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Patient Perspectives

Exploring aspects of integration for hospital patients

Volume 1, Adult Admitted Patients, NSW Public Hospitals 2013

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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 services and specialist 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 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 only 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 hospitalisation. This first volume focuses on aspects of integration that patients experienced during their admission, stay and discharge from hospital. A second volume will look more closely at aspects of integration for patients using the emergency department.

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 will guide quality improvement efforts.

Understanding how integrated care is embedded, its effect on processes and outcomes of care, and how it evolves will guide quality improvement efforts.

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 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 patient 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 integration – patient experiences – and one patient group – those admitted to a NSW public hospital during 2013. It provides a piece of the picture of integrated patient care, making a contribution to the measurement of integration and highlighting areas where there are opportunities to improve in hospitals and local health districts around the state.

Integrated patient care in a NSW context encapsulates three key dimensions. These dimensions were used to identify relevant data from over 35,000 responses to the Adult Admitted Patient Survey (AAPS), resulting in 22 questions addressing six themes. The dimensions and themes that structure the report are:

Dimension 1: Care that is seamless, effective and efficient

- Coordination and continuity of hospital care
- Coordination and care continuity at discharge

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

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

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

- Involvement of patients in decisions
- Self-management support

This edition of *Patient Perspectives* is the first of two volumes focusing on aspects of integration from hospital patients' perspectives. This volume includes data from patients admitted to a NSW public hospital while the second volume draws on data from patients who visited a NSW hospital emergency department.

Thematic results

Care that is seamless, effective and efficient

- 72% of patients said that doctors 'always' knew enough about their medical history
- 64% said their care was 'very well' organised
- 54% of patients said the way doctors and nurses worked together was 'very good'
- 86% were told who to contact if they were worried about their condition or treatment after they left hospital
- 70% of patients said that the hospital 'completely' made adequate arrangements for post-discharge services.

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

- 91% received the 'right amount' of pre-admission information
- 91% received the 'right amount' of information about medication they were given to take home
- 85% received the 'right amount' of information about their condition or treatment during their stay
- 74% 'always' received understandable answers from doctors and 75% from nurses
- 71% received a 'completely' understandable explanation of their test, x-ray or scan results.

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

- 60% of patients were 'definitely' involved in decisions about their care and treatment, as much as they wanted to be
- A similar proportion were 'completely' involved in decisions about using medication in their treatment (64%) and in decisions about discharge (63%).

Across all questions, a majority of patients (54% to 91%) gave the most positive answer. 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 89% to 98% of patients responded positively.

Making comparisons

Variation across NSW

Comparing results across hospitals, a higher proportion of small hospitals (peer group C) recorded results that were significantly higher than the NSW average.

Overall, there were seven hospitals, all peer group C hospitals, with results higher than the NSW average for more than two-thirds of the questions. They were: Cessnock District Hospital, Deniliquin Health Service, Grafton Base Hospital, Kempsey Hospital, Kurri Kurri District Hospital, Macksville District Hospital and Murwillumbah District Hospital.

No hospital had results lower than the NSW average for more than two-thirds of the questions.

In general, LHDs either recorded favourable results or unfavourable results. Across the 22 questions in the survey:

- The highest number of favourable results were recorded in Hunter New England, Mid North Coast, Northern NSW and Southern NSW LHDs (significantly higher than NSW for more than half of the questions)
- The lowest number of favourable results was seen in South Western Sydney and Western Sydney LHDs (significantly lower than NSW for more than half of the questions).

Aboriginal people, people who mainly speak a language other than English and those with long-standing health conditions reported less positively on many aspects of integration:

- Aboriginal people were less positive than non-Aboriginal people, particularly on questions about the provision of the 'right amount' of information to them and to their family or carers and tailoring of care at discharge
- People who speak a language other than English at home were less positive than those who speak English at home, particularly for questions about responsiveness to their needs and expectations, and shared decision-making. However, this group was more positive about receiving the 'right' amount of information about their care and treatment.
- People with a long-standing health condition reported less positively than those without a long-standing condition across most of the questions analysed.

International context

- Where comparable, NSW results are generally in line with those seen in England, except for those questions focused on coordination around hospital discharge, where NSW performed more strongly
- Broader results from the Commonwealth Fund International Health Policy Survey show that for questions where comparisons are possible, NSW results are similar to those in other jurisdictions.


ED
GP clinic
House calls
Outpatient clinic
X-ray
Physiotherapy
Blood test
Community nursing
Surgical procedures
Electronic medical records
Pharmacy
Telemedicine

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 in chronic disease management.[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, healthcare provision at inappropriate locations, 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, structures. Connections occur over time, across distances, 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, quarternary, community; and different specialisations across preventive, curative, palliative; mental and physical healthcare domains. On a typical day, this pluralist system provides to the people of NSW:

- 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]

Box 1 Defining integrated care in NSW

From the NSW Health Integrated Care Strategy, 2014–2017[4]

*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.*

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 '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 the local health district demonstrator sites.[4] This report 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]

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, transmural 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

Hospital patients' experiences relate to some, but not all, aspects of integration

Aspects of integration

Exploring aspects of integration for hospital patients is based on survey data from more than 35,000 people admitted to a NSW public hospital during 2013.

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 report on 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 not providing a comprehensive account, survey data can harness the perceptions and reflections of patients and the extent to which they report receiving care that is integrated 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 AAPS, elicits the views of patients hospitalised in NSW public hospitals across a wide range of topics relevant to their hospital stay. A deliberative exercise that mapped the available questions from the AAPS to these key dimensions identified six themes (Figure 1) encompassing 22 questions (Appendix 1). This set of questions provides information on patients' hospital experiences 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 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 six themes in Figure 1, examining in detail patient responses to the different questions within each theme. The second section compares results focusing on patterns and variation between peer groups, between LHDs, between different population subgroups and between NSW and other jurisdictions.

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 hospital care**	Healthcare professionals and care teams effectively share relevant information and interact together in a coordinated way to deliver patient care.
	Coordination and care continuity at discharge	Care teams coordinate discharge processes and ongoing arrangements for care outside hospital.
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 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 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

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

The report draws on existing survey data to reflect on aspects of integration as reported by hospitalised patients. To place the NSW findings in an international context, it includes complementary data from the NHS Inpatient Survey in England; and the Commonwealth Fund International Health Policy Survey.

This edition of *Patient Perspectives* is the first of two volumes focusing on the experience of hospital patients relative to certain aspects of integration in NSW hospitals. This volume includes data from patients admitted to a NSW public hospital while the second volume draws on data from patients who visited a NSW hospital emergency department.

Data and methods

The Adult Admitted Patient Survey (AAPS) is the primary data source for this report. It is part of the NSW Patient Survey Program. This suite of surveys collects information on the experiences of patients receiving care in public hospitals and other public healthcare facilities across NSW. The NSW Ministry of Health ran 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, with the 2013 AAPS being the first redeveloped survey in field.

NSW hospitals vary in size and type and 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 AAPS included 103 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. 91% of surveys were completed on paper.

Sample

Surveys were mailed to a random sample of over 73,000 people aged 17 years and older who had been admitted to a NSW public hospital between January 2013 and December 2013. Over 35,000 valid surveys were completed representing a response rate of 49%.

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

In 2013, each eligible hospital was sampled separately. The target sample size took into account expected response rate and was selected proportionately to the patient numbers in four strata created by stratifying by age (17–49, 50+ years) and stay type (same day vs. overnight).

For further information regarding the sample please see the related *Technical Supplement – Sampling Overview* for the AAPS 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 stay type strata were adjusted to match the actual proportions of these in each hospital.

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

To assess the impact of socio-demographic characteristics associated with patient experience across LHDs, a sensitivity analysis was undertaken. The results after controlling for age group, gender, education and main language other than English were compared with pre-adjusted results. The impact was minor – the two sets of results showed similar LHD rankings (Appendix 3).

Statistically significant results between LHDs or hospitals and NSW for each question were obtained. For each question the percentage of patients providing the most positive response for each hospital or 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 shown to be significant. If the confidence intervals did not overlap, then the result for the hospital or LHD was shown to be significantly different from that of the state.

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

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

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 AAPS 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.

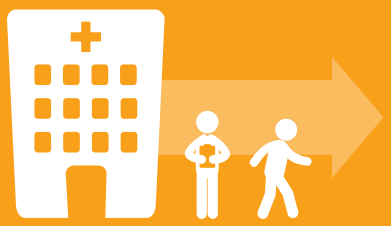
* Not included in the AAPS.

Care that is **seamless**, **effective** and **efficient**

Among hospital patients:

64% said their care was 'very well' organised

70% said the hospital 'completely' made adequate arrangements for post-discharge services



Responsive care

91% of patients reported they received the 'right amount' of pre-admission information

85% said they received the 'right amount' of information about their condition or treatment during their stay

91% said they received the 'right amount' of information about medication they were given to take home

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

60% of patients were 'definitely' involved in decisions about their care and treatment (as much as they wanted to be)

64% were 'completely' involved in decisions about using medication after discharge

63% were 'definitely' involved in decisions about discharge

Thematic results

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

- **Coordination and continuity of hospital care**
- **Coordination and care continuity at discharge**
- **Provision of information**
- **Responsiveness to patients' needs and expectations**
- **Involvement of 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 hospital patients: detailed responses

Presentation of survey results

Questions contained in the Adult Admitted Patient Survey focus on different aspects of patient experiences. They also differ in the number and type of response choices that are provided. Interpretation of survey results is informed by an understanding of the number and formulation of options offered to respondents in completing the survey. Accordingly, the full range of valid responses for the questions included in this report are provided in Figure 3 (see Appendix 1 for more detail).

Across all questions, a majority of patients (54% to 91%) gave the most positive answer. Improvement efforts aim for excellence, and to maximise the number of people giving the most positive response.

Figure 3 Survey question results, all response options, 2013

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 89% to 98% patients responded positively.

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 respondents providing *the most positive response*.

Aspects of integration for hospital patients: Six themes

Most patients report receiving the right amount of information about care

Averages for NSW, displayed in thematic clusters, provide an overview of results across different aspects of integration for the state as a whole.

Looking across the 22 questions included in the analysis, the two with the highest average results focused on whether patients received the 'right amount' of information. Both addressed information provided at transition points in patients' hospitalisation journeys. One asked about information provided before hospitalisation (91% received the 'right amount') and the other about information provided about discharge medication (91% received the 'right amount') (Figure 4).

Overall, questions about information provision and self-management support were the aspects of integration rated most positively by hospitalised patients in NSW. In contrast, involving patients in decision-making and coordination and continuity of hospital care were rated less favourably. These results echo the international literature which shows that truly engaging patients in their care and ensuring that increasingly complex care teams work in a well-coordinated manner are challenges facing many healthcare systems.

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

These three types of patient communication resonate with the three dimensions of integrated care.

Seamless, effective and efficient care relies heavily on the efficient transfer of codified information. Information transfer for coordination purposes can encompass scheduling arrangements; the transfer of standardised sets of instructions and advice about particular treatments or procedures; and the sharing of relevant patient information within and between care teams.

Responsive care requires tailored, patient-centred communication and involves eliciting and reacting to patients' values, circumstances and preferences.

Partnership in care is founded on actively engaging patients in shared decision-making, and supporting and encouraging patients' capabilities in self-care.

Codified information is generally easier to transfer and can rely on well-established scripts or standardised documentation. Tailored communication is responsive to individual patients' circumstances, questions and information needs. It is more challenging to communicate effectively and its generation and transmission requires greater expertise, skill, and time. Communication that supports patient engagement and involvement can be even more difficult to achieve, requiring significant commitment to the building of trust and nurturing of shared problem solving.

The results of the survey reflect the increasing difficulty in moving along the communication continuum from codified information transfer to active engagement in care. In general, responses to questions asking about codified information transfer were more positive than those for more complex forms of communication.

Figure 4 Survey question results, top response category only, NSW average, 2013

Note: ‘Doctors and nurses worked together in very good way’ and ‘Got understandable explanations from health professionals ‘all of the time’ are both from 5 point response scale questions, while others have fewer response options. This may impact the percentage of patients who provided the response.

Coordination and continuity of hospital care

Six in 10 patients said their care was very well organised

Delivering well informed, coordinated and consistent care within and between the 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 admission.

Within the four questions addressing issues of coordination and continuity of hospital care, those focused on whether different members of healthcare teams were appropriately informed about their patient were most positively rated. Results were less positive for organisation of care and collaboration between healthcare professionals.

In NSW, around seven in 10 admitted patients (72%) said that doctors 'always' knew enough about their medical history, and a similar proportion reported that nurses 'always' knew enough about their care or treatment (71%).

Less positively, just over half of respondents (54%) said the way doctors and nurses worked together was 'very good' (Figure 5).

Across LHDs, Northern NSW and Southern NSW had significantly more positive results than the NSW average for all four questions on coordination and continuity of hospital care, while Western Sydney and South Western Sydney had significantly less positive results for three of the four questions (Figure 6).

At a hospital level, variation was widest for the question regarding how well doctors and nurses worked together – with results ranging from 45% to 78% of patients (Figure 7).

The greatest concentration of hospital-level results higher than the NSW average was seen for the question on whether care was 'very well organised', with 38 hospitals recording significantly higher results (Figure 7). Of these, 29 were smaller (peer group C) hospitals (see Appendix 4).

