

SURE 2.0: Ready for the Future of Research

Enhancing access to NSW Patient Survey data to deliver actionable insights

Diane Watson, Chief Executive

July 2023

Acknowledgement of country

I acknowledge the traditional custodians of the lands upon which we are meeting today. Today I am presenting on the lands of the Cammeraygal people of the Eora nation.

I pay my respects to Elders past, present and emerging and celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters.

Bureau of Health Information

The Bureau of Health Information (BHI) is a board-governed organisation that provides the community, healthcare professionals and policy makers with information that enhances transparency of the performance of the healthcare system in NSW to inform actions to improve healthcare and strengthen accountability.

Trusted information. Informed decisions. Improved healthcare.

BHI is a trusted provider of health performance information

Information is used to inform action

Patients' experiences and outcomes continue to improve

Our strategic direction

Key strategies

Inform improvement

Strengthen accountability

We aim to maximise the impact of our information on behalf of NSW patients and communities and enhance its value to the NSW health system.

1 Drive awareness and use of BHI information

- Maximise effective use of information
- Digital access
- Leverage BHI's measurement expertise

2 Deliver high value information

- Timely, meaningful analysis
- Actionable insights
- Data linkage and sharing
- New information

3 Sustain trust in BHI and our information

- Rigour
- Engagement and communications

4 Invest in our people and capabilities

- Culture and engagement
- Capability and contribution
- Innovation

NSW Patient Survey Program – Core surveys

The image displays a collection of materials related to the NSW Patient Survey Program:

- Brochure 1 (Top Left):** Titled "Snapshot Adults admitted to hospital Results from the 2021 patient survey". It features a woman's face and text about the survey's scope and findings.
- Brochure 2 (Bottom Left):** Titled "Snapshot Emergency department Results from the 2021-22 patient survey". It features a woman in a medical mask and highlights "36 measures" and "13 measures".
- Brochure 3 (Middle Left):** Titled "Experiences in rural and urban hospitals". It includes text about patient experiences and a photo of a doctor and patient.
- Report (Middle Right):** A patient survey report titled "ADULT ADMITTED PATIENT SURVEY" for NSW, Jan-Dec 2020. It shows overall satisfaction and outcomes, with a bar chart for "Overall, how would you rate the nurses who treated you?".
- Dashboard (Bottom Right):** A digital dashboard showing a grid of data points, likely representing various hospital units and their performance metrics. It includes a "Summary 2019-20" and "Comparison with 2019-20 survey".

The core survey datasets

Over the past 10+ years, more than 900,000 participants have completed surveys

Survey questionnaires (see development reports on BHI's website):

- Robust question set development process including literature reviews, cognitive testing, periodic reviews of reliability; core questions and special-purpose modules for priority policy directions and new evidence
- Self-reported experiences and outcomes on journeys of care, an episode of illness, or use of care in past one, three or 12 months, depending on the topic

Survey methodology (see technical supplements on BHI's website):

- Recruitment via mail with two reminders; mail and online response options; Response rates from 25–40% depending on the survey and topic; BHI calculates all survey weights to support representative results
- Stratified random and oversampling to be representative of largest 75+ hospitals (annually), local health district and state level (quarterly) and 65+ small rural facilities (every few years)

Example opportunities

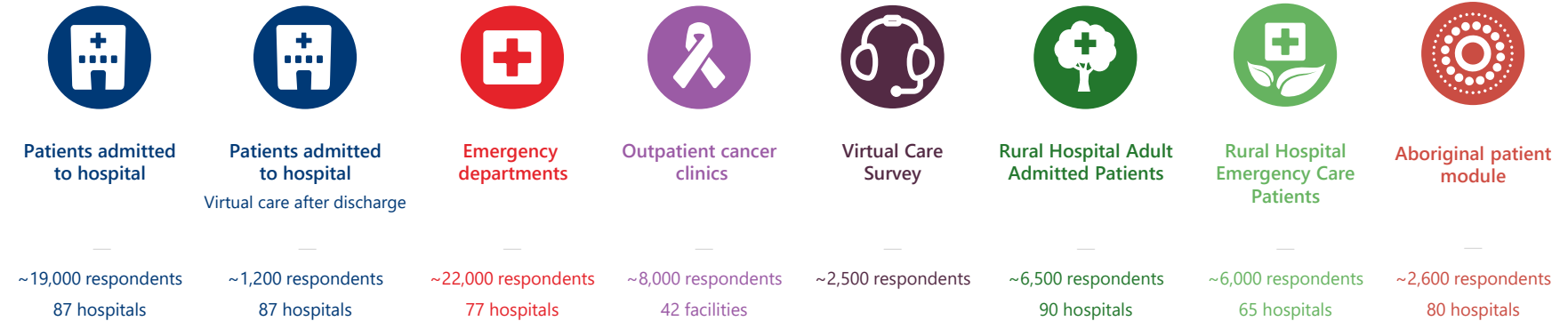
Every year, almost 20,000 patients complete the Adult Admitted and Emergency Department patient surveys (core surveys). In addition to the core questions and due to our agile survey format BHI has been able to, for example:

