Wyong Hospital

July 2009 – June 2012

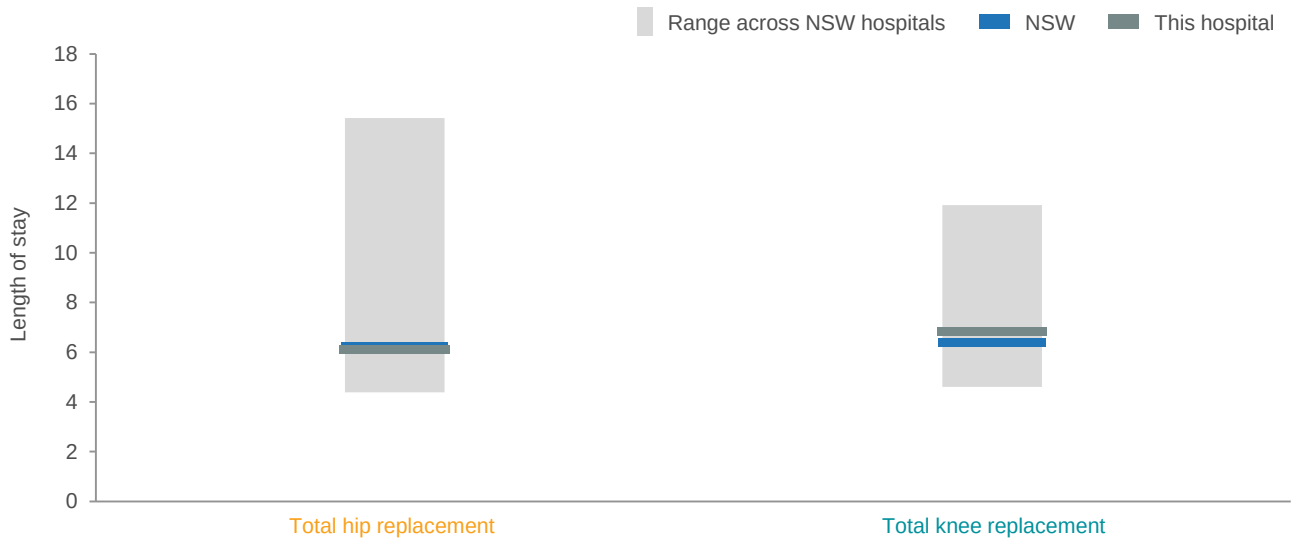
This profile reports risk-standardised readmission ratios (RSRRs). The ratios take into account differences across hospitals in terms of case mix and volumes of patients, and results are reported as either: higher than expected; no different than expected; or lower than expected. The performance dashboard below summarises ratio results for two elective surgical procedures over a 12 year period together with length of stay information for July 2009 – June 2012. Subsequent pages provide information to support interpretation of the RSRR. Readmissions are defined as returns to acute care[1] and results describe the age profile and comorbidity profile of patients; the number who returned to acute care within 60 days of discharge; and reasons, location and timing of returns to acute care.

Returns to acute care for two elective surgical procedures[2]

Higher than expected | No different than expected | Lower than expected | Not reported

Procedure	Time series			This period
	July 2000 – June 2003	July 2003 – June 2006	July 2006 – June 2009	July 2009 – June 2012
Total hip replacement	RSRR			RSRR
Total knee replacement	RSRR			RSRR

Average length of stay (days)[3]



NOTES:

