div><div>✓ Good</div><div>✓ Neither good nor poor</div></div>	<div><div>✓ Poor</div><div>✓ Very poor</div><div>✗ Don't know or can't remember</div></div>
After you had seen the triage nurse and were still waiting in the waiting room to be treated, did Emergency Department staff check on your condition?	ED staff checked on condition while waiting to be treated	<div><div>✓ Yes, someone checked on my condition</div><div>✓ No, no-one checked on my condition</div><div>✗ Don't know or can't remember</div></div>	
Coordination and continuity of care in the ED			
Did you receive contradictory information from Emergency Department healthcare professionals – for example, giving different opinions on your treatment?	Patient did not receive contradictory information from ED health professionals	<div><div>✓ Yes, definitely</div><div>✓ Yes, to some extent</div><div>✓ No</div></div>	
How would you rate how well the Emergency Department health professionals worked together?	ED health professionals worked together in 'very good' way	<div><div>✓ Very good</div><div>✓ Good</div><div>✓ Adequate</div></div>	<div><div>✓ Poor</div><div>✓ Very poor</div></div>
Did the doctors know your medical history, which had already been given to the triage nurse or ambulance crew?	Doctors 'always' knew enough about medical history given to triage nurse or ambulance crew	<div><div>✓ Yes, always</div><div>✓ Yes, sometimes</div><div>✓ No</div></div>	
Did the nurses know your medical history, which had already been given to the triage nurse or ambulance crew?	Nurses 'always' knew enough about medical history given to triage nurse or ambulance crew	<div><div>✓ Yes, always</div><div>✓ Yes, sometimes</div><div>✓ No</div></div>	<div><div>✗ I only saw a triage nurse</div><div>✗ I did not see any nurses</div></div>
Coordination and continuity of care when leaving the ED			
Were you delayed when leaving the Emergency Department – that is, before being admitted to a ward, being transferred to another hospital or going directly home?	Patient not delayed when leaving the ED (before admission, transfer or discharge)	<div><div>✓ Yes</div><div>✓ No</div></div>	
Did Emergency Department staff tell you who to contact if you were worried about your condition or treatment after you left hospital?	Patient told who to contact if worried about condition or treatment after discharge	<div><div>✓ Yes</div><div>✓ No</div><div>✗ Don't know or can't remember</div></div>	
Thinking about when you left the Emergency Department, were adequate arrangements made by the hospital for any services you needed?	Upon discharge, 'completely' adequate arrangements made for services needed	<div><div>✓ Yes, completely</div><div>✓ Yes, to some extent</div></div>	<div><div>✓ No</div><div>✗ I did not need any services</div></div>
Provision of Information			
Did a member of the Emergency Department staff explain the purpose of the medications you were prescribed in a way you could understand?	Staff explained purpose of new medications in 'completely' understandable way	<div><div>✓ Yes, completely</div><div>✓ Yes, to some extent</div><div>✓ No</div></div>	
If you had a test, X-ray or scan during your visit to the Emergency Department, did a doctor, nurse or other health professional discuss the purpose with you?	Health professionals 'always' discussed purpose of tests, X-rays or scans	<div><div>✓ Yes, always</div><div>✓ Yes, sometimes</div><div>✓ No, did not discuss with me</div></div>	<div><div>✗ No, did not have any tests, X-rays, or scans</div><div>✗ Don't know or can't remember</div></div>
Did a member of staff explain the test, X-ray or scan results in a way that you could understand?	Staff explained test, X-ray or scan results in 'completely' understandable way	<div><div>✓ Yes, completely</div><div>✓ Yes, to some extent</div><div>✓ No</div></div>	

✓ included in denominator ✗ not included in denominator (highlighted option used in measure)

Original Question Text	Reported Measure	Response Options
Responsiveness to ED patients' needs and expectations		
Did Emergency Department staff take your family and home situation into account when planning your discharge?	Staff 'completely' took family or home situation into account when planning discharge	<ul style="list-style-type: none"> ✓ Yes, completely ✓ Yes, to some extent ✓ No, staff did not take my family and home situation into account understand ✗ It was not necessary ✗ Don't know or can't remember
How often did the Emergency Department health professionals caring for you explain things in a way you could understand?	Received understandable explanations from health professionals 'all of the time'	<ul style="list-style-type: none"> ✓ All of the time ✓ Most of the time ✓ Some of the time understand ✓ Rarely ✓ Never
Did a member of the Emergency Department staff tell you when you could resume your usual activities, such as when to go back to work or drive a car?	ED staff 'definitely' told patient when to resume usual activities	<ul style="list-style-type: none"> ✓ Yes, definitely ✓ Yes, to some extent ✓ No
Involvement of ED patients in decisions		
Were you involved, as much as you wanted to be, in decisions about your care and treatment?	'Definitely' involved in decisions about care or treatment	<ul style="list-style-type: none"> ✓ Yes, definitely ✓ Yes, to some extent ✓ No ✗ I was not well enough or did not want to be involved in decisions about my care or treatment
Self-management support		
How much information about your condition or treatment was given to you by Emergency Department health professionals?	Received 'right amount' of information about condition or treatment	<ul style="list-style-type: none"> ✓ Not enough ✓ Right amount ✓ Too much ✗ It was not necessary to provide information ✗ Don't know or can't say
How much information about your condition or treatment was given to your family, carer or someone close to you?	'Right amount' of information given to family/carer/someone close about condition or treatment	<ul style="list-style-type: none"> ✓ Not enough ✓ Right amount ✓ Too much ✗ It was not necessary to provide information to any family or friends ✓ Don't know or can't say
Thinking about when you left the Emergency Department, were you given enough information about how to manage your care at home?	Upon discharge, given 'completely' enough information on how to manage care at home	<ul style="list-style-type: none"> ✓ Yes, completely ✓ Yes, to some extent ✓ No ✗ I did not need this type of information
Thinking about your illness or treatment, did a member of the Emergency Department staff tell you about what signs or symptoms to watch out for after you went home?	Upon discharge, staff 'completely' told patient about signs and symptoms to watch for	<ul style="list-style-type: none"> ✓ Yes, completely ✓ Yes, to some extent ✓ No
Did a member of the Emergency Department staff tell you about medication side effects to watch for?	Upon discharge, staff 'completely' told patient about medication side effects to watch for	<ul style="list-style-type: none"> ✓ Yes, completely ✓ Yes, to some extent ✓ No