Figure 5 Results for **coordination and continuity of hospital care**: hospital range, LHD range and NSW average

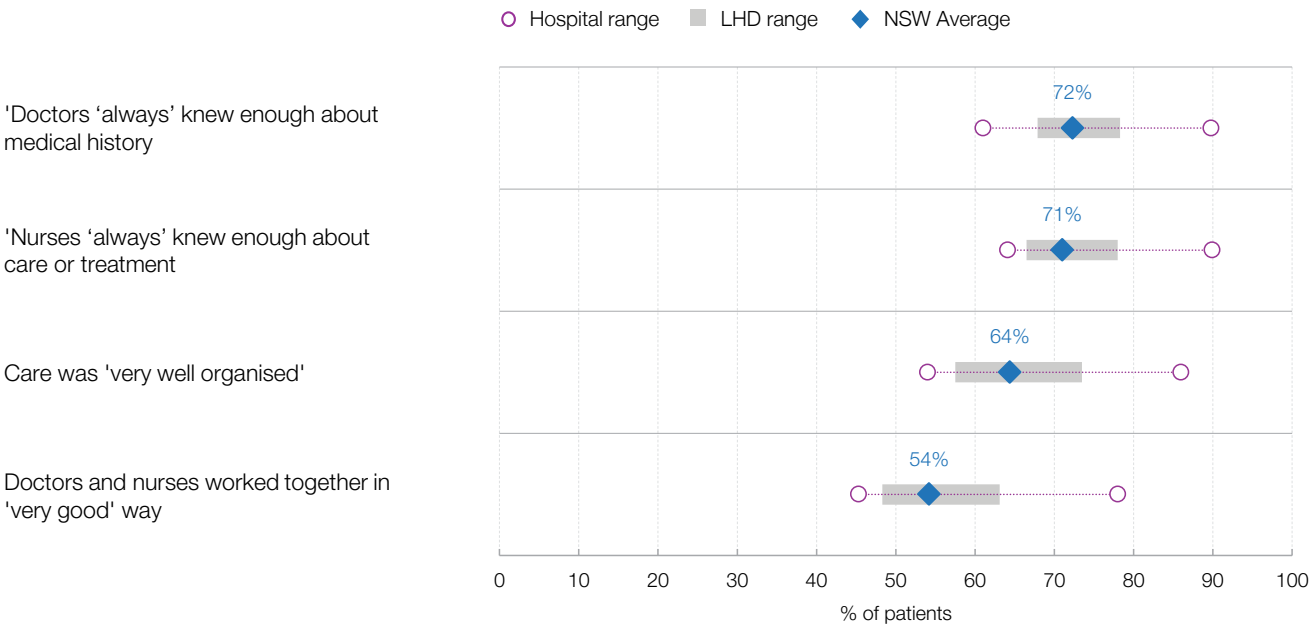
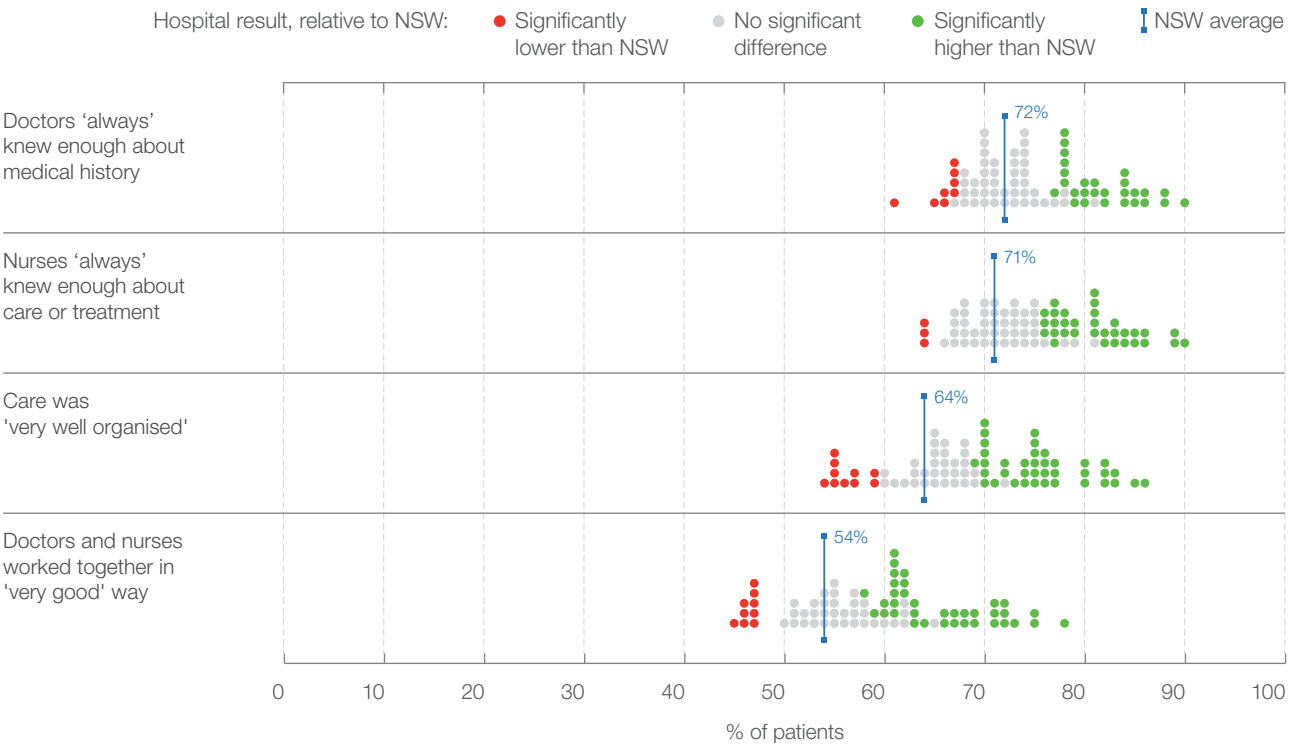


Figure 6 LHD results for **coordination and continuity of hospital care** relative to NSW average

Figure 7 Hospital results for **coordination and continuity of hospital care** relative to NSW average



Coordination and care continuity at discharge

Patients did not always feel that post-discharge services were adequate

The transition between hospital and home is often a vulnerable period for patients. During transitions such as discharge from hospital, patients are at increased risk of experiencing adverse events.[24] Communication failures can lead to delays in appropriate treatment and community support, replication of tests and avoidable hospitalisations.[9]

Of the three questions that address issues of coordination and care continuity at discharge, the most positive results (86%) were for the provision of information about who to contact if patients had worries following their discharge from hospital.

However, among those who needed services after discharge, a smaller proportion (70%) said the hospital had 'completely' made adequate arrangements (Figure 8).

Across LHDs, Hunter New England, Mid North Coast and Southern NSW had significantly more positive results than the NSW average for all three questions on coordination and care continuity at discharge, while Western Sydney had significantly less positive results for two of the three questions (Figure 9).

At a hospital level, variation was widest for the questions regarding delays to discharge (66% to 97% of patients) and whether adequate arrangements were made for services needed post discharge (59% to 90%) (Figure 10).

The greatest concentration of hospital-level results higher than the NSW average was seen for the question on whether discharge was delayed, with 47 hospitals recording significantly higher results (Figure 10). Of these, 38 were smaller (peer group C) hospitals (see Appendix 4).

Figure 8 Results for **coordination and care continuity at discharge**: hospital range, LHD range and NSW average

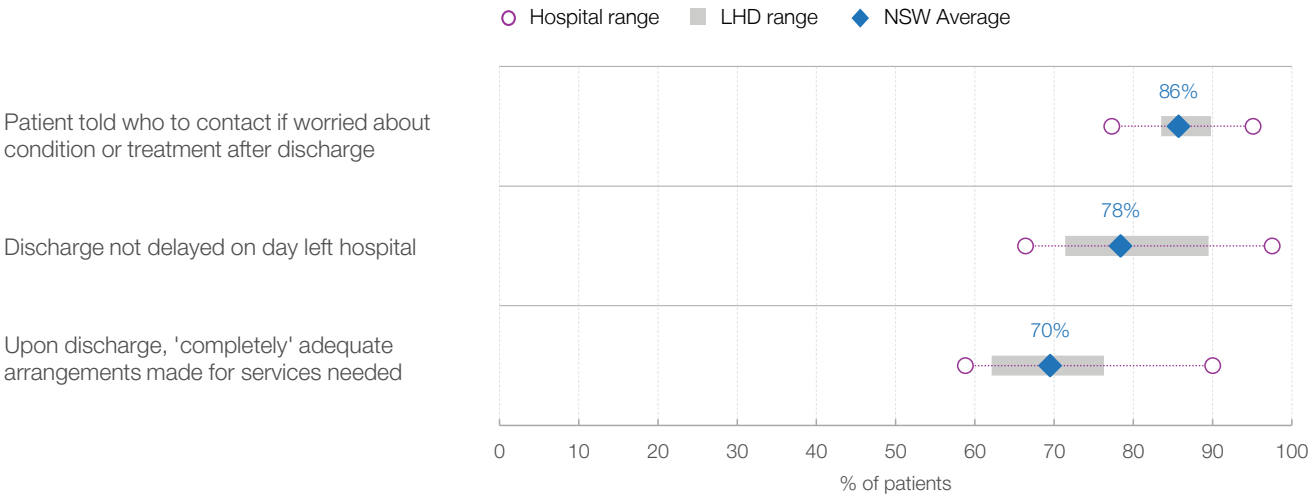
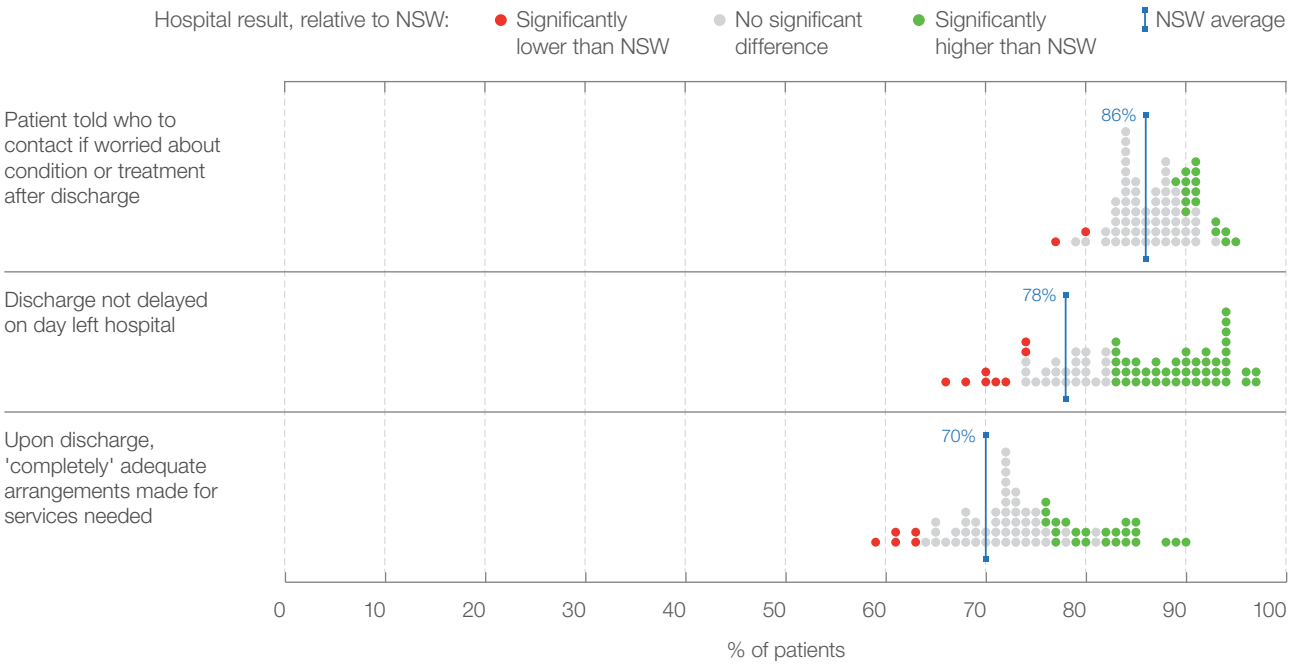


Figure 9 LHD results for **coordination and care continuity at discharge** relative to NSW average

Figure 10 Hospital results for **coordination and care continuity at discharge** relative to NSW average



Provision of information

Most patients receive the right amount of information before arrival

Information provision is a crucial first stage in providing integrated patient care. Standardised, well codified information is used to explain and coordinate routine care processes and principles. It forms the basis for the knowledge transfer that enables patients to properly engage in decisions about their care, and to take an active role in managing their health.

Across NSW, nine in 10 patients (91%) said they received the 'right amount' of information about their hospital stay before arrival. This type of information might include standard information regarding the hospital (e.g. visiting hours, parking) and about particular procedures that were planned (e.g. what to expect when you have a knee replacement operation).

In contrast, seven in 10 patients (71%) in NSW said that staff explained test, x-ray or scan results in a 'completely' understandable way (Figure 11).

Across LHDs, there was no clear pattern in responses to questions regarding provision of information (Figure 12).

At a hospital level, variation was widest for the question about whether staff 'always' discussed the purpose of tests, x-rays or scans – with results ranging from 69% to 97% of patients (Figure 13).

The greatest concentration of hospital-level results higher than the NSW average was seen in the question regarding the receipt of the 'right amount' of information about the hospital stay prior to admission, with 15 hospitals recording significantly higher results (Figure 13). Of these, 13 were smaller (peer group C) hospitals (see Appendix 4).

Figure 11 Results for **provision of information** in NSW hospitals: hospital range, LHD range and NSW average