1. For patients whose acute hospitalisation ends with discharge home, a return to acute care involves readmission to hospital; while for patients whose acute hospitalisation ends with a 'discharge' to non-acute care, a return involves a move back into an acute care setting regardless of whether they physically left the hospital.
2. The “Not reported” category is used when there were fewer than 50 index cases admitted in the time period. Outlier status is determined using funnel plot control limits of 95% and 99.8%.
3. For the calculation of average length of stay, index admissions that were transferred in from, or transferred out to, another acute care hospital were excluded. Unreasonably long episodes are trimmed on the basis of the Diagnosis Related Group (DRG) of the episode. The trim point is the third quartile plus 1.5 x the interquartile range of all in-scope episodes in each DRG.
4. Discharge destinations are based on the mode of separation of the index case. For episodes coded as 'Discharged by hospital' or 'Discharged on leave', patients are considered to be destined for their place of usual residence. All other modes of separation are deemed to indicate a discharge destination other than a patient’s place of usual residence.
5. Age of the patient at admission for the index case is used. Percentages may not add to 100% due to rounding.
6. Comorbidities are identified from the hospital discharge records using the Elixhauser comorbidity set (plus dementia) with a one year look-back from the admission date of the index case. Percentage labels have been rounded to the nearest integer.
7. Results for hospitals with <1 expected return to acute care (readmission) within 60 days are not shown.
8. Peer hospitals are identified according to the NSW Ministry of Health’s peer grouping as of 30 June 2011. Hospitals with fewer than 50 index cases are not shown.
9. Hospitals are classified as urban and regional/rural using the geocoded address of the hospital assigned to ABS statistical areas (SA2) and the Australian remoteness index for areas.
10. Reasons for return to acute care are classified according to a draft specification made available to the BHI by the Australian Institute of Health and Welfare. Principal diagnoses for the return to acute care episode, are stratified as: orthopaedic complications using various time horizons; potentially related to hospital care (i.e. complications and adverse events) using various time horizons; and, other reasons. Percentages may not add to 100% due to rounding.

Further information can be found in this report's *Spotlight on Measurement* companion publication.

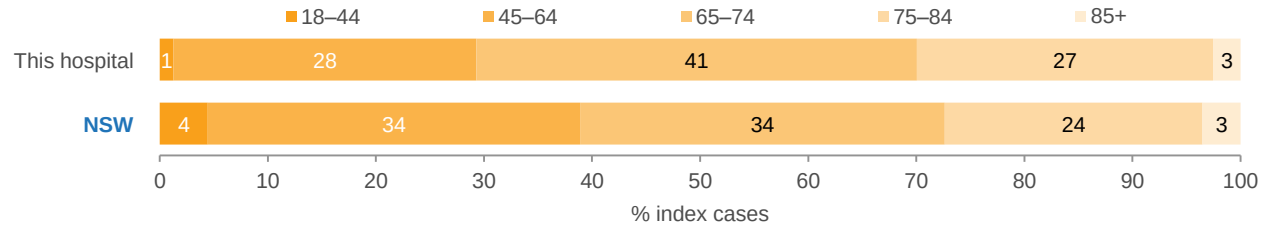
Data source: SAPHaRI, Centre for Epidemiology and Evidence, NSW Ministry of Health.