Appendix 2

LHDs and hospitals covered in the Emergency Department Patient Survey

Local health district	Hospital name	Peer group	# Respondents	Response rate
Central Coast	Gosford Hospital	A1	543	33%
	Wyong Hospital	B	553	32%
Far West	Broken Hill Base Hospital	C1	158	23%
Hunter New England	Armidale and New England Hospital	C1	175	31%
	Belmont Hospital	C1	178	34%
	Calvary Mater Newcastle	A3	570	33%
	Cessnock District Hospital	C2	139	24%
	Gunnedah District Hospital	C2	148	25%
	Inverell District Hospital	C2	166	27%
	John Hunter Hospital	A1	523	31%
	Kurri Kurri District Hospital	C2	138	25%
	Maitland Hospital	B	514	30%
	Manning Base Hospital	B	596	37%
	Moree District Hospital	C2	142	20%
	Muswellbrook District Hospital	C2	152	22%
	Narrabri District Hospital	C2	163	25%
	Singleton District Hospital	C2	146	23%
	Tamworth Base Hospital	B	482	28%
Illawarra Shoalhaven	Bulli District Hospital	C2	164	35%
	Milton and Ulladulla Hospital	C2	222	41%
	Shellharbour Hospital	C1	175	33%
	Shoalhaven and District Memorial Hospital	B	557	34%
	Wollongong Hospital	A1	513	32%
Mid North Coast	Coffs Harbour Base Hospital	B	578	32%
	Kempsey Hospital	C2	187	29%
	Port Macquarie Base Hospital	B	622	39%
Murrumbidgee	Griffith Base Hospital	C1	170	25%
	Wagga Wagga Base Hospital	B	546	31%
Nepean Blue Mountains	Blue Mountains District Anzac Memorial Hospital	C2	182	34%
	Hawkesbury District Health Service	C1	120	31%
	Lithgow Health Service	C2	176	29%
	Nepean Hospital	A1	574	32%
Northern NSW	Ballina District Hospital	C2	195	34%
	Casino and District Memorial Hospital	C2	176	28%
	Grafton Base Hospital	C1	171	31%
	Lismore Base Hospital	B	585	34%
	Maclean District Hospital	C2	208	39%
	Murwillumbah District Hospital	C1	174	30%
	The Tweed Hospital	B	567	34%

Local health district	Hospital name	Peer group	# Respondents	Response rate
Northern Sydney	Hornsby and Ku-Ring-Gai Hospital	B	541	36%
	Manly District Hospital	B	545	31%
	Mona Vale and District Hospital	B	594	37%
	Royal North Shore Hospital	A1	567	38%
	Ryde Hospital	C1	177	33%
South Eastern Sydney	Prince of Wales Hospital	A1	525	30%
	St George Hospital	A1	488	32%
	Sutherland Hospital	B	527	35%
	Sydney/Sydney Eye Hospital	A3	490	29%
South Western Sydney	Bankstown / Lidcombe Hospital	A1	473	26%
	Bowral and District Hospital	C1	182	34%
	Camden Hospital	C2	149	27%
	Campbelltown Hospital	B	487	28%
	Fairfield Hospital	B	428	24%
	Liverpool Hospital	A1	494	27%
Southern NSW	Bateman's Bay District Hospital	C2	171	31%
	Bega District Hospital	C1	188	35%
	Goulburn Base Hospital	C1	155	29%
	Moruya District Hospital	C2	219	38%
St Vincent's Health Network	St Vincent's Hospital, Darlinghurst	A1	444	26%
Sydney	Canterbury Hospital	B	425	25%
	Concord Hospital	A1	503	35%
	Royal Prince Alfred Hospital	A1	508	31%
Sydney Children's Health Network	Sydney Children's Hospital	A2	468	34%
	The Children's Hospital at Westmead	A2	459	29%
Western NSW	Bathurst Base Hospital	C1	169	29%
	Cowra District Hospital	C2	153	29%
	Dubbo Base Hospital	B	478	27%
	Forbes District Hospital	C2	141	26%
	Mudgee District Hospital	C2	138	26%
	Orange Health Service	B	530	31%
	Parkes District Hospital	C2	167	29%
Western Sydney	Auburn Hospital	B	387	22%
	Blacktown Hospital	B	499	28%
	Mount Druitt Hospital	C1	124	21%
	Westmead Hospital	A1	513	28%

Appendix 3

Sensitivity analysis of LHD results

The results presented in this report include only those weighted by the strata variables (i.e. age strata and whether a patient was admitted or not) to match the patient population of each hospital.