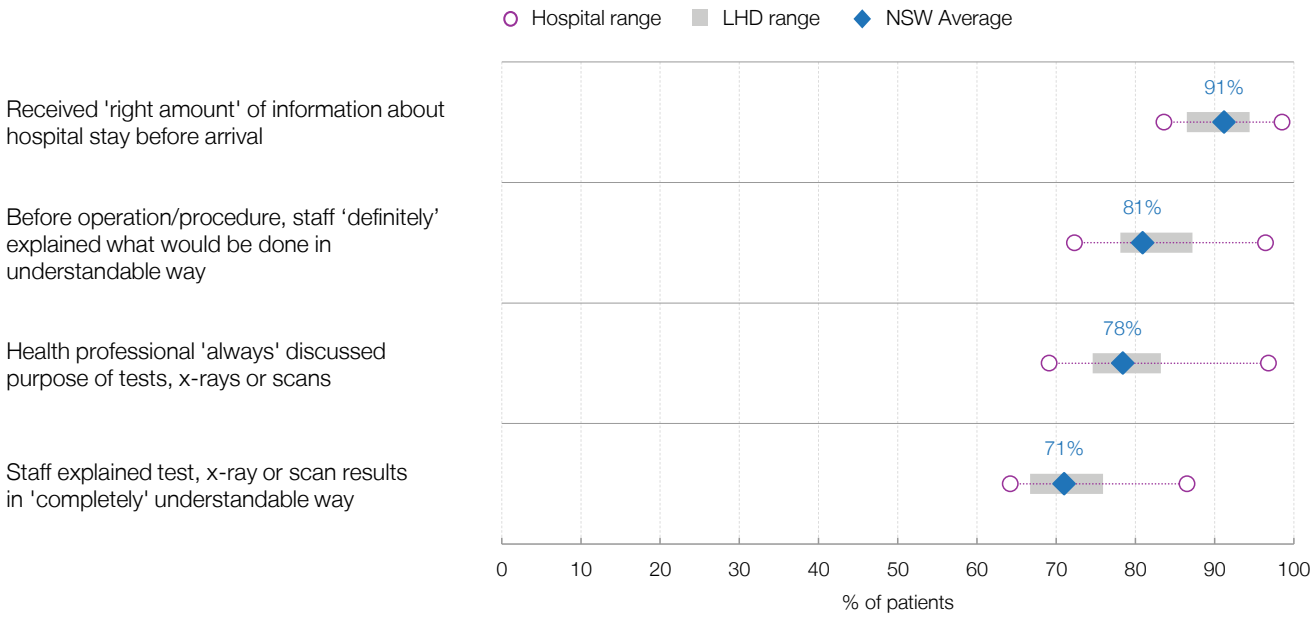


Figure 12 LHD results for **provision of information** relative to NSW average

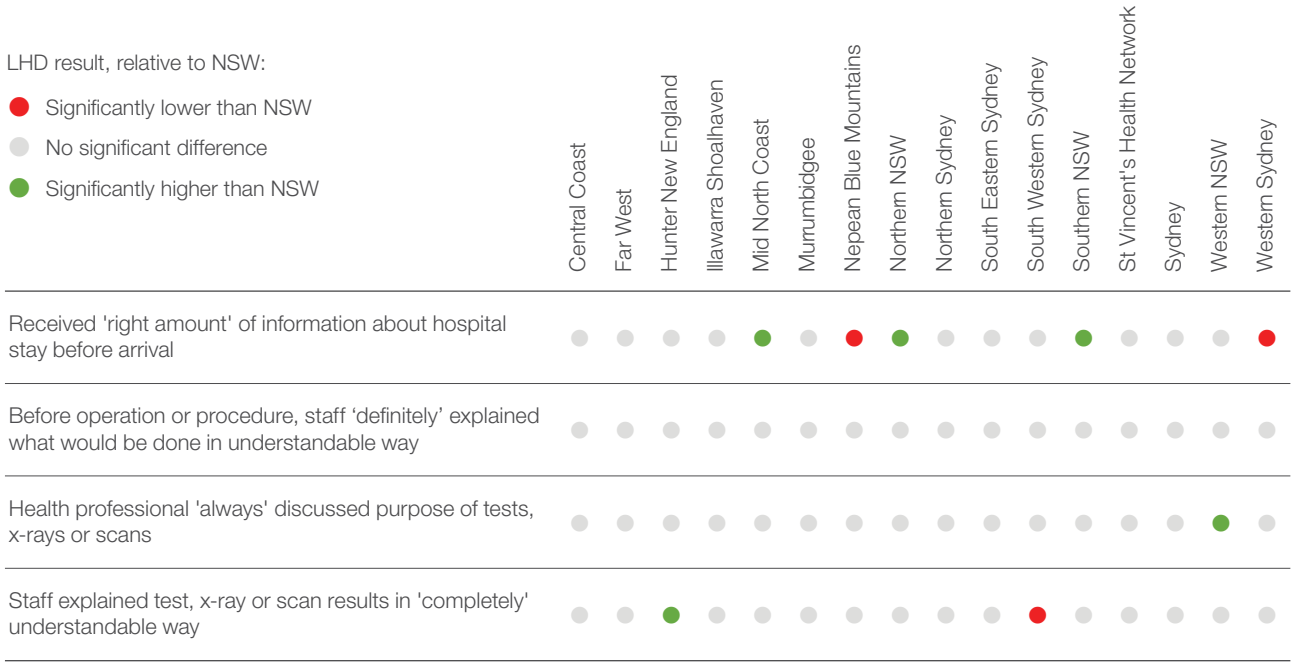
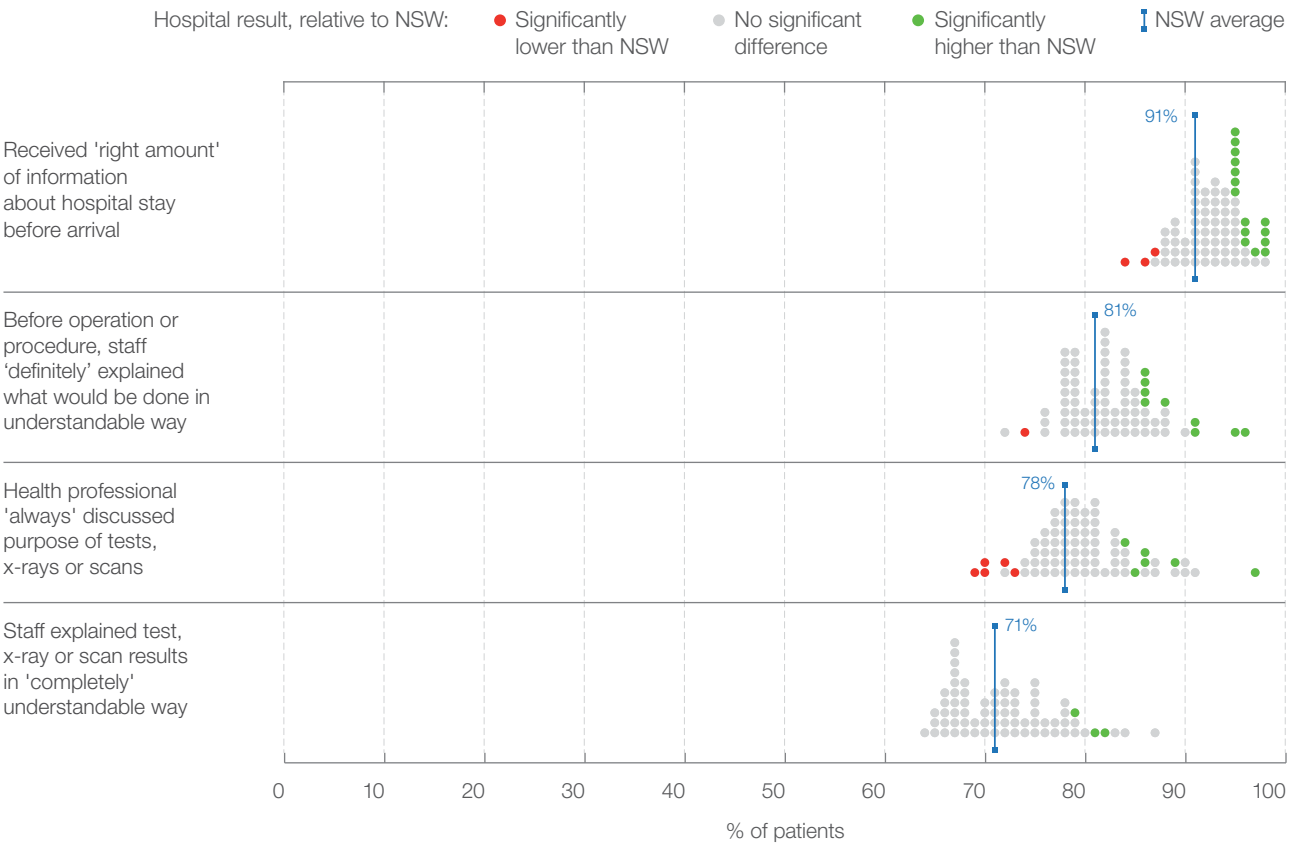


Figure 13 Hospital results for **provision of information** relative to NSW average



Responsiveness to patients' needs and expectations

Variation across hospitals in the provision of understandable answers to patients

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.

Responsiveness involves patient centred communication, dependent upon:

1. Sharing of information – the transfer of relevant knowledge and the creation of learning environments
2. Compassion – attentiveness and altruism contribute to the effective communication and the development of a strong clinician–patient relationship based upon patient feelings of autonomy and trust
3. Sensitivity to patient needs – acknowledging and adapting to specific patient characteristics.[25]

Among the four questions in the survey that address issues of responsiveness to patients' needs and expectations, those that asked whether patients 'always' received understandable answers from nurses or from doctors were most positively rated (75% and 74% respectively) (Figure 14).

Across LHDs, Southern NSW and Northern NSW had significantly more positive results than the NSW average for all four questions on responsiveness to patients' needs and expectations, while South Western Sydney had significantly less positive results for all four questions (Figure 15).

At a hospital level, variation was widest for the question about whether patients received understandable explanations from health professionals 'all of the time'. Hospital results ranged from 44% to 79% of patients (Figure 16).

The greatest concentration of hospital-level results higher than the NSW average was seen for the question on the receipt of understandable explanations from health professionals 'all of the time', with 37 hospitals recording significantly higher results (Figure 16). Of these, 33 were smaller (peer group C) hospitals (see Appendix 4).

Figure 14 Results for **responsiveness to patients' needs and expectations**: hospital range, LHD range and NSW average

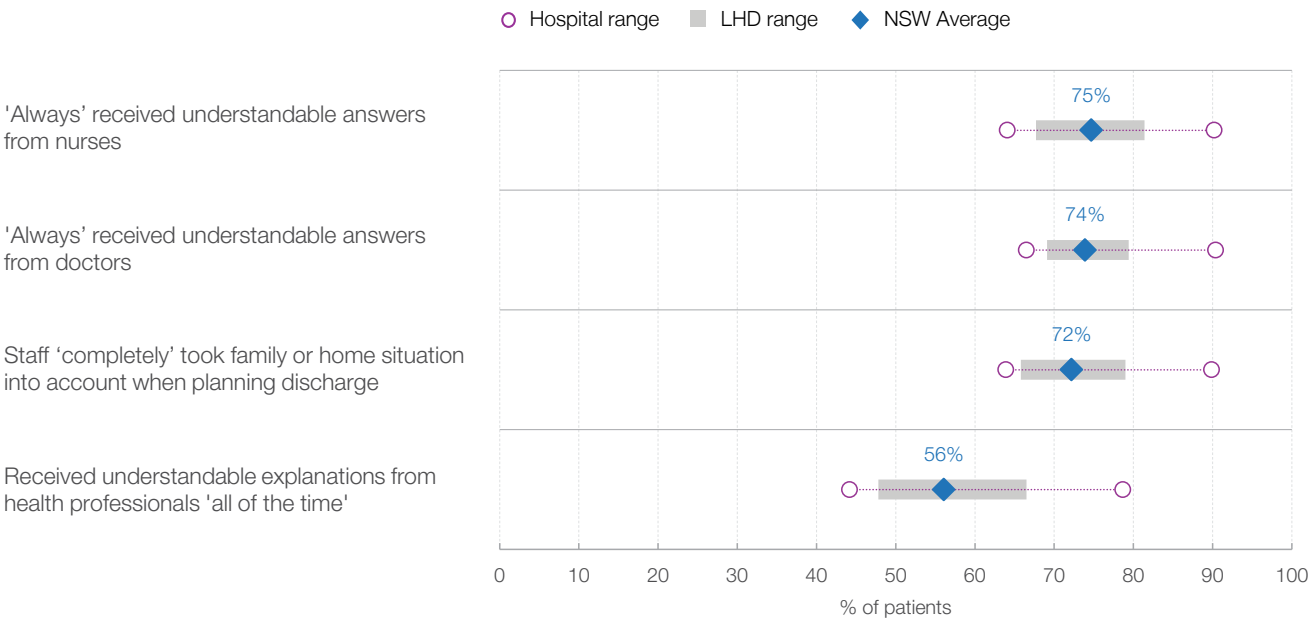


Figure 15 LHD results for **responsiveness to patients' needs and expectations** relative to NSW average

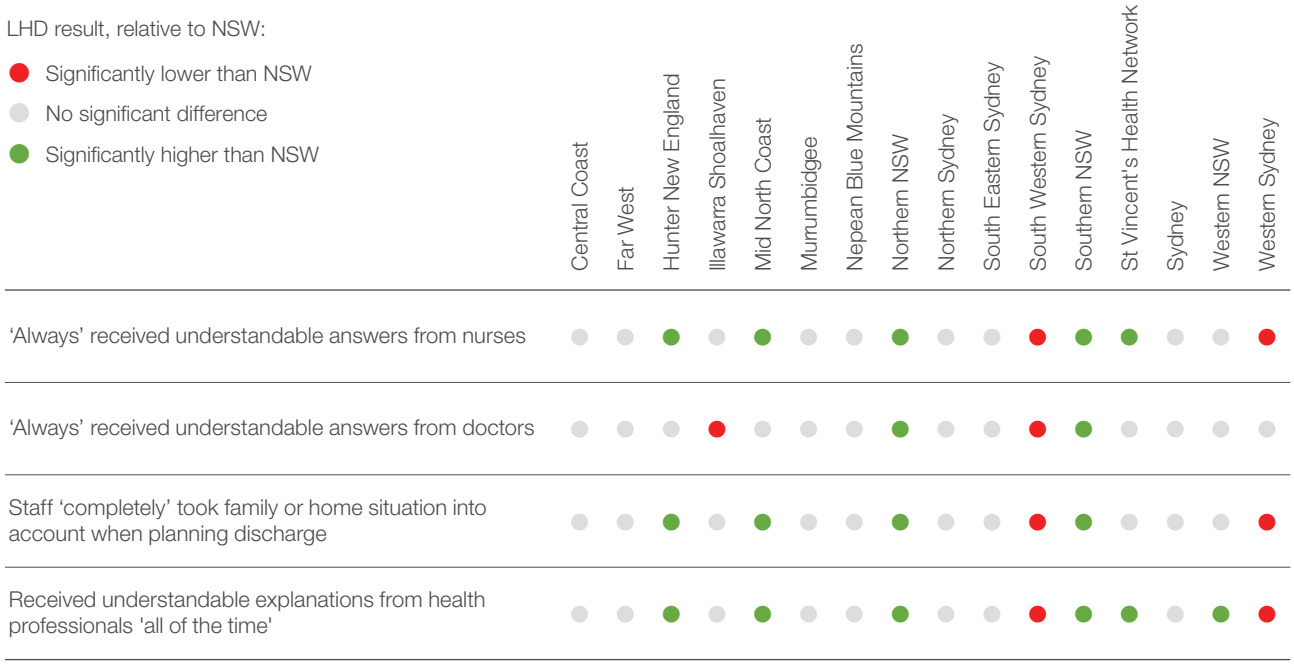
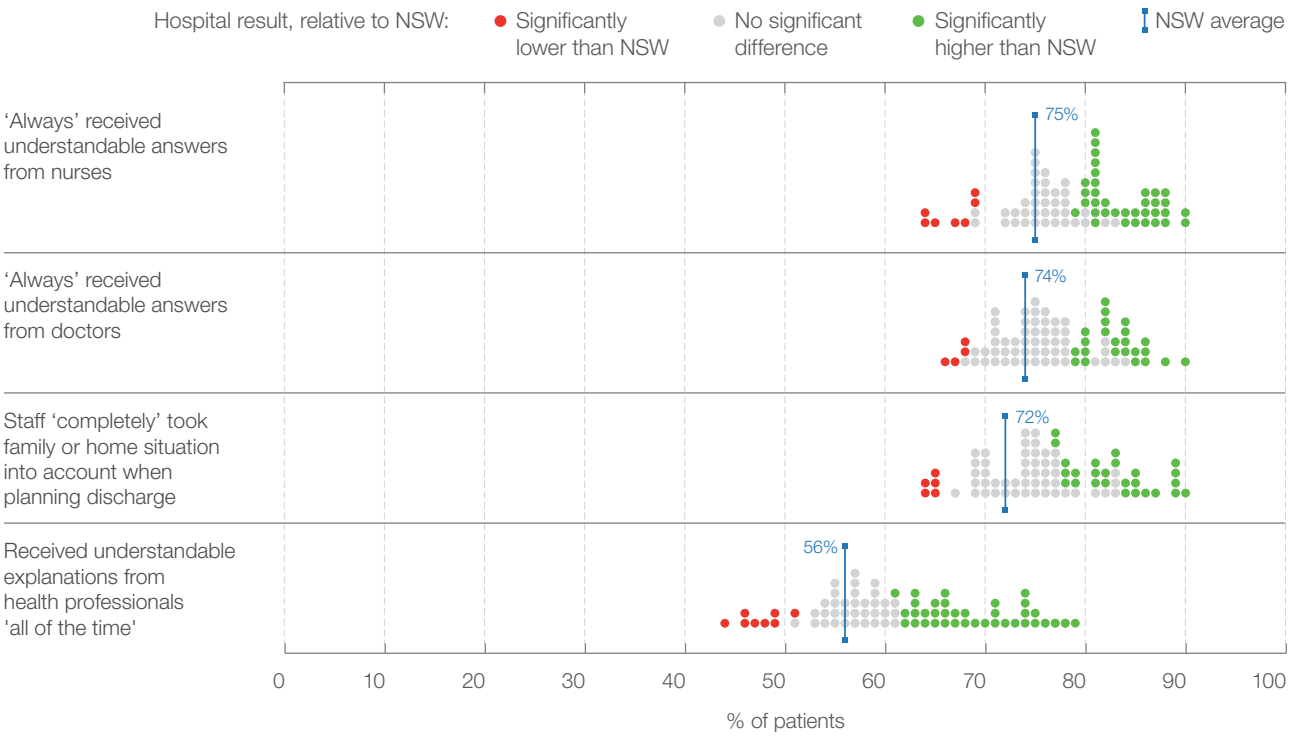


Figure 16 Hospital results for **responsiveness to patients' needs and expectations** relative to NSW average



Involvement of patients in decisions

Six in 10 patients were completely involved in decisions about care and treatment

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

Making shared decisions encompasses several elements:

- Definition and explanation of a patient's healthcare problem
- Presentation of options
- Discussion of benefits, risks, costs
- Elicitation of patient values and preferences
- Discussions about patient's ability and self-efficacy
- Presentation of evidence and recommendations
- Ascertainment of the patient's understanding
- Decision-making
- Follow up.[26]

Statewide, six in 10 hospital patients (64%) said they were 'completely' involved in decisions about medication they were given to take at home. A similar proportion said they were 'definitely' involved as much as they wanted in decisions about their discharge (63%) and about their care and treatment (60%) (Figure 17).