60-day return to acute care following hospitalisation for total hip replacement

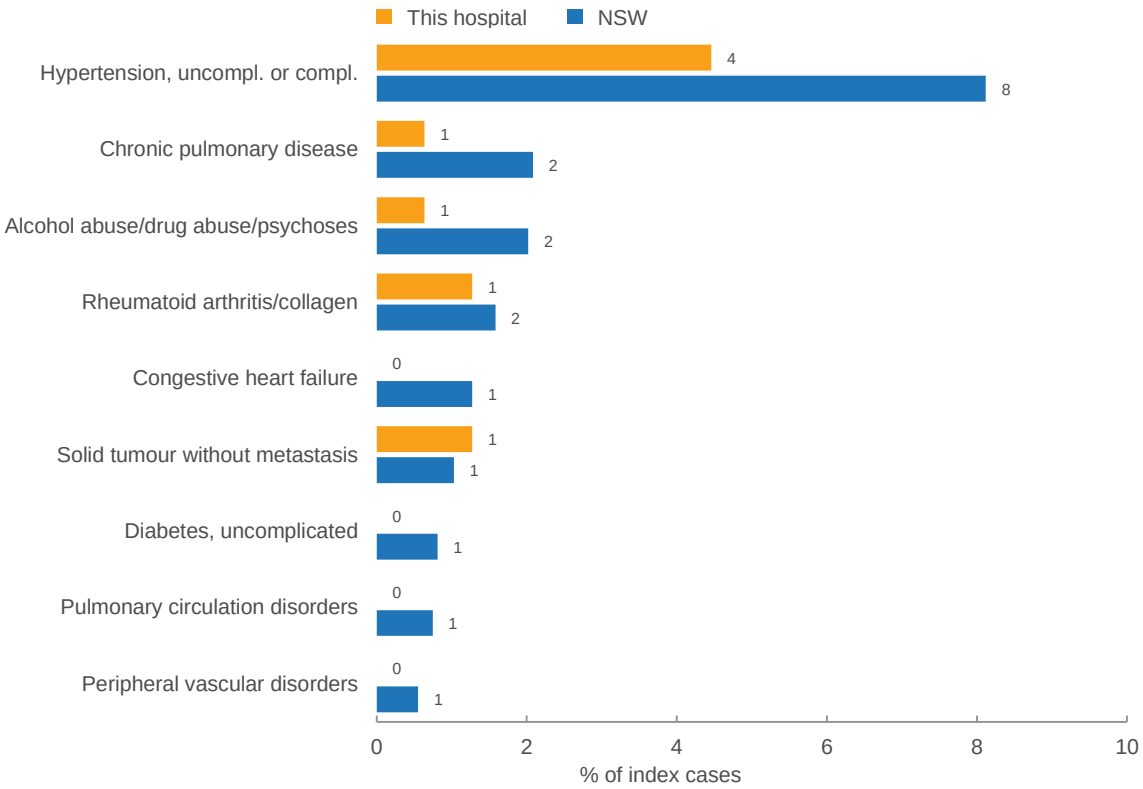
Patient cohort, index cases[3,4]

	This hospital	NSW
Total hip replacement index cases	157	7,773
Average length of stay (days)	6.1	6.2
Discharge destination		
Home	147	6,547
Other	10	1,226

Age profile for index cases (years)*[5]



Presence of factors associated with 60-day total hip replacement return to acute care[6]