To assess the impact on results of socio-demographic characteristics associated with patient experience, a sensitivity analysis was undertaken by standardising the results to control for any influence these factors might have had. While hospitals should endeavour to address the needs of their particular patient group, this analysis gives insight into the extent to which differences in patient-mix are contributing to patients' ratings.

Through a process of patient-mix adjustment based on the method used by the Consumer Assessment of Healthcare Providers and Systems Hospital Survey (HCAHPS), LHD and NSW level results were standardised by age group (0–16, 17–34, 35–54, 55–74, 75+), gender (male, female, missing), education (less than year 12, completed year 12, trade or technical certificate, university, post-graduate, missing) and main language other than English at home (English, language other than English, missing).⁴⁶

As per the method used by HCAHPS, for each response variable we fitted a linear relationship, with indicator variables for each level of the four variables included in the standardisation. The estimates of the coefficients for each of the indicator variables were then used to obtain the fitted values and confidence intervals. For the LHD analysis, indicator variables for each LHD were included in the model. The analysis was performed in SAS V9.3 using PROC GLM. Confidence intervals around the modelled values were used to determine statistical significance in the same manner as for the weighted results presented in the body of this report.

Compared to the weighted results, the impact of adjusting for these socio-demographic characteristics was to decrease the number of LHDs for which results were significantly more positive than the NSW average. This effect was mainly due to the adjustment of the age profile to that of the patient population in NSW.

The impact on the less positive results was minimal and the LHDs that received the lowest proportion of statistically significant results remained the same. No LHDs went from having some of the highest ratings to the lowest or vice-versa.

These results point to the potential impact of patient-mix on patients' ratings of care, but demonstrate that for the LHDs with less positive results in these measures, these factors are not influential.

Figure 35 Number of question results significantly different from NSW, following patient-mix adjustment of percentage selecting most positive option

	LHD with more positive results		LHD with less positive results	
	Reported results		Sensitivity analysis results	
	Significantly more positive question results than NSW	Significantly less positive question results than NSW	Significantly more positive question results than NSW	Significantly less positive question results than NSW
Central Coast	0	0	0	0
Far West Local	1	1	1	1
Hunter New England	3	1	1	0
Illawarra Shoalhaven	1	2	1	1
Mid North Coast	5	1	1	1
Murrumbidgee	0	3	0	3
Nepean Blue Mountains	0	1	0	0
Northern NSW	7	0	1	0
Northern Sydney	8	0	8	0
South Eastern Sydney	0	1	0	2
South Western Sydney	1	14	0	14
Southern NSW	2	0	2	0
St Vincent's Health Network	5	0	3	0
Sydney Children's Health Network	4	4	2	5
Sydney	1	2	0	2
Western NSW	3	0	3	0
Western Sydney	1	11	0	13

Appendix 4

Hospitals with significantly higher or lower results compared to NSW

- Coordination and continuity of care when arriving at the ED
- Coordination and continuity of care in the ED
- Coordination and continuity of care when leaving the ED
- Provision of information
- Responsiveness to ED patients' needs and expectations
- Involvement of ED patients in decisions
- Self-management support

Hospital result, relative to NSW: ● Significantly lower than NSW ● No significant difference ● Significantly higher than NSW

Peer group A

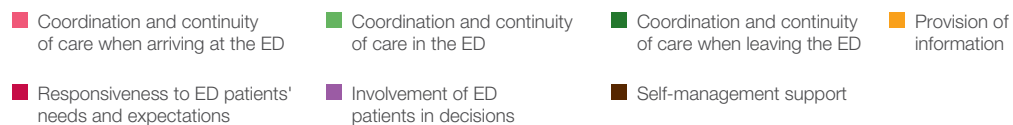
*Question:	1	2	3	1	2	3	4	1	2	3	1	2	3	1	2	3	1	2	3	4	5
Bankstown / Lidcombe Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Calvary Mater Newcastle	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Concord Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Gosford Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
John Hunter Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Liverpool Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Nepean Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Prince of Wales Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Royal North Shore Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Royal Prince Alfred Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
St George Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
St Vincent's Hospital, Darlinghurst	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Sydney Children's Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Sydney / Sydney Eye Hospital**	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
The Children's Hospital at Westmead	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Westmead Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Wollongong Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Peer group B

*Question:	1	2	3	1	2	3	4	1	2	3	1	2	3	1	2	3	1	2	3	4	5
Auburn Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Blacktown Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Campbelltown Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Canterbury Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Coffs Harbour Base Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Dubbo Base Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Fairfield Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hornsby and Ku-Ring-Gai Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Lismore Base Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Maitland Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Manly District Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Manning Base Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Mona Vale and District Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Orange Health Service	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Port Macquarie Base Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Shoalhaven and District Memorial Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Sutherland Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Tamworth Base Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
The Tweed Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Wagga Wagga Base Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Wyong Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

* For full text of the questions referred to, see pages 37-38.