Across LHDs, Hunter New England, Northern NSW, Southern NSW and Western NSW had significantly more positive results than the NSW average for all three questions on involvement of patients in decisions, while South Western Sydney and Western Sydney had significantly less positive results for all three questions (Figure 18).

At a hospital level, variation was widest for the question about whether patients were 'completely' involved in decisions about medications they were taking home. Results ranged from 54% to 90% of patients (Figure 19).

The greatest concentration of hospital-level results higher than the NSW average was seen in the question regarding involvement in decisions about discharge, with 36 hospitals recording significantly higher results (Figure 19). Of these, 31 were smaller (peer group C) hospitals (see Appendix 4).

Figure 17 Results for **involvement of patients in decisions**: hospital range, LHD range and NSW average

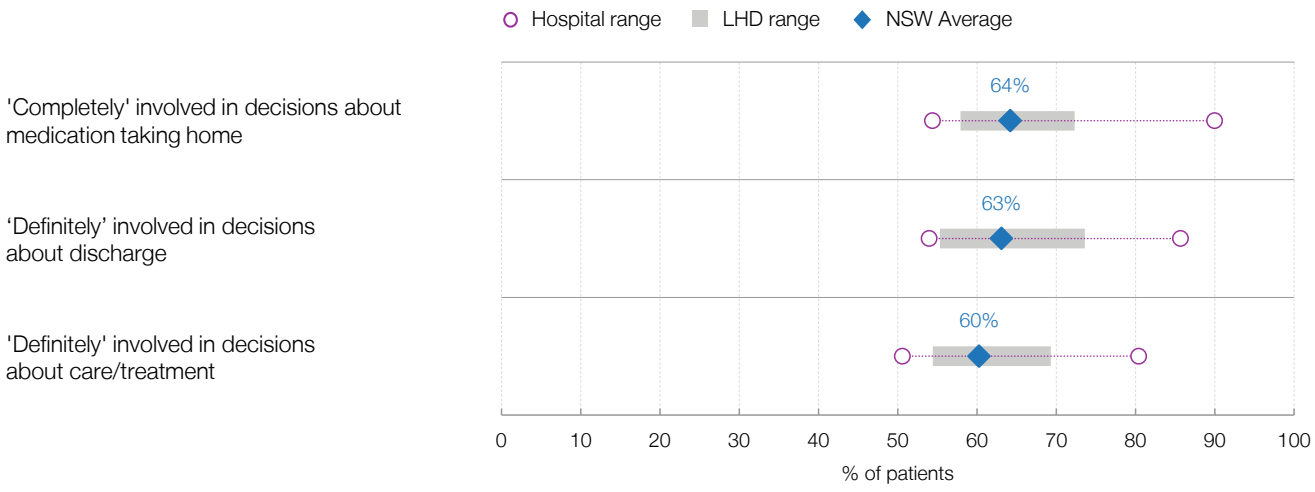


Figure 18 LHD results for **involvement of patients in decisions** relative to NSW average

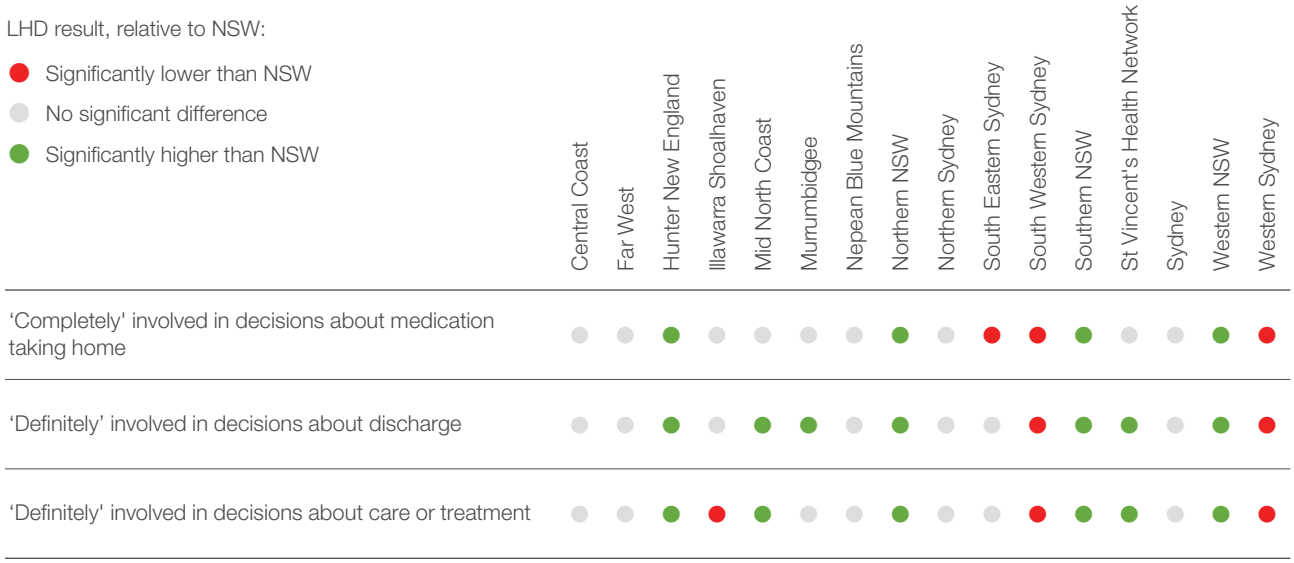
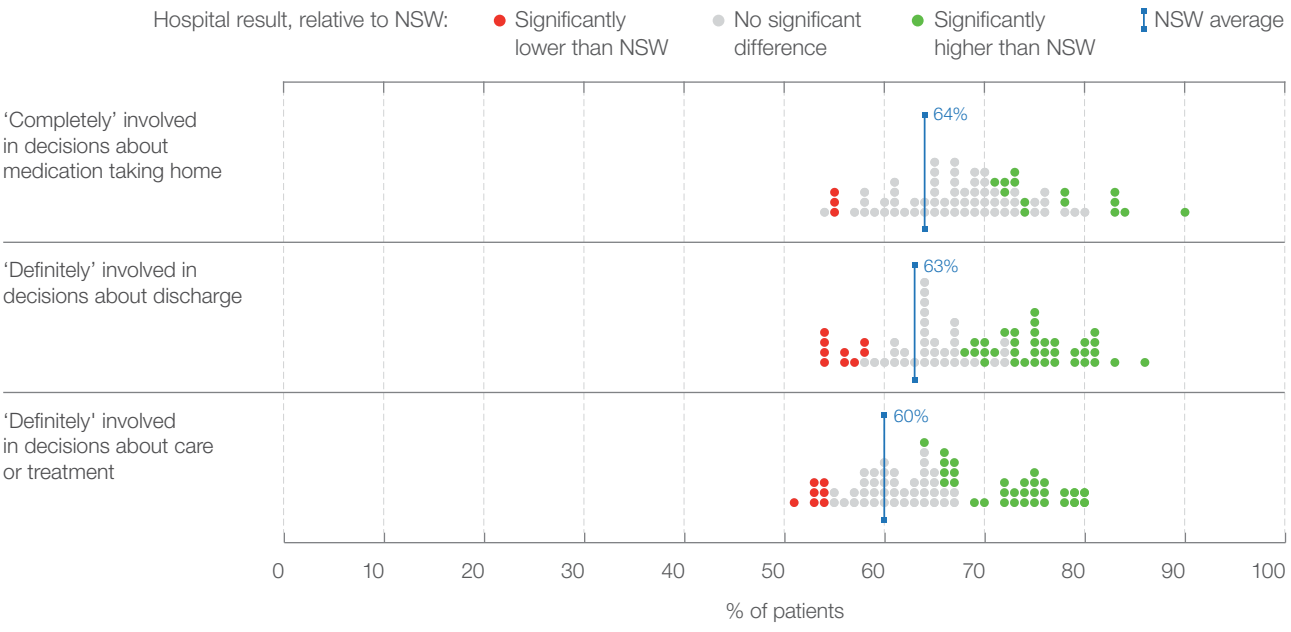


Figure 19 Hospital results for **involvement of patients in decisions** relative to NSW average



Self-management support

Most patients received right amount of information about discharge medication

Supporting and encouraging self-management is key to providing sustainable services for long-term or chronic conditions. Encompassing patient education, support for decision-making, self-monitoring and psychological and social support[7], self-management has a positive impact on health outcomes and can reduce hospital use.[27]

For hospital patients, effective communication of information relevant to self-care following discharge is critically important. Provision of support around this time of transition can reduce anxiety and depression and increase self-rated health.[28]

Statewide, nine in 10 hospital patients (91%) said they received the right amount of information about discharge medication. Fewer patients (74%) said that upon discharge they were 'completely' given enough information about how to manage their care at home (Figure 20).

Across LHDs, Southern NSW and Sydney LHDs had significantly more positive results than the NSW average for two of the four self-management support questions, while Nepean Blue Mountains had significantly less positive results for two questions (Figure 21).

At a hospital level, variation was widest for the question about whether patients were 'completely' given enough information about how to manage care at home. Results ranged from 66% to 92% of patients (Figure 22).

The greatest concentration of hospital-level results higher than the NSW average was seen for the same question on provision of information about managing care at home. There were 26 hospitals recording significantly higher results (Figure 22). Of these, 24 were smaller (peer group C) hospitals (see Appendix 4).

Figure 20 Results for **self-management support**: hospital range, LHD range and NSW average

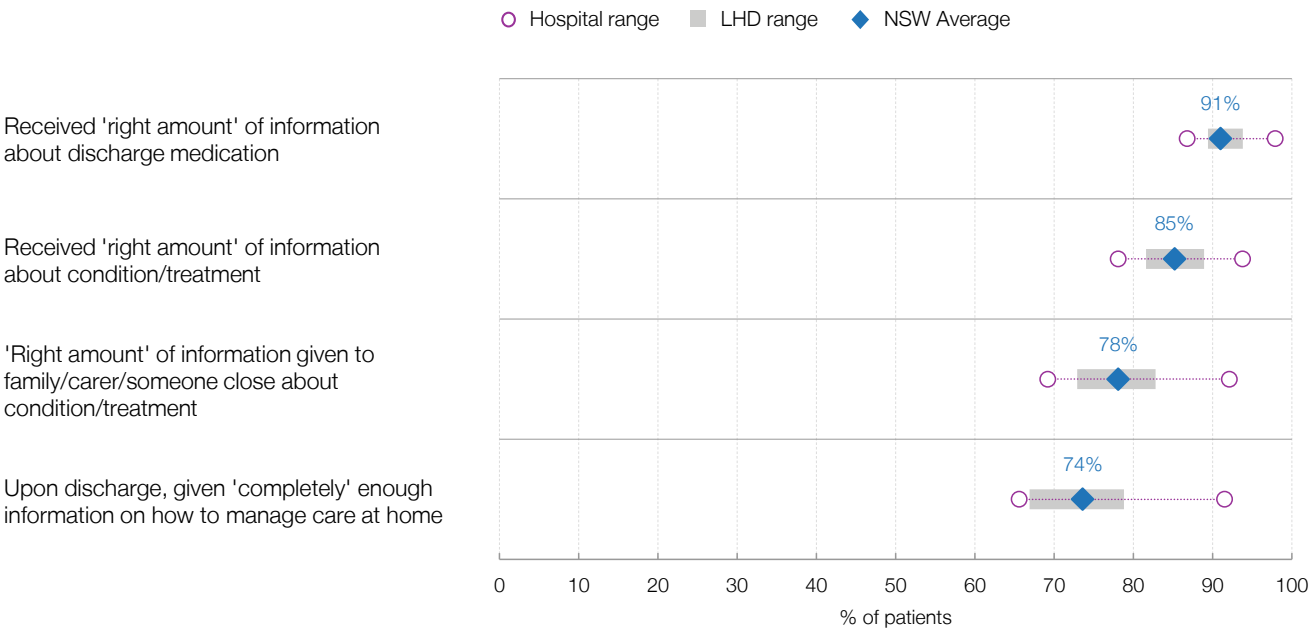
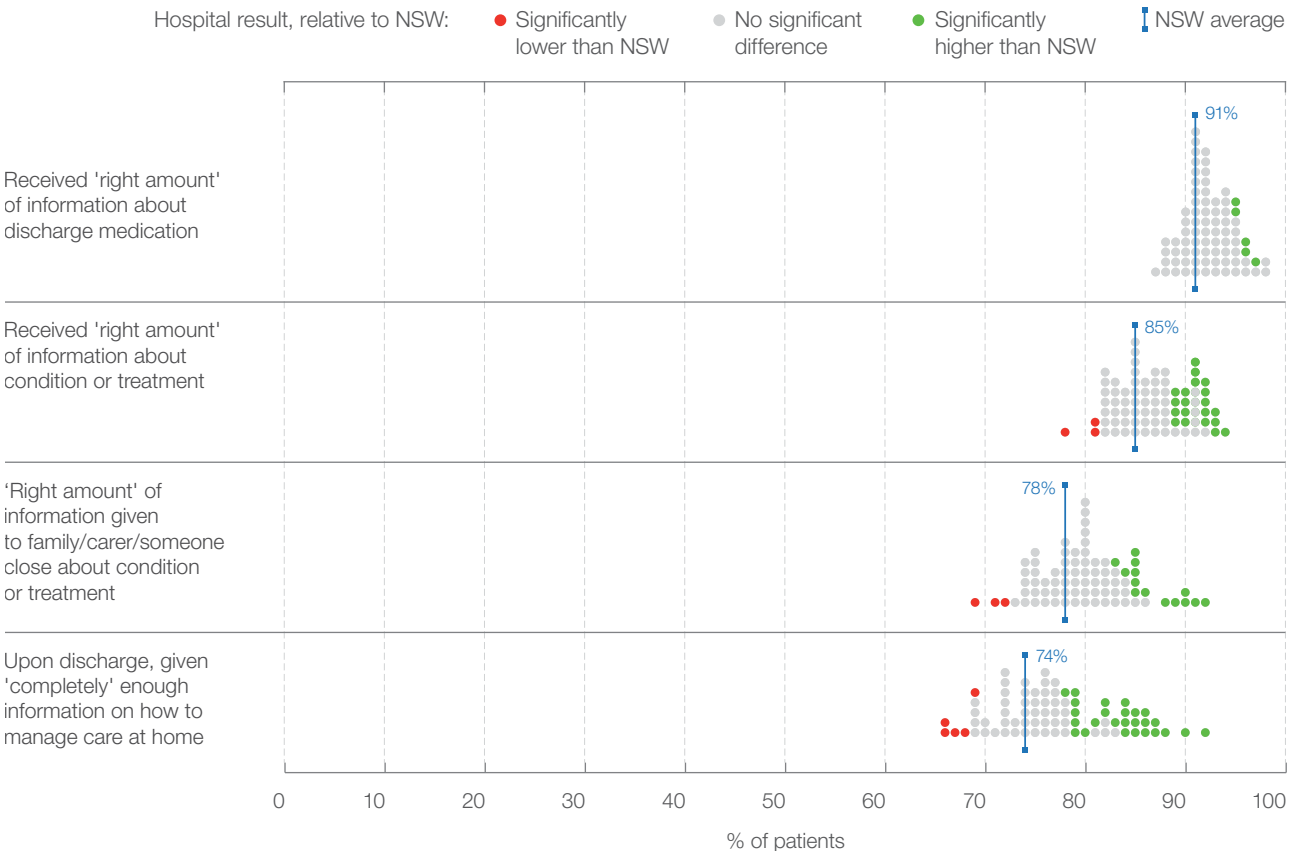