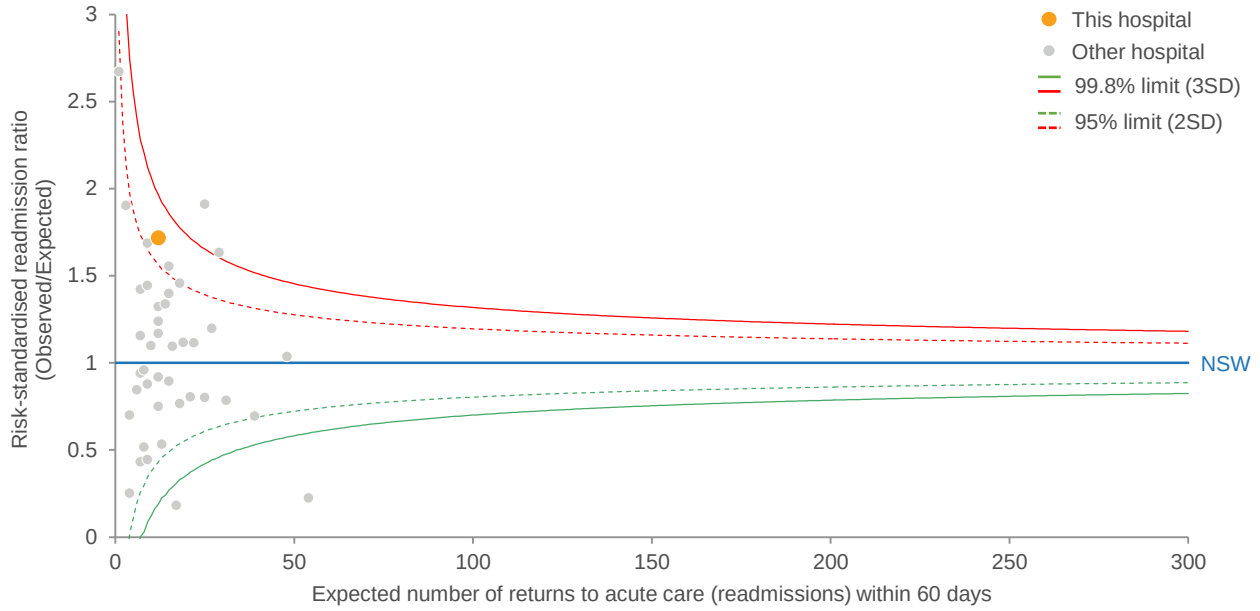


*Age and sex were significant factors in the final model of 60-day return to acute care following an index hospitalisation for total hip replacement. The percentage of index hospitalisations that were female patients at this hospital was 58% compared to 54% for NSW.

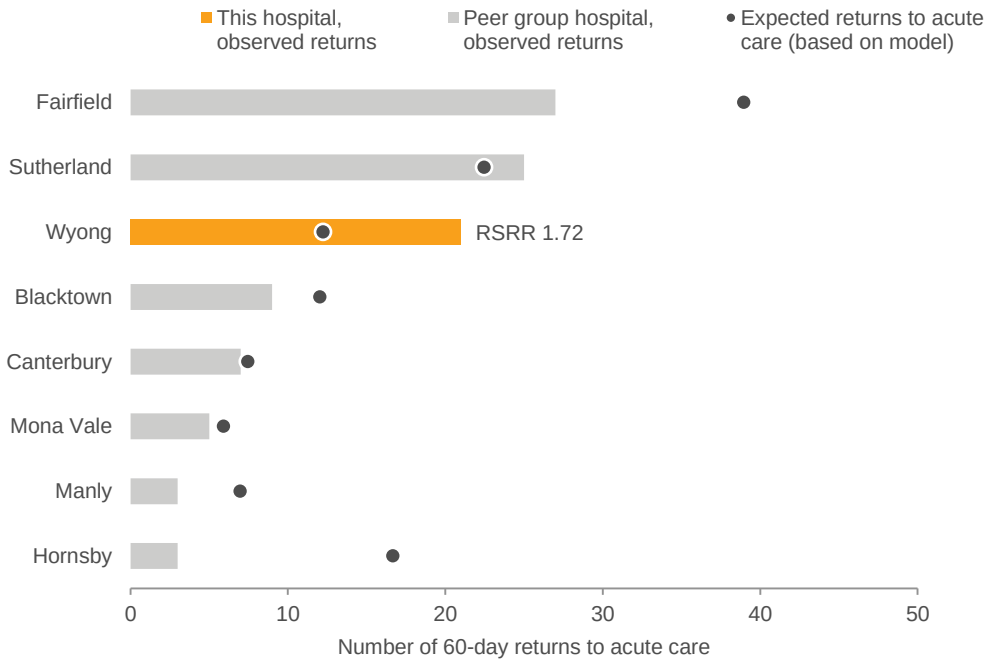
60-day return to acute care following hospitalisation for total hip replacement

Hospital-specific RSRRs report the ratio of actual or 'observed' number of returns to acute care to the 'expected' number of returns. A competing risk regression model draws on the NSW patient population's characteristics and outcomes to estimate the expected number of returns for each hospital, given the characteristics of its patients. An RSRR less than 1.0 indicates lower-than-expected returns to acute care, and a ratio higher than 1.0 indicates higher-than-expected returns. Small deviations from 1.0 are not considered to be meaningful. Funnel plots with 95% and 99.8% control limits around the NSW rate are used to identify outliers.