** While 76 hospitals were sampled in the EDPS, Sydney and Sydney Eye Hospitals were combined for reporting purposes. This means there are 75 hospital-level results available.



Hospital result, relative to NSW:
 ● Significantly lower than NSW
 ● No significant difference
 ● Significantly higher than NSW
○ Insufficient respondents for significance testing

Peer group C

*Question:	1	2	3	1	2	3	4	1	2	3	1	2	3	1	2	3	1	1	2	3	4	5
Armidale and New England Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Ballina District Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Bateman's Bay District Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Bathurst Base Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Bega District Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Belmont Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Blue Mountains District Anzac Memorial Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Bowral and District Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Broken Hill Base Hospital	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Bulli District Hospital	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Camden Hospital	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Casino and District Memorial Hospital	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cessnock District Hospital	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cowra District Hospital	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	○
Forbes District Hospital	○	○	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●
Goulburn Base Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Grafton Base Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Griffith Base Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Gunnedah District Hospital	○	○	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●
Hawkesbury District Health Service	○	○	●	●	●	●	●	●	●	○	●	●	●	○	●	●	●	●	●	●	●	○
Inverell District Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Kempsey Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Kurri Kurri District Hospital	○	○	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●
Lithgow Health Service	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Maclean District Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Milton and Ulladulla Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Moree District Hospital	●	○	●	●	●	●	●	●	●	○	○	●	●	●	●	●	●	●	●	●	●	○
Moruya District Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Mount Druitt Hospital	●	●	●	●	●	●	●	●	●	○	●	●	○	●	●	●	●	●	●	●	●	○
Mudgee District Hospital	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Murwillumbah District Hospital	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Muswellbrook District Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Narrabri District Hospital	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Parkes District Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Ryde Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Shellharbour Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Singleton District Hospital	○	○	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●

* For full text of the questions referred to, see pages 37-38.

Appendix 5

Exploring variation in NSW results – 17 LHDs, 75 hospitals

To be meaningful, measurement of variation in any type of performance data must take account of factors that are beyond the control of organisational units under assessment. This often requires the use of statistical methods to control for contextual confounders, or clustering of units into groups that share key characteristics so that comparisons are fair.

LHDs are the administrative hubs for a regional healthcare system and share many responsibilities and characteristics, however they differ in important ways. In particular, the populations served by LHDs* vary in terms of social, economic and health characteristics. For example, across NSW, 12% of respondents to the EDPS mainly speak a language other than English at home (Figure 36). However, this varies across LHDs. For example, corresponding results for Northern NSW and Southern NSW LHDs were 11 percentage points lower (i.e. 1% of respondents mainly speak a language other than English), while those for South Western Sydney and Western Sydney LHDs were 23 and 28 percentage points higher (35% and 40% respectively) (Figure 37).

In addition to variation between LHDs, each LHD varies in the socio-demographic profile of patients who

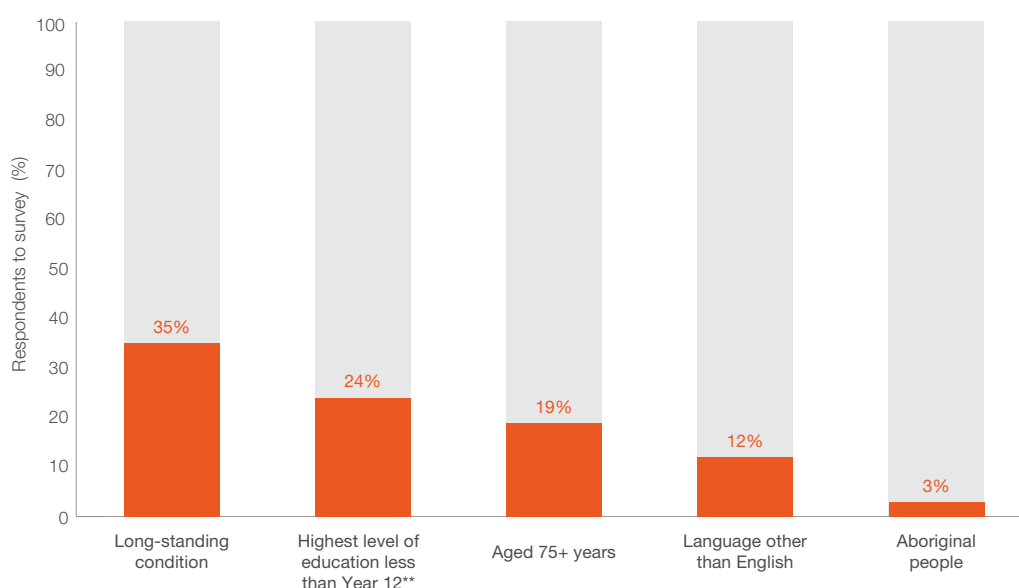
attend the ED versus those admitted. When compared to Volume 1 in this series, we see that although similar in many ways, the NSW profile shows a higher percentage of older patients, those with a long-standing condition and those with lower educational attainment among admitted patients. Differences such as these are also apparent for some LHDs.