Figure 21 LHD results for **self-management support** relative to NSW average

Figure 22 Hospital results for **self-management support** relative to NSW average



Peer group comparisons

Small 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 12+ questions

- Hunter New England
- Mid North Coast
- Northern NSW
- Southern NSW

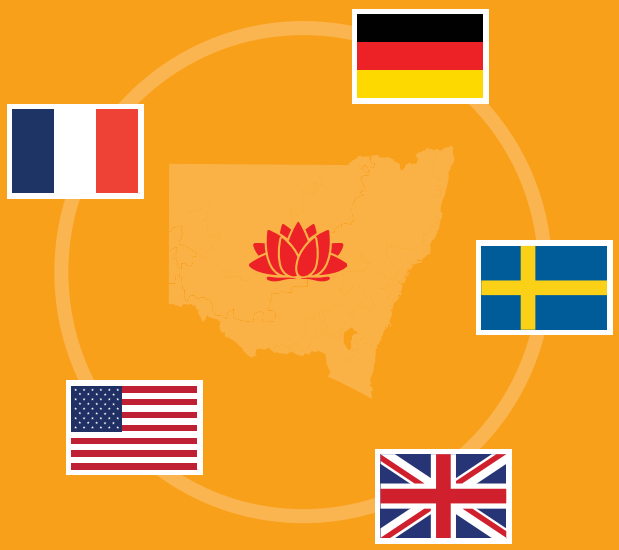
had **significantly more positive results** for 12+ questions

Sub-population comparisons

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

International context

NSW results were generally **better than**, or **in line with**, international comparators



Making comparisons

This section details patterns of variation in results:

- **Between peer groups**
- **Between local hospital districts (LHDs)**
- **Between 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.
- **NSW and other jurisdictions**

Peer groups and themes: high and low results

Patients in smaller hospitals more positive about aspects of 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 23).

Across all 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 in larger (peer group A) hospitals (Figure 24).

Clearly there is an association between the type and size of hospitals in an LHD and its results. LHDs with no peer group A hospitals tended to record more positive results overall (see page 36).

A key question that emerges from this analysis is whether higher than NSW average results are clustered? Is strong hospital performance in one thematic area associated with strong performance in other thematic areas?

Hospital level results reveal that strong performers tended to score higher than the NSW average across a range of themes (Appendix 4).

Overall, there were seven hospitals, all peer group C hospitals, with results higher than the NSW average for more than 15 questions. They were: Cessnock District Hospital, Deniliquin Health Service, Grafton Base Hospital, Kempsey Hospital, Kurri Kurri District Hospital, Macksville District Hospital and Murwillumbah District Hospital.

No hospital had results lower than the NSW average for more than 15 questions.

Detailed results for all questions for each NSW hospital are summarised in Appendix 4 and further information is available on the online reporting portal, Healthcare Observer.

Figure 23 Distribution of peer group hospitals A – 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	Western NSW	Western Sydney
Peer Group A	1	–	2	1	–	–	1	–	1	4	2	–	1	2	–	1
Peer Group B	1	–	3	1	2	1	–	2	3	1	2	–	–	1	2	2
Peer Group C	–	1	10	3	3	4	2	5	1	–	2	6	–	–	5	1

Figure 24 Proportion of results within each peer group that differed from the NSW average, by theme, 2013

* While there was 43 peer group C hospitals included in the AAPS, less than 30 patients from Casino and District Memorial Hospital responded to the survey. This hospital was not included in significance testing.

LHDs and themes: high and low results

Consistency of patterns

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

The analysis depicted in Figure 25 summarises results at an LHD level. Each segment within the circles corresponds to a question. Questions are grouped into integrated patient care themes. Those questions for which an LHD result was significantly higher than the NSW average are coloured green; while those for which results were significantly lower 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.

LHDs with 12 or more green questions were Hunter New England, Mid North Coast, Northern NSW and Southern NSW. LHDs with 12 or more red questions were South Western Sydney and Western Sydney (Figure 25).

Figure 25 Summary of LHD results relative to NSW average

Coordination and continuity of hospital care	1 Doctors 'always' knew enough about medical history 2 Nurses 'always' knew enough about care or treatment 3 Care was 'very well organised' 4 Doctors and nurses worked together in 'very good' way
Coordination and care continuity at discharge	1 Patient told who to contact if worried about condition or treatment after discharge 2 Discharge not delayed on day left hospital 3 Upon discharge, 'completely' adequate arrangements made for services needed
Provision of information	1 Received 'right amount' of information about hospital stay before arrival 2 Before operation or procedure, staff 'definitely' explained what would be done in understandable way 3 Health professional 'always' discussed purpose of tests, X-rays or scans 4 Staff explained test, X-ray or scan results in 'completely' understandable way
Responsiveness to patients' needs and expectations	1 'Always' got understandable answers from nurses 2 'Always' got understandable answers from doctors 3 Staff 'completely' took family or home situation into account when planning discharge 4 Got understandable explanations from health professionals 'all of the time'
Involvement of patients in decisions	1 'Completely' involved in decisions about medication taking home 2 'Definitely' involved in decisions about discharge 3 'Definitely' involved in decisions about care/treatment
Self-management support	1 Received 'right amount' of information about discharge medication 2 Received 'right amount' of information about condition or treatment 3 'Right amount' of information given to family/carer/someone close about condition or treatment 4 Upon discharge, given 'completely' enough information on how to manage care at home

The populations served by the LHDs vary in terms of social, economic and health characteristics (see Appendix 5). However, a sensitivity analysis that compared LHD results that had been adjusted for age group, gender, education and main language spoken at home with pre-adjusted results found that the impact of the adjustment was modest. This suggests that sociodemographic factors are not substantively confounding the LHD level results (see Appendix 3).

Results for LHDs do however show an association between the type and size of hospitals within their region and their results. LHDs with no peer group A hospitals tended to record more positive results overall (see page 33).

Aboriginal people

Aboriginal people were less positive on a range of questions, particularly self-management support

NSW is a culturally and ethnically diverse state. However, with the benefits of diversity come challenges for those responsible for providing a range of social services, including healthcare.[29] Respondents to the Adult Admitted Patient Survey (AAPS) come from a broad range of cultural, linguistic and geographic backgrounds. A person's cultural and ethnic background significantly influences their perceptions and experiences of health and illness and can have an enduring effect on their health status.[29] Some have argued that it is people with the greatest need for coordinated care (such as ethnic minorities) who are least likely to receive it.[30]

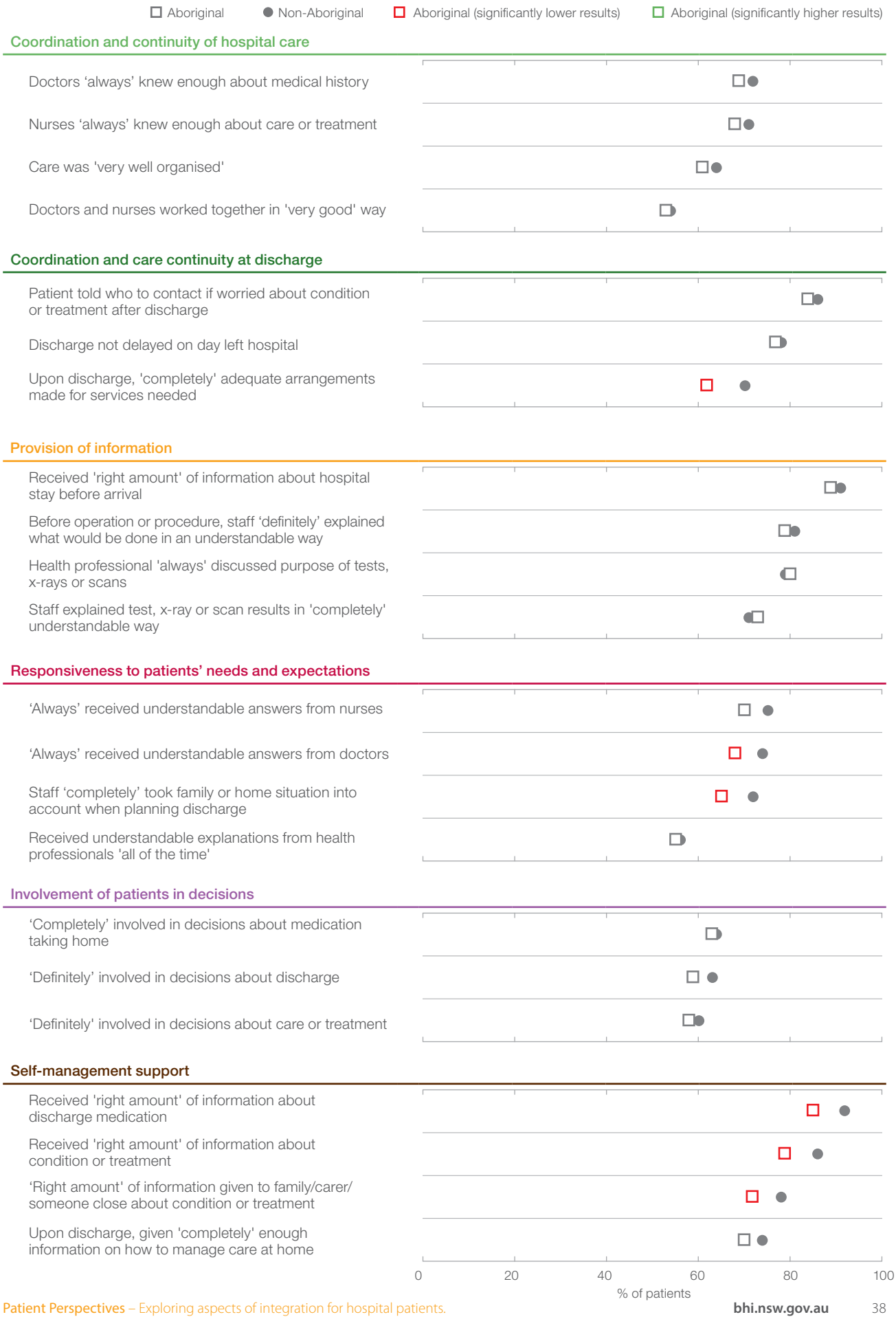
Disparities in healthcare for Aboriginal people are well documented.[31] For example, after controlling for the effect of age, Aboriginal people are hospitalised more than non-Aboriginal people,[32] are more likely to have a chronic health condition and to be living with a disability.[33] Communication difficulties between Aboriginal patients and non-Aboriginal health professionals have been identified as a challenge in achieving good Aboriginal health outcomes[34]; and in specific settings, such as cancer treatment, Aboriginal patients have been shown to have poorer continuity of care.[35]

There were just over 700 people who identified as Aboriginal or Torres Strait Islander in the AAPS (2% of all respondents). Compared to non-Aboriginal people, Aboriginal people were significantly less positive on many survey questions, particularly those about self-management support (Figure 26). There were no questions for which they gave significantly more positive responses.

Overall, a lower proportion of Aboriginal people reported that:

- Doctors answered questions in a way they could always understand (68% vs 74%)
- They received the right amount of information about their condition or treatment (79% vs 86%)
- Their family or carers received the right amount of information about their condition or treatment (72% vs 78%)
- They received the right amount of information about medication they were taking home (85% vs 92%)
- Their home situation was taken into account upon discharge (65% vs 72%)
- Completely adequate arrangements were made for healthcare services needed upon discharge (62% vs 70%).

Figure 26 Significant differences for Aboriginal and non-Aboriginal people, NSW, 2013



People who speak a language other than English at home

Those who speak a language other than English received less responsive care

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.[36] Along with Aboriginality, the Adult Admitted Patient Survey (AAPS) captures non-English as a main language 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.[29]

In the AAPS, there were almost 4,000 patients (11% of respondents) who identified with this group (the 'non-English' group), although this does not necessarily indicate lack of proficiency in English. Only three in 10 of the 'non-English' group said they needed or would have liked an interpreter during their admission.