- In July to September 2022, ask all sampled patients who arrived at the emergency department by **ambulance** about their experiences with NSW ambulance services
- In August to October 2022, ask all sampled **elective surgery patients** about their experiences of that care
- In January to March 2023, ask all sampled **rural emergency care patients** about their experience in the emergency department
- From 2021 to 2023, ask admitted patients about their experiences and outcomes of **virtual outpatient and GP care** after discharge
- In 2022 and 2023, oversample **Aboriginal admitted patients** to create local health district-level information about experiences of care (i.e. core questions plus question set established with Aboriginal community input). In 2019, we conducted a census survey of **Aboriginal admitted patients** and **those admitted for maternity care**

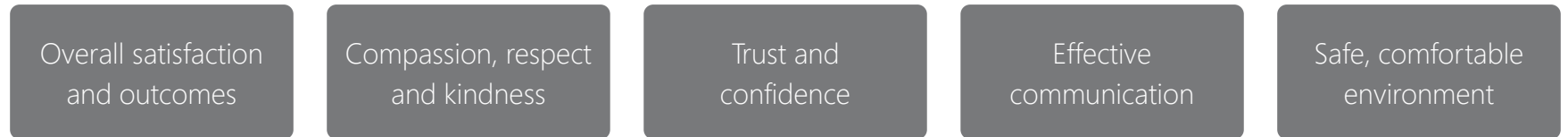
Over the past 10 years, more than 500,000 respondents to BHI surveys have offered consent (~82%) to link their survey to administrative and clinical data

Example opportunities

The NSW Patient Survey Program covers many areas of our State's public health system, such as:



Surveys cover domains of patient experience, including:



This slide includes an illustrative selection of available surveys and modules.

All BHI surveys and results are available at bhi.nsw.gov.au

Liberalising data through SURE

Why are we using a secure data analytics environment?

- Increased safety and security
- Links to our strategic plan
- Linking people who have the skills with the data
- Helps meet our obligations as data custodian

Examples of some highly relevant, clinical or policy questions:

- Is patient experience improving, in what areas, and for whom?
- What are the drivers of patient experience?
- How are vulnerable populations experiencing the health system, and how is this related to outcomes?

Multi-step process for approval to access

Step 1: Review online information



Questionnaire and
development report



Relevant
technical supplement



BHI Data Portal

Step 2: Let's have a chat



Contact BHI – **BHI-Enq@health.nsw.gov.au**

Step 3: Complete data request


Publications from the dataset

PLOS ONE

OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

Patient-reported experiences and outcomes following hospital care are associated with risk of readmission among adults with chronic health conditions

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Published: November 2, 2022 • <https://doi.org/10.1371/journal.pone.0276812>

Article	Authors	Metrics	Comments	Media Coverage
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Abstract

Introduction

Methods

Results

Discussion

Abstract

This study quantifies the association between patient reported measures (PRMs) and readmission to inform efforts to improve hospital care. A retrospective, cross-sectional study was conducted with adults who had chronic obstructive pulmonary disease (COPD) or congestive heart failure (CHF) and were admitted for acute care in a public hospital in New South Wales, Australia for any reason (n = 2394 COPD and 2476 CHF patients in 2018–2020).

Experiences drive outcomes and future use of hospitals

Results:

Readmission rates were 17% and 19% for patients who have chronic obstructive pulmonary disease (COPD) and congestive heart failure (CHF), respectively.*

Readmission** is **twice as likely** for patients whose overall ratings of care were poor/very poor (i.e. 31% and 37% for COPD and CHF, respectively).

Readmission** is **1.5 to 2 times as likely** for patients who gave lower ratings on having things explained in an understandable way, care being well organised and feeling prepared for discharge. Other experiences associated with readmissions include being treated with respect and dignity, effective and clear communications, and timely and coordinated care.

More **moderate ratings were associated with attenuation of risk**, and the most positive ratings were associated with the lowest readmission rate*. These results suggest that increasing each patient's positive experiences progressively reduces the risk of adults with chronic conditions returning to acute care.

* These rates differ from those publicly reported by BHI which measure readmissions following admission for COPD or CHF.

**Adjusted for other patient-level characteristics such as age, gender, comorbidity. Smoking and SES not significant when considering these other factors.



Risk of readmission declines as experiences improve

Effective and clear communication

Adults with COPD who said health professionals **did not explain things** in a way they could understand had **more than twice** the risk of readmission.*



“Did the health professional explain things in a way that you could understand?”

Response	Readmission rate	Hazard ratio*
Yes, always (~70% respondents)	15%	Reference group
Yes, sometimes (~25%)	20%	1.30 times higher
No (<5%)	33%	2.35 times higher

* Adjusted for age, gender, comorbidity and history of COPD. Smoking and SES not significant when considering these other factors.

Recent papers submitted

Experiences of medication discharge counselling

Tan E. *Medication discharge counselling and readmission to hospital* – presentation at Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT) Conference 2022

Tan E et al. *The association between self-reported experiences with medication discharge counselling and returns to hospitals or emergency departments related to complications: A population-based study from New South Wales, Australia* – paper submitted to MJA

Experiences of food services

Dai-Keller, Z. *Hospital food service and patient experience in NSW public hospitals* – presentation at Preventative Health Conference 2023

Dai-Keller, Z et al. *The association between patient-reported experiences with hospital food services and recovery outcomes: A population-based study from New South Wales, Australia* – paper submitted to Public Health Nutrition

Thank you

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