However, a sensitivity analysis of the impact of socio-demographic characteristics (including age group, gender, education and a main language other than English) associated with patient experience comparing standardised with non-standardised results for LHDs revealed only modest differences. Rankings for LHDs were quite consistent, particularly for the lower ranked LHDs (Appendix 3). This suggests that socio-demographic factors are not substantively confounding the LHD level results.

For hospitals however, there are marked differences in size and complexity across the state. NSW public hospitals are therefore clustered into peer groups in order to make fair comparisons (see page 35 for details).

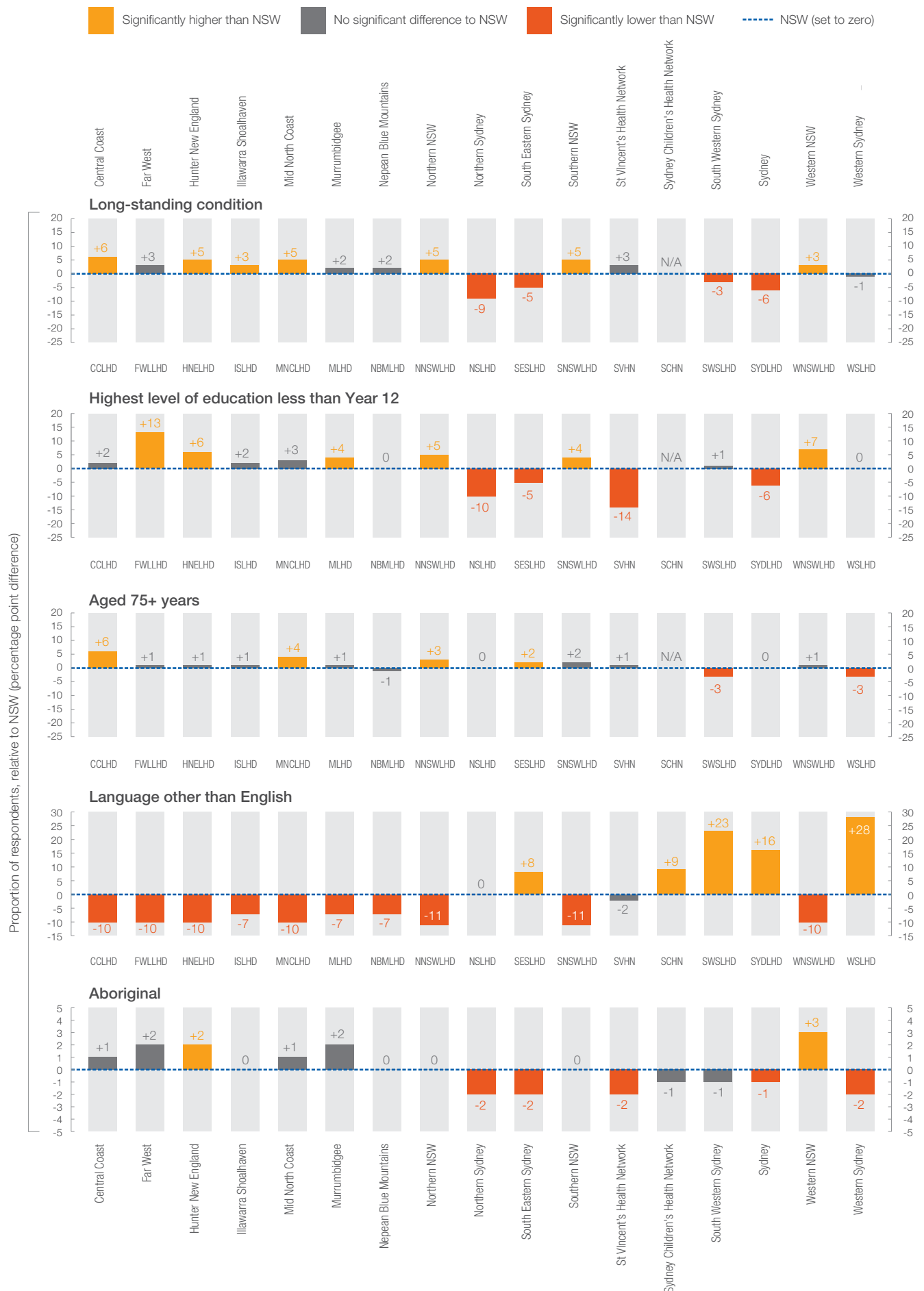
Further information on respondent profiles is available at www.bhi.nsw.gov.au

Figure 36 Self-reported socio-demographic and health characteristics of survey respondents: NSW



* There are 15 geographically defined LHDs included in this report. Among non-geographically defined Local Health Networks (LHNs), results for St Vincent's LHN and Sydney Children's Health Network are also included while those for one specialist network, Justice and Forensic Mental Health, is not. ** This analysis performed for adult patients only.