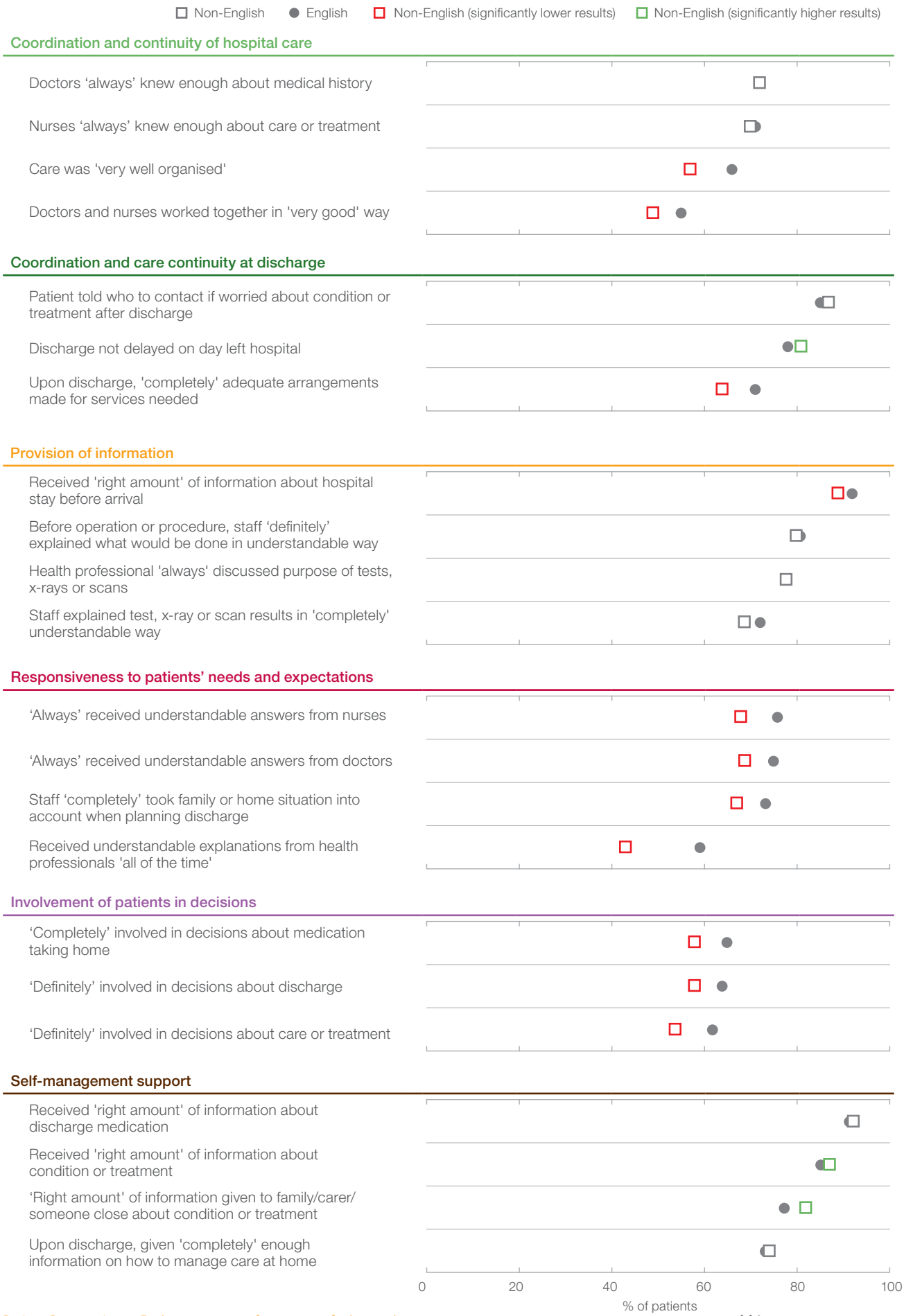
Overall, a lower proportion of the 'non-English' group reported:

- They had received sufficient information about their hospital stay pre-arrival (89% vs 92%)
- Doctors answered questions in a way they could always understand (69% vs 75%)
- Nurses answered questions in a way they could always understand (68% vs 76%)
- Positively on both teamwork between doctors and nurses (49% vs 55%) and care organisation (57% vs 66%)
- They felt fully involved in decisions about their healthcare (54% vs 62%)
- They felt fully involved in decisions about their medication (58% vs 65%) and their discharge (58% vs 64%)
- That upon discharge, their family and home situation were taken into account (67% vs 73%) and adequate arrangements were made for services they needed (64% vs 71%).

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

- That the right amount of information about their condition or treatment was provided to them (87% vs 85%) and their family or carer (82% vs 77%)
- That their discharge was not delayed (81% vs 78%) (Figure 27).

Figure 27 Significant differences between non-English and English speakers, NSW, 2013



People with long-standing conditions

People with long-standing conditions are less positive about most aspects of integration

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 co-ordinated care.[37]

Patients with long-standing conditions want involvement in decisions about their care, access to information to help them make these decisions, support and confidence to understand and self-manage their health and seamless service delivery.[38]

In the AAPS, there were almost 17,000 people (47% of respondents) who identified as having one or more long-standing conditions (Box 3).

Patients with long-standing conditions were less positive than those without such conditions for most of the aspects of integration addressed by the survey.

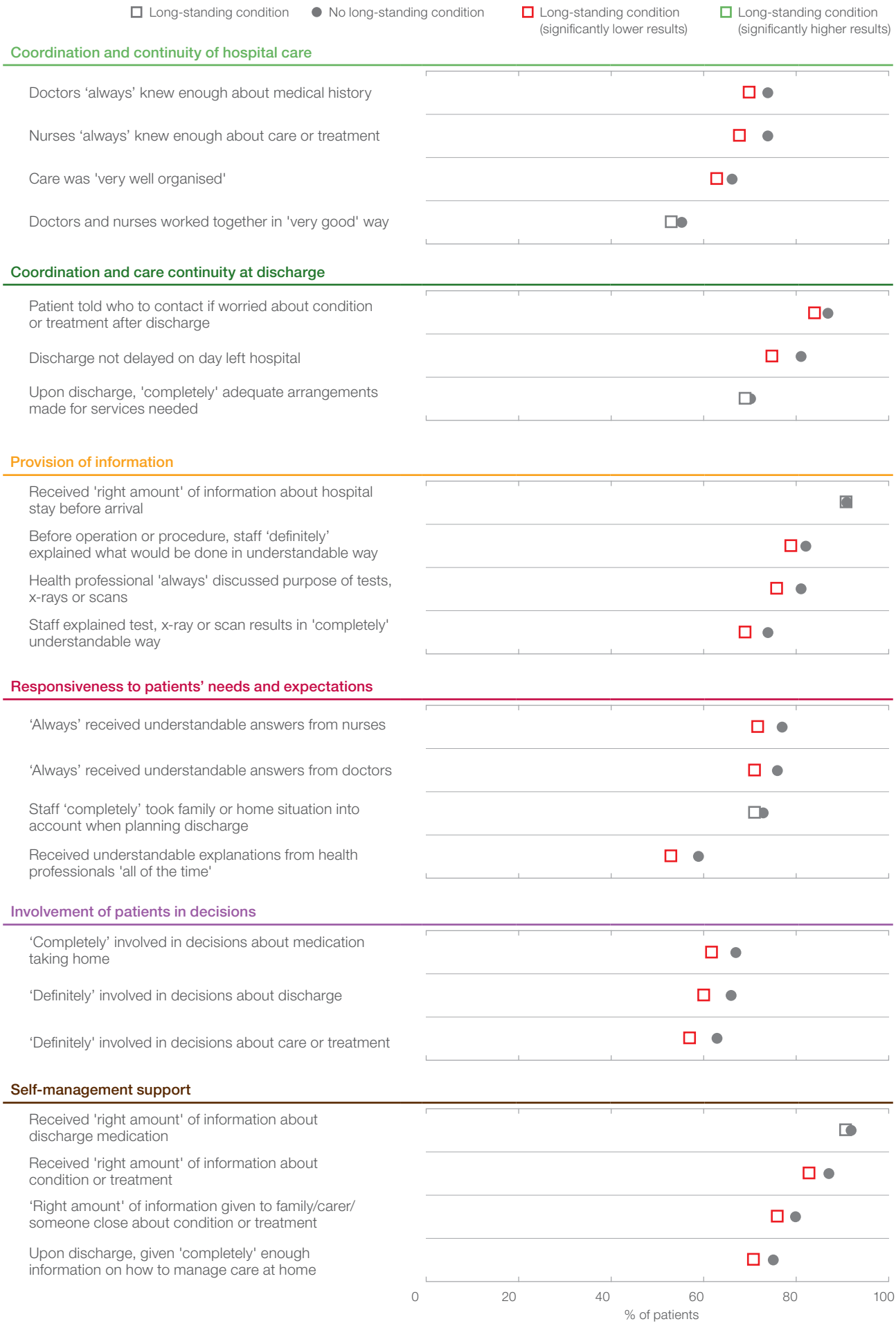
Differences in patterns of responses from these groups may appear to be marginal, however many of the results were statistically significant. Among the significant differences, a lower proportion of patients with a long-standing condition reported:

- That the doctors always knew enough about their medical history (70% vs 74%), and the nurses always knew enough about their care and treatment (68% vs 74%)
- Always receiving understandable answers from nurses (72% vs 77%) and doctors (71% vs 76%)
- That they received the right amount of information about their condition or treatment (83% vs 87%)
- That their family or carers received the right amount of information about their condition or treatment (76% vs 80%)
- That their care was very well organised (63% vs 66%)
- That they were definitely involved in their healthcare (57% vs 63%)
- That they were fully involved in decisions about their medication (62% vs 67%) and discharge (60% vs 66%)
- They were informed about who to contact if they were worried after discharge (84% vs 87%)
- They were informed about how to manage their care at home (71% vs 75%) (Figure 28).

Box 3 **Long-standing health conditions reported in the AAPS**

- 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 28 Significant differences for patients with a long-term condition for all questions, NSW average



NSW results in an international context

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 Patient Survey

England's 2013 NHS Inpatient Survey included eight questions that are almost identical to those in the NSW Adult Admitted Patient Survey, providing an opportunity to compare results (see Appendix 6 for more information on these questions).

Patients in NSW provided more positive responses than those in England for questions about coordination and continuity of care upon discharge (Figure 29). Results for the other questions, focused more on information provision, communication and shared responsibility, were closely aligned.

Commonwealth Fund International Health Policy Survey

A selection of results from the 2013 Commonwealth Fund International Health Policy Survey offers further insight into hospital patients' experiences in NSW (Figure 30).

This telephone survey of adults aged 18 years and over is run in 11 countries and asks respondents about their experiences in all sectors of healthcare. In 2013, the BHI commissioned additional respondents to be surveyed in NSW, in order to bring the NSW sample up to around 1,500.

A number of questions relate to hospital experiences (public and private combined), particularly with regards to patients' experience of discharge. Comparison of these results shows that NSW results are mostly in line with those from other jurisdictions.

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 overnight inpatients from NSW.

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

For more information about the Commonwealth Fund International Health Policy Survey visit **www.commonwealthfund.org**

In 2013 the NHS Inpatient Survey received responses from over 62,000 inpatients. The inclusion criteria were patients aged 16 years and over who were admitted for at least one night in hospital.

Figure 29 A selection of NHS Inpatient Survey results, 2013, comparing results for overnight inpatients in England and NSW

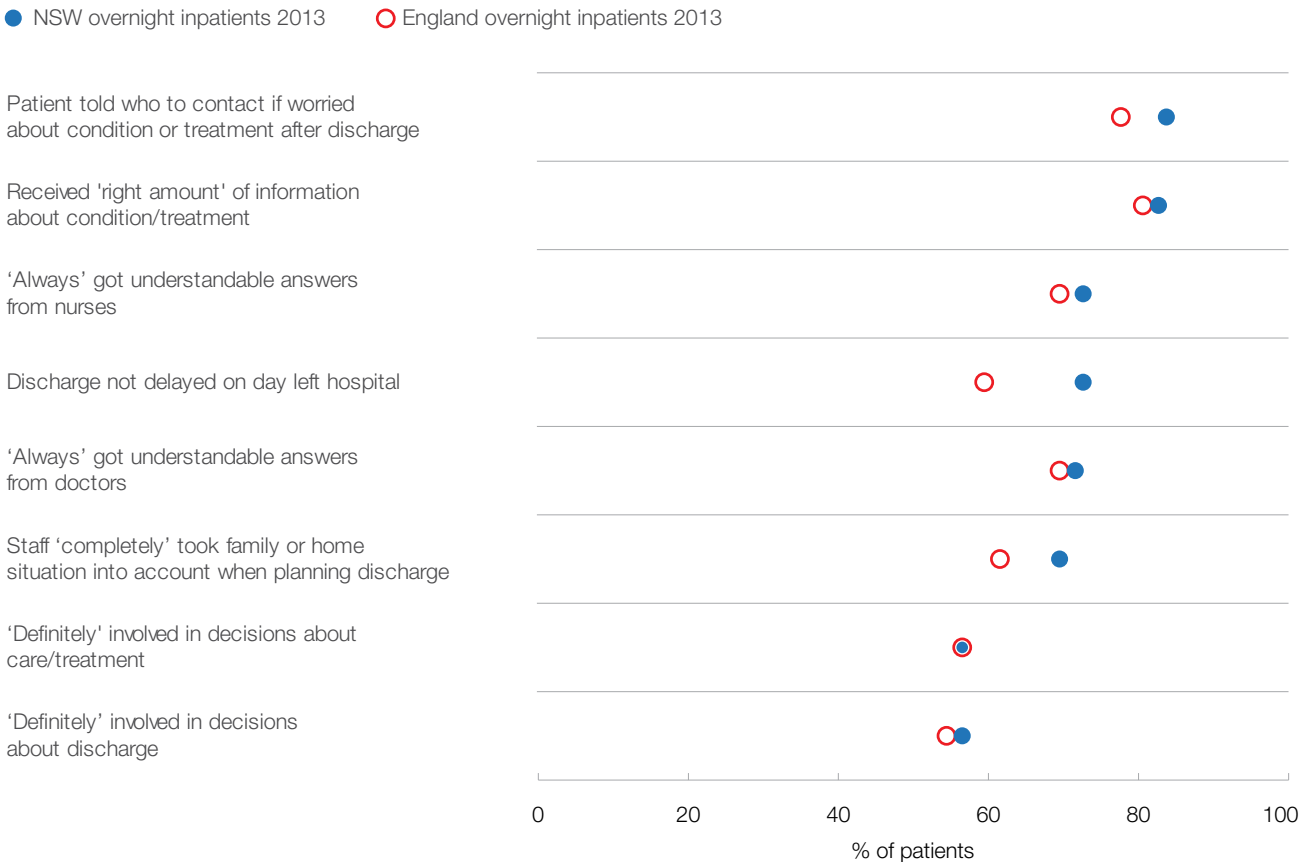
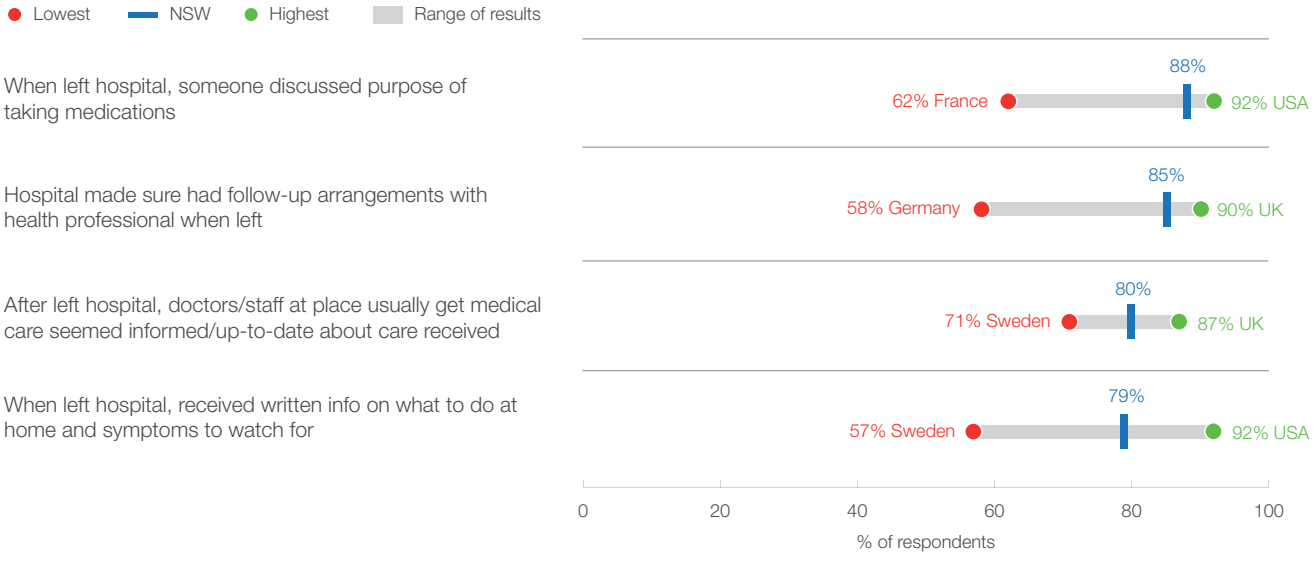


Figure 30 A selection of Commonwealth Fund International Health Policy Survey results comparing jurisdictions, 2013



Note: Questions from these surveys have been rephrased to a statement that includes the most preferable response option. Some results exclude those 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 6.