Hospital level total hip replacement RSRR by number of expected returns to acute care (readmissions)[7]



Observed and expected 60-day returns to acute care, grouped with peers[8]



60-day return to acute care following hospitalisation for total hip replacement

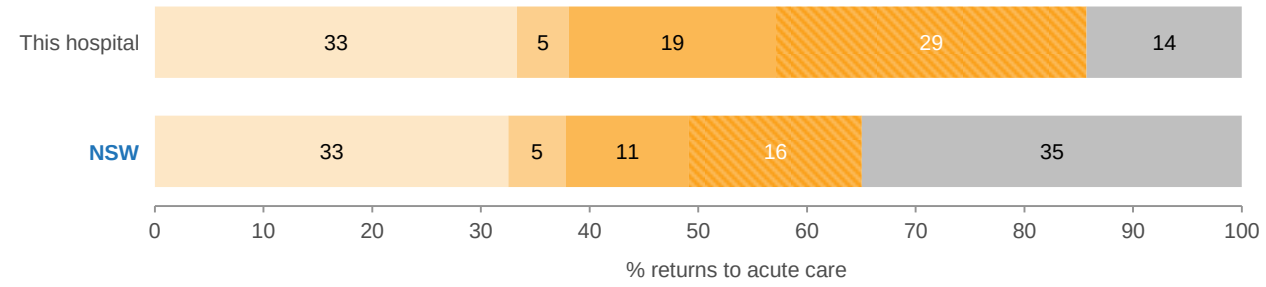
Location of returns to acute care[9]

	This hospital	NSW
Total returns to acute care following total hip replacement index hospitalisation	21	698
Returned to the hospital where acute care was completed	12	421
Returned to a different hospital	9	277
Of these:		
To an urban public hospital	3	
To a regional or rural public hospital	1	
To a private hospital	5	

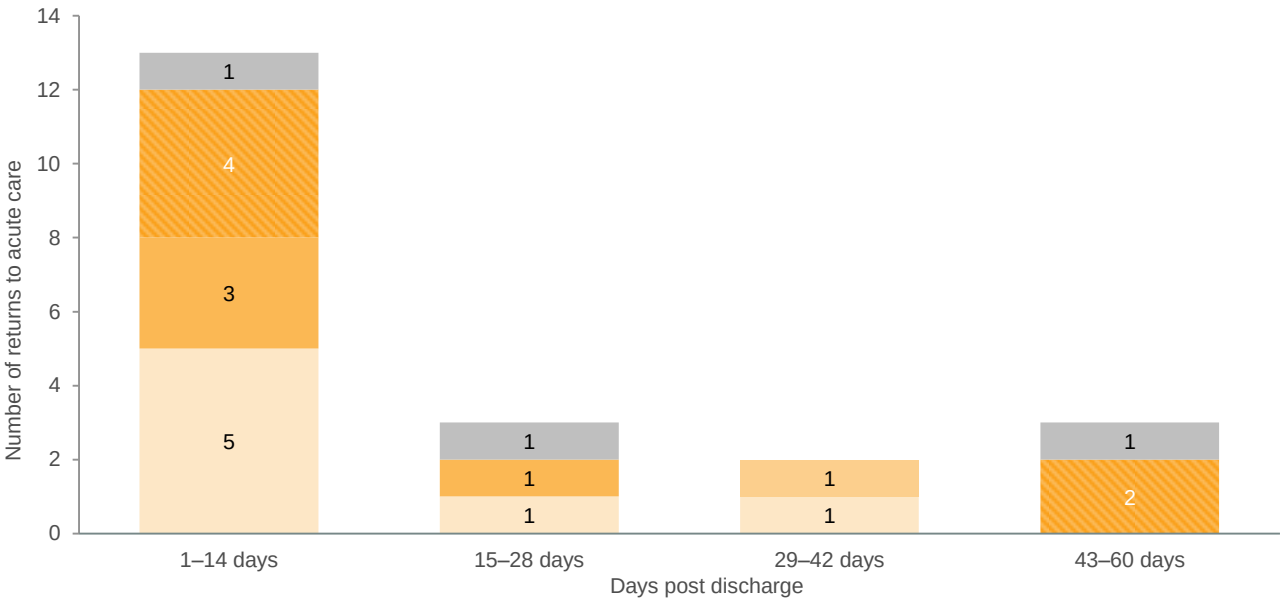
Reasons for and time to returns to acute care[10]