Figure 37 Self-reported socio-demographic and health characteristics of survey respondents: LHDs relative to NSW



Appendix 6

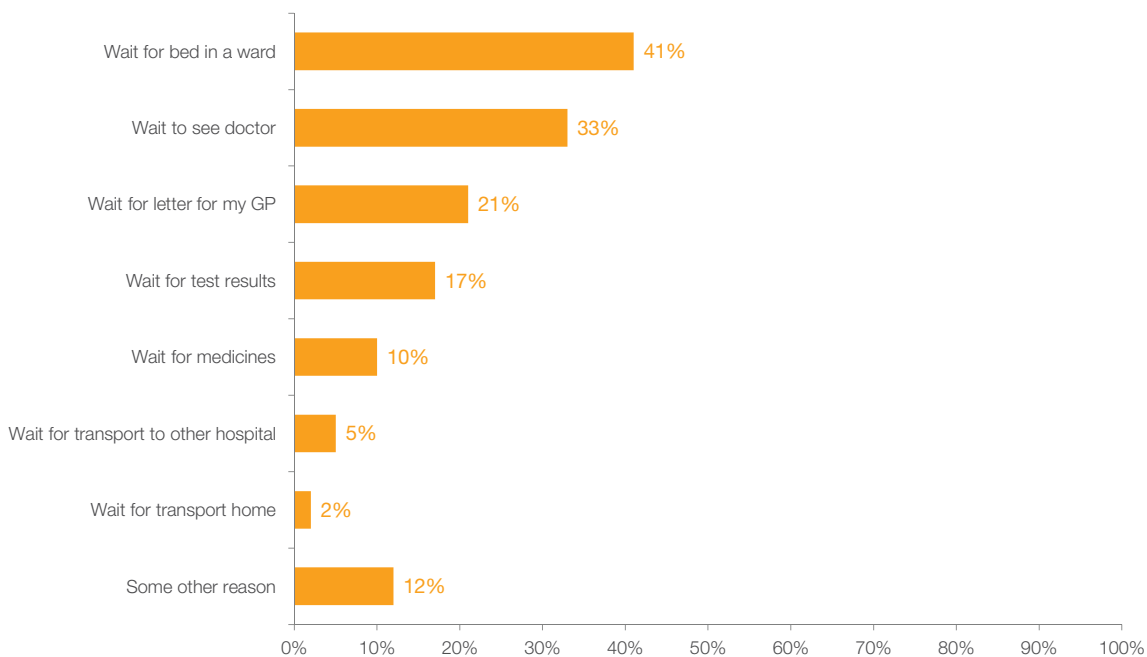
Reasons for delay in leaving the ED

The EDPS asked patients ‘Were you delayed when leaving the Emergency Department – that is, before being admitted to a ward, being transferred to another hospital or going directly home?’

Across the state, almost two in 10 ED patients (18%) said they were delayed. This group was subsequently asked about the reasons for the delay. Multiple responses were possible.

The most commonly given reasons were waiting for a bed in a ward (41%); waiting to see a doctor (33%); and waiting for a letter for the general practitioner (GP) (21%). The cited reasons all reflect issues relevant to integration of care – but primarily focus on coordination between different departments and providers of care.

Figure 38 Reasons for delay in leaving the ED, among those who were delayed, EDPS 2013-2014



Appendix 7:

Comparison questions from the NHS Accident and Emergency Survey 2014

The NHS in England has a well-established program of patient experience surveys. The program includes surveys on:

- Adult Inpatients
- General Practice patients
- Maternity patients
- Paediatric patients
- Mental health service users
- Accident and Emergency (A&E) Department patients
- Specific disease groups:
 - Cancer patients
 - Coronary heart disease patients
 - Diabetes patients
 - Stroke patients

The 2014 A&E Department survey contained a number of questions that aligned with questions used in the NSW Emergency Department Patient Survey. The questions are outlined in Figure 39.

Figure 39 Survey questions from the NHS 2014 Accident and Emergency Department Survey

Highlighted option used in measure ✓ Included in denominator ✗ Not included in denominator

Original Question Text	Reported Measure	Response Options
Did hospital staff tell you who to contact if you were worried about your condition or treatment after you left the A&E Department?	Patient told who to contact if worried about condition or treatment after discharge	<ul style="list-style-type: none"> ✓ Yes ✓ No ✗ Don't know or can't remember
Did a member of staff explain the purpose of the medications you were to take at home in a way you could understand?	Staff explained purpose of new medications in 'completely' understandable way	<ul style="list-style-type: none"> ✓ Yes, completely ✓ Yes, to some extent ✓ No ✗ I did not need an explanation
Did a member of staff explain why you needed these test(s) in a way you could understand?	Staff explained test, x-ray or scan results in 'completely' (or 'definitely') understandable way	<ul style="list-style-type: none"> ✓ Yes, definitely ✓ Yes, to some extent ✓ No ✗ Not sure or can't remember
Did hospital staff take your family or home situation into account when you were leaving the A&E Department?	Staff 'completely' took family or home situation into account when planning discharge	<ul style="list-style-type: none"> ✓ Yes, completely ✓ Yes, to some extent ✓ No ✗ It was not necessary ✗ Don't know or can't remember
Did a member of staff tell you when you could resume your usual activities, such as when to go back to work or drive a car?	ED staff 'definitely' told patient when to resume usual activities	<ul style="list-style-type: none"> ✓ Yes, definitely ✓ Yes, to some extent ✓ No ✗ I did not need this type of information
Were you involved as much as you wanted to be in decisions about your care and treatment?	Definitely' involved in decisions about care or treatment	<ul style="list-style-type: none"> ✓ Yes, definitely ✓ Yes, to some extent ✓ No ✗ I was not well enough to be involved in decisions about my care
While you were in the A&E Department, how much information about your condition or treatment was given to you?	Received 'right amount' of information about condition or treatment	<ul style="list-style-type: none"> ✓ Not enough ✓ Right amount ✓ Too much ✓ I was not given any information about my condition or treatment
Did a member of staff tell you about what danger signals regarding your illness or treatment to watch for after you went home?	Upon discharge, staff 'completely' told patient about signs and symptoms (or danger signals) to watch for	<ul style="list-style-type: none"> ✓ Yes, completely ✓ Yes, to some extent ✓ No ✗ I did not need this type of information
Did a member of staff tell you about medication side effects to watch for?	Upon discharge, staff 'completely' told patient about medication side effects to watch for	<ul style="list-style-type: none"> ✓ Yes, completely ✓ Yes, to some extent ✓ No ✗ I did not need this type of information