Appendix 1 AAPS questions reported on

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

Reported Measure	Original Question Text	Response Options
Coordination and continuity of hospital care		
Doctors 'always' knew enough about medical history	In your opinion, did the doctors who treated you know enough about your medical history?	✓ Yes, always ✓ Yes, sometimes ✓ No
Nurses 'always' knew enough about care or treatment	In your opinion, did the nurses who treated you know enough about your care and treatment?	✓ Yes, always ✓ Yes, sometimes ✓ No
Care was 'very well organised'	How well organised was the care you received in hospital?	✓ Very well organised ✓ Fairly well organised ✓ Not well organised
Doctors and nurses worked together in 'very good' way	How would you rate how well the doctors and nurses worked together?	✓ Very good ✓ Good ✓ Adequate ✓ Poor ✓ Very poor
Coordination and care continuity at discharge		
Patient told who to contact if worried about condition or treatment after discharge	Did hospital staff tell you who to contact if you were worried about your condition or treatment after you left hospital?	✓ Yes ✓ No × Don't know or can't remember
Discharge not delayed on day left hospital	On the day you left hospital, was your discharge delayed?	✓ Yes ✓ No
Upon discharge, 'completely' adequate arrangements made for services needed	Thinking about when you left hospital, were adequate arrangements made by the hospital for any services you needed?	✓ Yes, completely ✓ Yes, to some extent ✓ No × I did not need any services
Provision of Information		
Received 'right amount' of information about hospital stay before arrival	Before your arrival, how much information about your hospital stay was given to you?	✓ Not enough ✓ The right amount ✓ Too much × Don't know or can't remember
Before operation or procedure, staff 'completely' explained what would be done in understandable way	Before your operation or surgical procedure, did a member of hospital staff explain what would be done in a way that you could understand?	✓ Yes, completely ✓ Yes, to some extent ✓ No × I do not want an explanation
Health professional 'always' discussed purpose of tests, X-rays or scans	Did a doctor, nurse or other health professional discuss the purpose of these tests, x-rays or scans with you?	✓ Yes, always ✓ Yes, sometimes ✓ No
Staff explained test, X-ray or scan results in 'completely' understandable way	Did a member of hospital staff explain the test, x-ray or scan results in a way that you could understand?	✓ Yes, always ✓ Yes, to some extent ✓ No

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

Reported Measure	Original Question Text	Response Options
Responsiveness to patients' needs and expectations		
'Always' received understandable answers from nurses	When you had important questions to ask a nurse, did they answer in a way you could understand?	✓ Yes, always ✓ Yes, sometimes ✓ No, I did not get answers I could understand × I did not ask any questions
'Always' received understandable answers from doctors	When you had important questions to ask a doctor, did they answer in a way you could understand?	✓ Yes, always ✓ Yes, sometimes ✓ No, I did not get answers I could understand × I did not ask any questions
Staff 'completely' took family or home situation into account when planning discharge	Did hospital staff take your family and home situation into account when planning your discharge?	✓ Yes, completely ✓ Yes, to some extent ✓ No, staff did not take my family and home situation into account × It was not necessary × Don't know or can't remember
Received understandable explanations from health professionals 'all of the time'	How often did the doctors, nurses and other health professionals caring for you explain things in a way you could understand?	✓ All of the time ✓ Most of the time ✓ Some of the time ✓ Rarely ✓ Never
Involvement of patients in decisions		
'Definitely' involved in decisions about medication taking home	Did you feel involved in the decision to use this medication in your treatment?	✓ Yes, completely ✓ Yes, to some extent ✓ No, I did not feel involved × I did not want to be involved
'Definitely' involved in decisions about discharge	Did you feel involved in decisions about your discharge?	✓ Yes, definitely ✓ Yes, to some extent ✓ No, I did not feel involved × I did not need or want to be involved
'Definitely' involved in decisions about care or treatment	Were you involved, as much as you wanted to be, in decisions about your care and treatment?	✓ 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		
Received 'right amount' of information about discharge medication	How much information, if any, were you given about the medication you were taking home?	✓ Not enough ✓ Right amount ✓ Too much
Received 'right amount' of information about condition or treatment	During your stay in hospital, how much information about your condition or treatment was given to you?	✓ Not enough ✓ Right amount ✓ Too much
Right amount' of information given to family/carer/someone close about condition or treatment	How much information about your condition or treatment was given to your family, carer or someone close to you?	✓ Not enough ✓ Right amount ✓ Too much × It was not necessary to provide information ✓ Don't know or can't say
Upon discharge, given 'completely' enough information on how to manage care at home	Thinking about when you left hospital, were you given enough information about how to manage your care at home?	✓ Yes, completely ✓ Yes, to some extent ✓ No × I did not need this type of information

Appendix 2

LHDs and hospitals covered in the AAPS

Local Health District	Hospital Name	Peer Group	# Respondents	Response Rate
Central Coast	Gosford Hospital	A1	585	49%
	Wyong Hospital	B	526	54%
Far West	Broken Hill Base Hospital	C1	291	46%
Hunter New England	Armidale and New England Hospital	C1	574	52%
	Belmont Hospital	C1	491	51%
	Calvary Mater Newcastle	A3	517	55%
	Cessnock District Hospital	C2	467	52%
	Gunnedah District Hospital	C2	112	51%
	Inverell District Hospital	C2	139	48%
	John Hunter Hospital	A1	572	50%
	Kurri Kurri District Hospital	C2	558	67%
	Maitland Hospital	B	376	47%
	Manning Base Hospital	B	504	55%
	Moree District Hospital	C2	101	35%
	Muswellbrook District Hospital	C2	147	47%
	Narrabri District Hospital	C2	91	36%
	Singleton District Hospital	C2	197	53%
	Tamworth Base Hospital	B	524	50%
Illawarra Shoalhaven	Bulli District Hospital	C2	129	46%
	Milton and Ulladulla Hospital	C2	106	49%
	Shellharbour Hospital	C1	539	54%
	Shoalhaven and District Memorial Hospital	B	650	58%
	Wollongong Hospital	A1	583	50%
Mid North Coast	Bellinger River District Hospital	C2	112	60%
	Coffs Harbour Base Hospital	B	545	53%
	Kempsey Hospital	C2	868	59%
	Macksville District Hospital	C2	556	62%
	Port Macquarie Base Hospital	B	590	56%
Murrumbidgee	Deniliquin Health Service	C2	143	48%
	Griffith Base Hospital	C1	611	46%
	Tumut Health Service	C2	111	45%
	Wagga Wagga Base Hospital	B	563	50%
	Young Health Service	C2	175	51%
Nepean Blue Mountains	Blue Mountains District Anzac Memorial Hospital	C2	456	49%
	Lithgow Health Service	C2	462	51%
	Nepean Hospital	A1	640	45%
Northern NSW	Ballina District Hospital	C2	536	56%
	Casino and District Memorial Hospital*	C2	29	41%
	Grafton Base Hospital	C1	568	53%
	Lismore Base Hospital	B	593	55%
	Maclean District Hospital	C2	176	66%
	Murwillumbah District Hospital	C1	484	56%
	The Tweed Hospital	B	462	58%

Local Health District	Hospital Name	Peer Group	# Respondents	Response Rate
Northern Sydney	Hornsby and Ku-Ring-Gai Hospital	B	544	50%
	Manly District Hospital	B	527	47%
	Mona Vale and District Hospital	B	525	51%
	Royal North Shore Hospital	A1	452	47%
	Ryde Hospital	C1	566	45%
South Eastern Sydney	Prince of Wales Hospital	A1	587	47%
	Royal Hospital for Women	A3	467	42%
	St George Hospital	A1	591	46%
	Sutherland Hospital	B	557	52%
	Sydney/Sydney Eye Hospital	A3	535	47%
South Western Sydney	Bankstown/Lidcombe Hospital	A1	614	44%
	Bowral and District Hospital	C1	499	52%
	Camden Hospital	C2	151	46%
	Campbelltown Hospital	B	531	46%
	Fairfield Hospital	B	581	39%
	Liverpool Hospital	A1	661	41%
Southern NSW	Bateman's Bay District Hospital	C2	484	58%
	Bega District Hospital	C1	515	56%
	Cooma Health Service	C2	135	53%
	Goulburn Base Hospital	C1	561	51%
	Moruya District Hospital	C2	459	53%
	Queanbeyan Health Service	C2	491	45%
St Vincent's Health Network	St Vincent's Hospital, Darlinghurst	A1	539	41%
Sydney	Canterbury Hospital	B	531	39%
	Concord Hospital	A1	634	48%
	Royal Prince Alfred Hospital/RPAH-IRO	A1	1041	50%
Western NSW	Bathurst Base Hospital	C1	612	51%
	Cowra District Hospital	C2	167	56%
	Dubbo Base Hospital	B	566	45%
	Forbes District Hospital	C2	152	46%
	Mudgee District Hospital	C2	168	53%
	Orange Health Service	B	602	49%
	Parkes District Hospital	C2	120	46%
Western Sydney	Auburn Hospital	B	543	34%
	Blacktown Hospital	B	575	40%
	Mount Druitt Hospital	C1	616	48%
	Westmead Hospital	A1	604	42%

* Results from this hospital are not reported on indiviually, due to the number of respondents being n=<30

Appendix 3

Sensitivity analysis of LHD results

To assess the impact on results of socio-demographic characteristics associated with patient experience, a sensitivity analysis was undertaken.

Through a process of patient-mix adjustment based on the method used by the Consumer Assessment of Healthcare Providers and Systems Hospital Survey (HCAHPS)[39], LHD and NSW level results were standardised by age group (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).

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 increase the number of LHDs for which results were significantly lower than the NSW average. This effect was mainly due to the adjustment of the age profile to that of the patient population in NSW. Despite this, however, the two sets of results show that the five LHDs that received the highest and lowest proportion of statistically significant results remained the same.

As a result of this, the results reported in the body of this report include only those weighted by the strata variables (i.e. age strata and stay type) to match the patient population of each hospital.

Figure 31 Results of sensitivity analysis on LHD's rankings

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	2	0	9
Far West	1	0	0	0
Hunter New England	13	0	13	0
Illawarra Shoalhaven	0	4	0	6
Mid North Coast	13	0	12	0
Murrumbidgee	4	1	1	1
Nepean Blue Mountains	0	4	0	5
Northern NSW	15	0	10	0
Northern Sydney	0	1	0	2
South Eastern Sydney	0	1	0	1
South Western Sydney	0	12	0	17
Southern NSW	17	0	12	0
St Vincent's Health Network	7	0	4	0
Sydney	3	0	2	1
Western NSW	9	0	2	0
Western Sydney	0	13	0	11

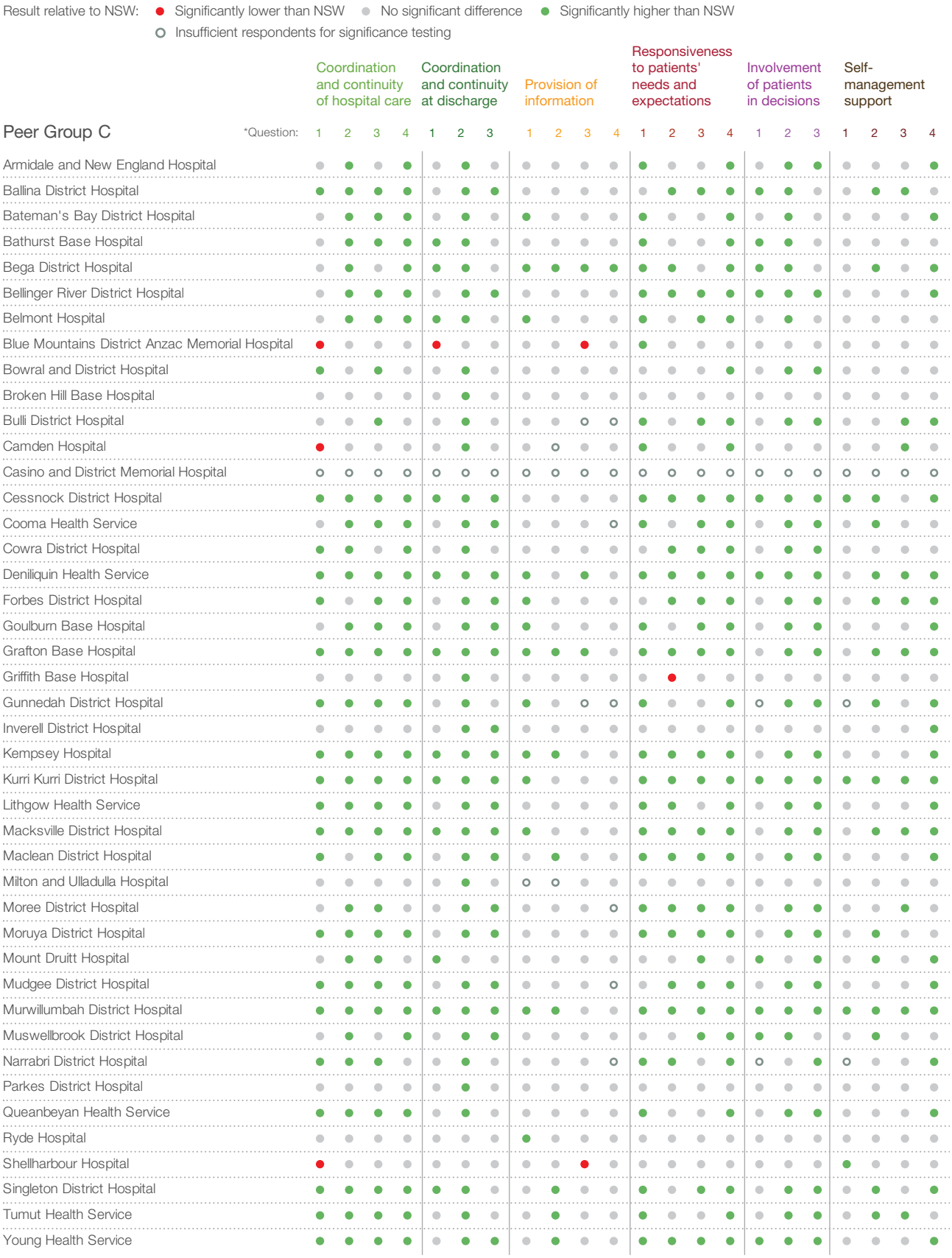
Appendix 4

Hospitals with significantly higher or lower results compared to the NSW average

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

	Coordination and continuity of hospital care				Coordination and continuity at discharge			Provision of information				Responsiveness to patients' needs and expectations				Involvement of patients in decisions			Self-management support			
Peer Group A *Question:	1	2	3	4	1	2	3	1	2	3	4	1	2	3	4	1	2	3	1	2	3	4
Bankstown / Lidcombe Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Calvary Mater Newcastle	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Concord Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Gosford Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
John Hunter Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Liverpool Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Nepean Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Prince of Wales Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Royal Hospital for Women	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Royal North Shore Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Royal Prince Alfred Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
St George Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
St Vincent's Hospital, Darlinghurst	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Sydney/Sydney Eye Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Westmead Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Wollongong Hospital	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Peer Group B *Question:	1	2	3	4	1	2	3	1	2	3	4	1	2	3	4	1	2	3	1	2	3	4
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 15-16.