Orthopaedic complications (within time specified)
Orthopaedic complications (outside time specified)
Potentially related to hospital care (within time specified)
Potentially related to hospital care (outside time specified)
Other conditions

Distribution of reasons for returns to acute care



Number of, and reasons for, returns to acute care following hospitalisation for total hip replacement, by days post discharge

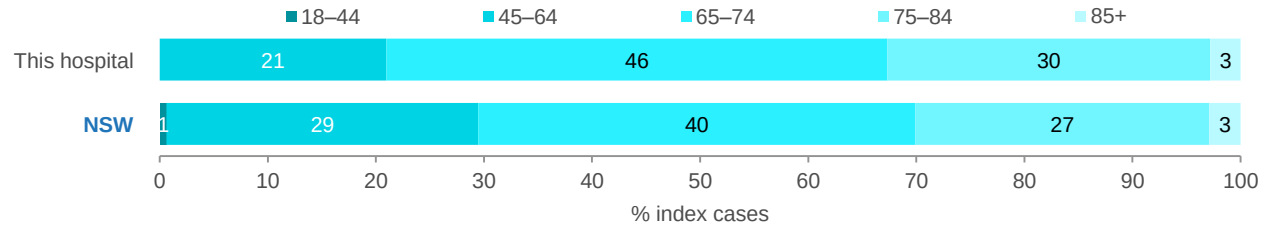


60-day return to acute care following hospitalisation for total knee replacement

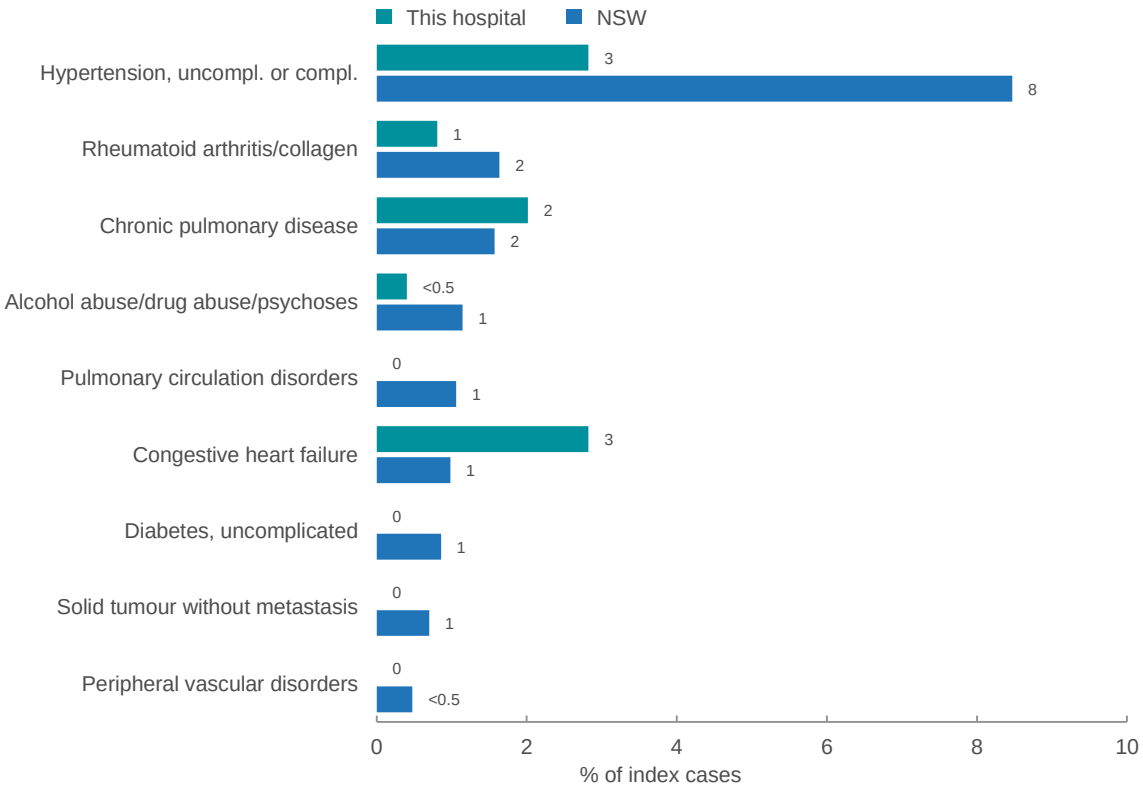
Patient cohort, index cases[3,4]