References

1. NHHRC, A Healthier Future For All Australians – Final Report of the National Health and Hospitals Reform Commission. June 2009.
2. Schoen, C., et al., New 2011 survey of patients with complex care needs in eleven countries finds that care is often poorly coordinated. *Health Affairs*, 2011. 30(12): p. 2437-2448.
3. Strandberg-Larsen, M. Measuring Integrated Care: An International Comparative Study. *Danish Medical Bulletin*, 2011; 58(2).
4. NSW Health: Integrated Care Strategy 2014 – 2017. 2014.
5. National Collaboration for Integrated Care and Support: Integrated Care and Support: Our Shared Commitment. 2013.
6. Vedel, I., et al., Ten years of integrated care: backwards and forwards. The case of the province of Québec, Canada. *International Journal of Integrated Care*, Volume 11, 7 March 2011.
7. Martínez-González, N.A., et al., Integrated care programmes for adults with chronic conditions: a metareview. *International Journal for Quality in Health Care*, 2014.
8. Montenegro, H., et al., Combating health care fragmentation through integrated health service delivery networks in the Americas: lessons learned. *Journal of Integrated Care*, 2011. 19(5): p. 5-16.
9. Muecke, S., et al., Continuity and safety in care transitions: Communication at the hospital/ community interface. Adelaide, South Australia: Primary Health Care Research & Information Service, 2010.
10. AIHW, Australian Hospital Statistics 2012–13 (Health services series no. 54. Cat. no. HSE 145. Canberra: AIHW).
11. SCRGSP (Steering Committee for the Review of Government Service Provision), Report on Government Services 2014, Productivity Commission, Canberra., 2014.
12. Shaw, S., et al., What is integrated care. An overview of integrated care in the NHS. London: The Nuffield Trust, 2011.
13. Singer, S.J., et al., Defining and measuring integrated patient care: promoting the next frontier in health care delivery. *Medical Care Research and Review*, 2011. 68(1):p. 112-127.
14. Niskanen, J.J., Finnish care integrated? *International Journal of Integrated Care*, 2002. 2.
15. Kodner, D.L., Spreeuwenberg, C. Integrated care: meaning, logic, applications, and implications – a discussion paper. *International Journal of Integrated Care*, 2002.
16. Blount, A., Integrated Primary Care: Organizing the Evidence. *Families, Systems, & Health*, 2003. 21(2): p. 121.
17. American Psychological Society. Health Care Reform: Integrated Health Care <http://www.apa.org/about/gr/issues/health-care/integrated.aspx>.
18. Øvretveit, J. Integrated Care: Models and Issues. Briefing Paper. Gothenburg: The Nordic School of Public Health. 1998.
19. Leatt, P., Synthesis Series: Integrated Service Delivery. 2002.
20. Gröne, O. and M. Garcia-Barbero, Integrated care: a position paper of the WHO European office for integrated health care services. *International journal of integrated care*, 2001. 1.
21. NHS, A Narrative for Person-Centred Coordinated Care. 2013.
22. Singer S.J., et al., Development and preliminary validation of the Patient Perceptions of Integrated Care survey. *Medical Care Research and Review*, 2013 Apr;70(2):143-64.
23. Wyatt, J.C., Management of explicit and tacit knowledge. *Journal of the Royal Society of Medicine*, 2001. 94(1): p.6.
24. Wimsett J., et al., Review article: Components of a good quality discharge summary: A systematic review. *Emergency Medicine Australasia* (2014) 26, 430–438.
25. Abourbih D., et al., Communication between nurses and physicians: Strategies to surviving in the emergency department trenches. *Emergency Medicine Australasia* (2015) 27, 80–82.
26. Johnson J.K., et al., Searching for the missing pieces between the hospital and primary care: mapping the patient process during care transitions. *BMJ Qual Saf.* 2012 Dec;21 Suppl 1:i97-105.
27. NSW Ministry of Health: Departure of Emergency Department Patients. Document Number PD2014_025, 17-Jul-2014.