Result relative to NSW: Significantly lower than NSW No significant difference Significantly higher than NSW
Insufficient respondents for significance testing
Coordination and continuity of hospital care
Coordination and continuity at discharge
Provision of information
Responsiveness to patients' needs and expectations
Involvement of patients in decisions
Self-management support
Peer Group C
*Question: 1 2 3 4 1 2 3 1 2 3 4 1 2 3 4 1 2 3 1 2 3 4
Armidale and New England Hospital
Ballina District Hospital
Bateman's Bay District Hospital
Bathurst Base Hospital
Bega District Hospital
Bellinger River 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
Cooma Health Service
Cowra District Hospital
Deniliquin Health Service
Forbes District Hospital
Goulburn Base Hospital
Grafton Base Hospital
Griffith Base Hospital
Gunnedah District Hospital
Inverell District Hospital
Kempsey Hospital
Kurri Kurri District Hospital
Lithgow Health Service
Macksville District Hospital
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
Queanbeyan Health Service
Ryde Hospital
Shellharbour Hospital
Singleton District Hospital
Tumut Health Service
Young Health Service

Appendix 5

Exploring variation in NSW results – 16 LHDs, 80 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.

This report explores variation in results across LHDs and across hospitals.

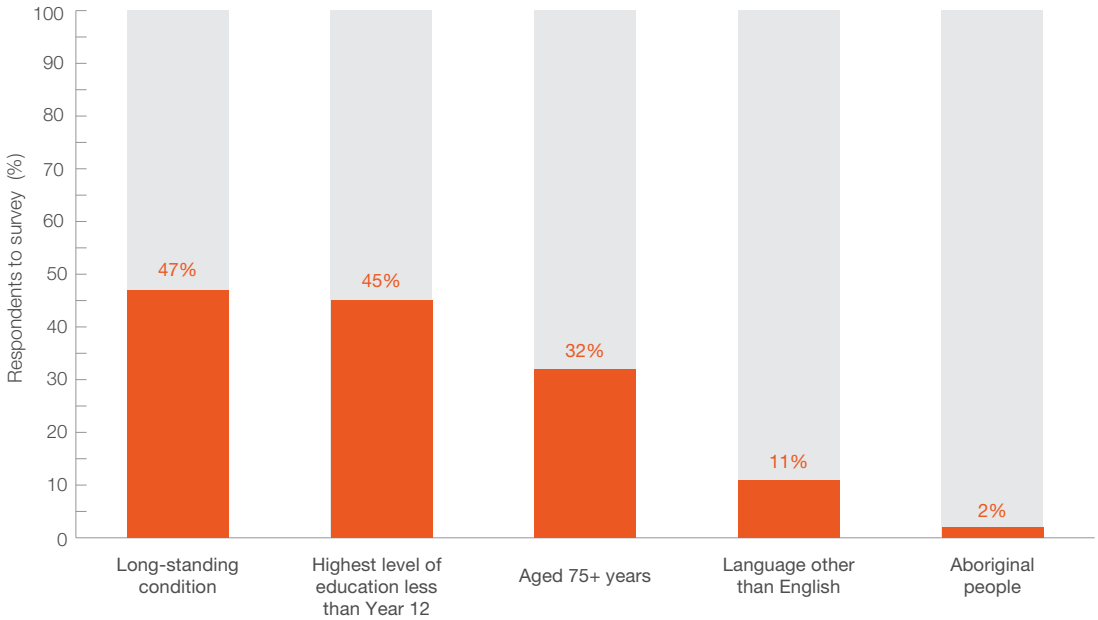
LHDs are the administrative hubs for a regional healthcare system and share many responsibilities and characteristics, however they differ in important ways. In particular, the populations served by LHDs vary in terms of social, economic and health characteristics. For example, across NSW, 11% of respondents mainly speak a language other than English at home (Figure 32). However, this varies across LHDs. Corresponding results for Far West, Hunter New England, Mid North Coast, Northern NSW and Western NSW LHDs were 10 percentage points lower (i.e. 1% of respondents mainly speak a language other than English), while those for South Western Sydney and Sydney LHDs were 23 percentage points higher (34% of respondents) (Figure 33).

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 compared standardised with non-standardised results for LHDs. It revealed only modest differences, between the two sets of results, and rankings for LHDs in terms of the most and least positive results remained consistent (Appendix 3). This suggests that sociodemographic 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 33 for details).

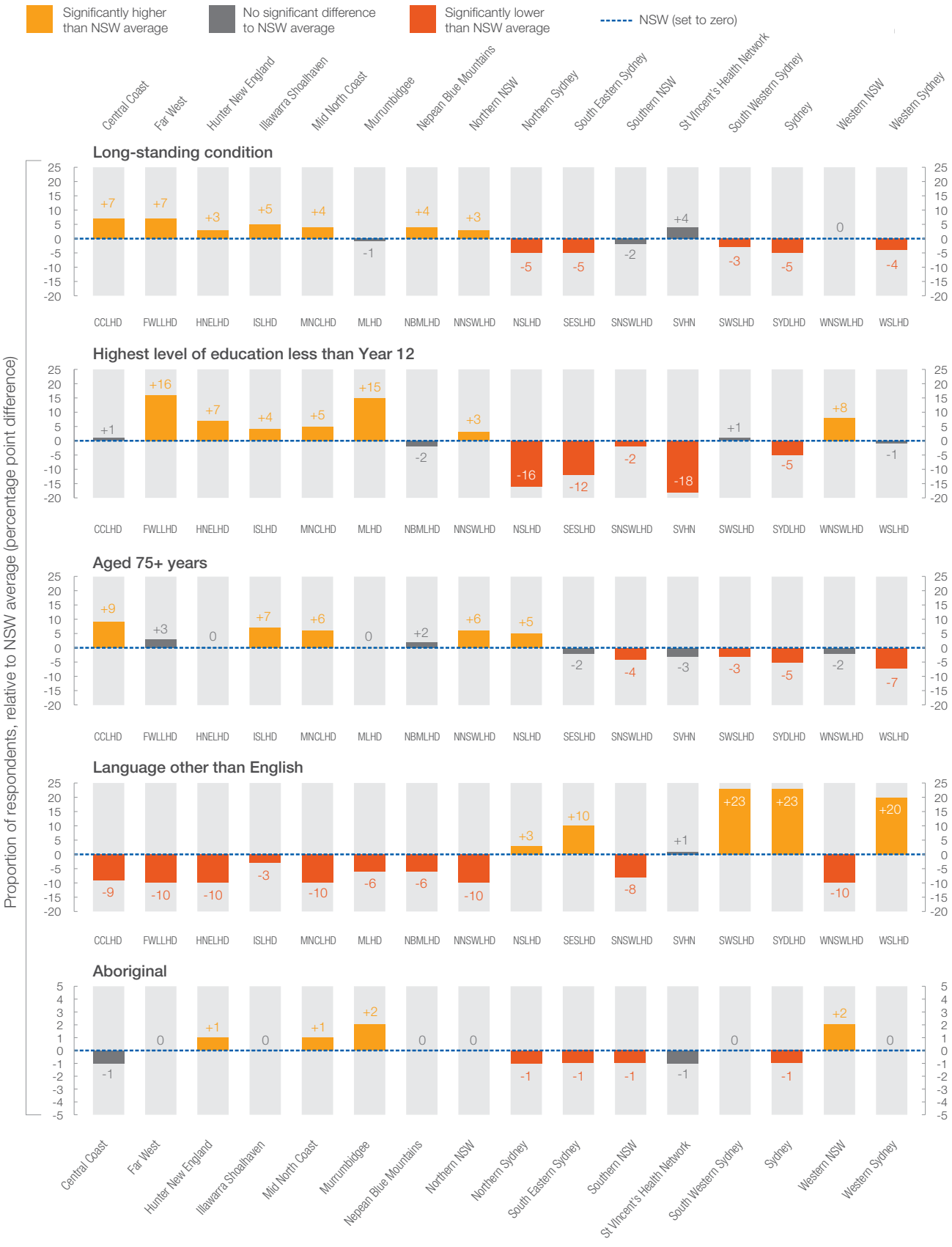
Further information on respondent profiles is available at **www.bhi.nsw.gov.au**

Figure 32 Selected characteristics of survey respondents, NSW, 2013



* There are 15 geographically defined LHDs included in this report. Among non-geographically defined Local Health Networks (LHNs), results for St Vincent's LHN are also included while those for two specialist networks, Sydney Children's Health Network and Justice and Forensic Mental Health are not.

Figure 33 Gap analysis of respondents' sociodemographic characteristics, LHDs vs NSW average, 2013



Appendix 6: Comparison questions from international surveys

NHS Inpatient Survey 2013

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

Reported Measure	Original Question Text	Response Options
Received 'right amount' of information about condition or treatment	How much information about your condition or treatment was given to you?	✓ Not enough ✓ Right amount ✓ Too much
'Always' got understandable answers from nurses	When you had important questions to ask a nurse did you get answers that you could understand?	✓ Yes, always ✓ Yes, sometimes ✓ No × I had no need to ask
'Always' got understandable answers from doctors	When you had important questions to ask a doctor, did you get answers that you could understand?	✓ Yes, always ✓ Yes, sometimes ✓ No × I had no need to ask
After operation or procedure, staff 'definitely' explained how it went in understandable way	After the operation or procedure, did a member of staff explain how the operation or procedure had gone in a way you could understand?	✓ Yes, completely ✓ Yes, to some extent ✓ No
'Definitely' involved in decisions about care or treatment	Were you involved as much as you wanted to be in decisions about your care and treatment?	✓ Yes, definitely ✓ Yes, to some extent ✓ No
'Definitely' involved in decisions about discharge	Did you feel you were involved in decisions about your discharge from hospital?	✓ Yes, definitely ✓ Yes, to some extent ✓ No × I did not want to be involved
Patient told who to contact if worried about condition or treatment after discharge	Did hospital staff tell you who to contact if you were worried about your condition or treatment after you left hospital?	✓ Yes ✓ No ✓ Don't know or can't remember
Staff 'completely' took family or home situation into account when planning discharge	Did hospital staff take your family or home situation into account when planning your discharge?	✓ Yes, completely ✓ Yes, to some extent ✓ No × It was not necessary × Don't know or can't remember
Discharge not delayed on day left hospital	On the day you left hospital, was your discharge delayed for any reason?	✓ Yes ✓ No

Commonwealth Fund International Health Policy Survey 2013

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

Reported Measure	Original Question Text	Response Options
When left hospital, someone discussed purpose of taking medications	When you left the hospital, did someone discuss with you the purpose of taking each of your medications?	✓ Yes ✓ No
Hospital made sure had follow-up arrangements with health professional when left	When you left the hospital, did the hospital make arrangements or make sure you had follow-up care with a doctor or other health care professional?	✓ Yes ✓ No
After left hospital, doctors or staff at place usually get medical care seemed informed or up-to-date about care received	After you left the hospital, did the doctors or staff at the place where you usually get medical care seem informed and up-to-date about the care you received in the hospital?	✓ Yes ✓ No
When left hospital, received written information on what to do at home and symptoms to watch for	When you left the hospital, did you receive written information about what to do when you returned home and what symptoms to watch for?	✓ Yes ✓ No

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 meta-review. 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., R. Rosen, and B. Rumbold, 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. Kripalani, S., et al., A., Promoting effective transitions of care at hospital discharge: A review of key issues for hospitalists. J. Hosp. Med., 2: 2007. 314–323.
25. Constand, M.K., et al., Scoping review of patient-centered care approaches in healthcare. BMC health services research, 2014. 14(1): p. 271.
26. Légaré, F., et al., Interventions for improving the adoption of shared decision making by healthcare professionals. Cochrane Database Syst Rev, 2010. 5.
27. Panagioti, M., et al., Self-management support interventions to reduce health care utilisation without compromising outcomes: a systematic review and meta-analysis. BMC health services research, 2014. 14(1): p. 356.
28. Veronovici, N.R., et al., Discharge education to promote self-management following cardiovascular surgery: An integrative review. European Journal of Cardiovascular Nursing, 2013: p. 1474515113504863.
29. NSW Health: Policy & Implementation Plan for Culturally Diverse Communities 2012-2016. 26 April 2012.
30. Øvretveit, J. Evidence: Does clinical coordination improve quality and save money? Health Foundation, 2011
31. 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.
32. AIHW, Australia's hospitals 2012–13 at a glance. 2014 (Health services series no. 55. Cat. no. HSE 146. Canberra: AIHW.).
33. Australian Bureau of Statistics, Australian Social Trends 2014. 2014 (ABS, 4102.0).
34. 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.
35. Shahid, S., et al., 'Nowhere to room… nobody told them': logistical and cultural impediments to Aboriginal peoples' participation in cancer treatment. Australian Health Review, 2011. 35(2): p. 235-241.
36. Australian Bureau of Statistics, Standards for Statistics on Cultural and Language Diversity. 1999(ABS Catalogue No. 1289.0).
37. 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, 2013.
38. NHS, Department of Health, Long Term Conditions Compendium of Information - Third Edition. 2012.
39. 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.

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bureau of health information

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 is 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.

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