28. Iedema, R. and Ball, C. (2010) NSW Ambulance/ Emergency Department Handover Project Report. Sydney: NSW Health & UTS Centre for Health Communication.
29. NSW Ministry of Health: Emergency Department Patients Awaiting Care. Document Number PD2010_075, 22-Dec-2010.
30. Katz, S., et al., Comparative Effectiveness of Care Coordination Interventions in the Emergency Department: A Systematic Review. *Annals of Emergency Medicine*, Volume 60, Number 1, July 2012.
31. NSW Ministry of Health 2012 Emergency Department Models of Care NSW Health, July 2012.
32. Johns Hopkins University, Armstrong Institute for Patient Safety and Quality. Improving the emergency department discharge process: environmental scan report. Rockville, MD: Agency for Healthcare Research and Quality; December 2014.
33. Samuels-Kalow, ME., et al., Effective Discharge Communication in the Emergency Department. *Ann Emerg Med*. 2012 Aug;60(2):152-9.
34. Jenkins, J., et al., Service Quality and Communication in Emergency Department Waiting Rooms: Case Studies at Four New South Wales Hospitals, May 2011.
35. Cooke, T., et al., Patient expectations of emergency department care: phase II – a cross-sectional survey *EM Advances*, *CJEM* 2006;8(3):148-157.
36. Flynn, D., et al., Engaging Patients in Health Care Decisions in the Emergency Department Through Shared Decision-making: A Systematic Review. Volume 19, Issue 8, pages 959–967, August 2012.
37. Scheeres, H., et al., Communicating in hospital emergency departments, *Prospect*, 2008, 23 (2), pp. 13 - 22.
38. Bureau of Health Information. Hospital Quarterly: Performance of NSW public hospitals, January to March 2014. Admitted Patients. 4(2). Sydney (NSW); 2014.
39. AIHW, Australia's Health 2012 - The thirteenth biennial health report of the Australian Institute of Health and Welfare. 2012, Australia's health series no.13. Cat. no. AUS 156, Canberra: AIHW.
40. AIHW, Australia's hospitals 2012–13 at a glance. 2014 (Health services series no. 55. Cat. no. HSE 146. Canberra: AIHW.).
41. Australian Bureau of Statistics, Australian Social Trends 2014. 2014 (ABS, 4102.0).
42. Shahid, S., et al., Identifying barriers and improving communication between cancer service providers and Aboriginal patients and their families: the perspective of service providers. *BMC health services research*, 2013.13(1): p. 460.
43. Australian Bureau of Statistics, Standards for Statistics on Cultural and Language Diversity. 1999 (ABS Catalogue No. 1289.0).
44. NSW Health: Policy & Implementation Plan for Culturally Diverse Communities 2012-2016. 26 April 2012.
45. Coulter, A., S. Roberts, and A. Dixon, Delivering better services for people with long-term conditions: Building the house of care. The King's Fund, October 2013.
46. Elliott MN, et al., Effects of Survey Mode, Patient Mix, and nonresponse on CAHPS Hospital Survey Scores. *Health Services Research* 2008. 44(2) 501-518.

Acknowledgements

The Bureau of Health Information is the main source of information for NSW people about the performance of their public system. A NSW board-governed organisation, BHI is led by Chairperson Professor Bruce Armstrong AM and Chief Executive Jean-Frédéric Lévesque MD, PhD.

BHI would like to thank our expert advisors and reviewers along with staff that contributed to the development of the report.

External advisors and reviewers

Chris Shipway	Agency for Clinical Innovation
Matt Hanrahan	Central Coast LHD
Karen Luxford	Clinical Excellence Commission
Sara Singer	Harvard School of Public Health
Anthony Brown	Health Consumers NSW
Betty Johnson	Health Consumers NSW
Nick Goodwin	International Foundation for Integrated Care and The King's Fund
Katherine Burchfield	NSW Ministry of Health
Zoran Bolevich	NSW Ministry of Health
Anne Mooney	NSW Ministry of Health
Allan Went	NSW Ministry of Health
Luke Worth	NSW Ministry of Health

Bureau of Health Information project team

Research & Analysis

Katinka Moran

Kim Sutherland

Diane Hindmarsh

Anna Do

Design

Adam Myatt

Efren Sampaga

Mark Williams

Communications & Stakeholder Engagement

Rohan Lindeman

Eve Jenkins

About the Bureau of Health Information

The Bureau of Health Information (BHI) is a board-governed organisation that provides independent reports about the performance of the NSW public healthcare system.

BHI was established in 2009 to provide system-wide support through transparent reporting.

BHI supports the accountability of the healthcare system by providing regular and detailed information to the community, government and healthcare professionals. This in turn supports quality improvement by highlighting how well the healthcare system is functioning and where there are opportunities to improve.

BHI publishes a range of reports and tools that provide relevant, accurate and impartial information about how the health system is measuring up in terms of:

- Accessibility: healthcare when and where needed
- Appropriateness: the right healthcare, the right way
- Effectiveness: making a difference for patients
- Efficiency: value for money
- Equity: health for all, healthcare that's fair
- Sustainability: caring for the future

BHI also manages the NSW Patient Survey Program, gathering information from patients about their experiences in public hospitals and healthcare facilities.

www.bhi.nsw.gov.au