	This hospital	NSW
Total knee replacement index cases	248	13,870
Average length of stay (days)	6.9	6.4
Discharge destination		
Home	224	11,649
Other	24	2,221

Age profile for index cases (years)*[5]



Presence of factors associated with 60-day total knee replacement return to acute care[6]

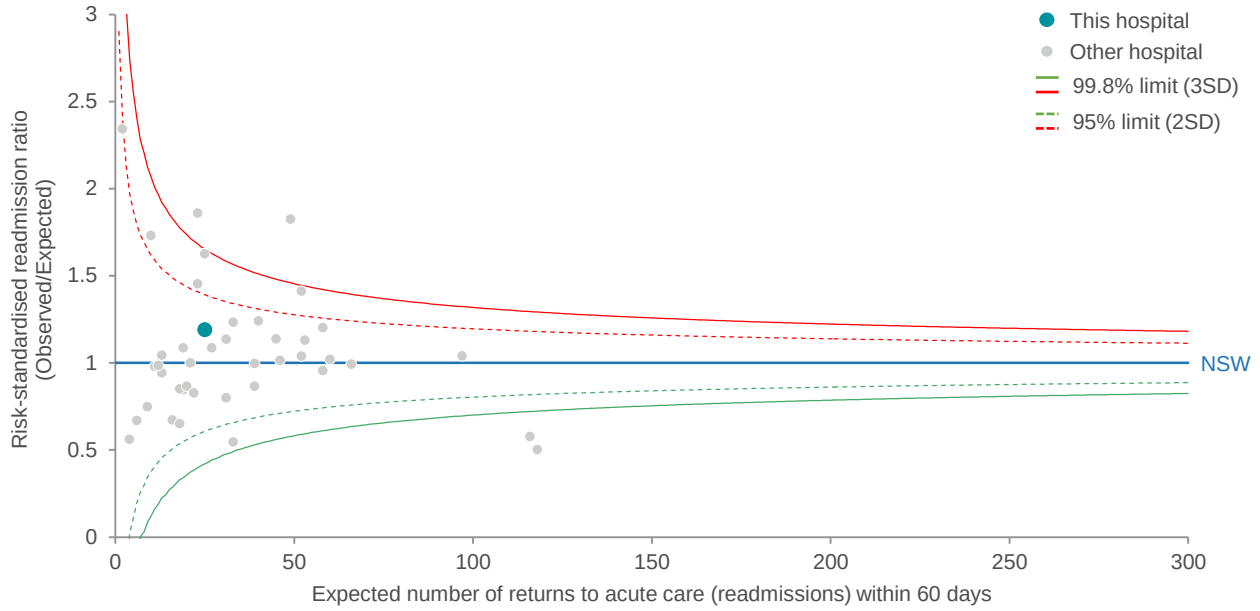


*Age and sex were significant factors in the final model of 60-day return to acute care following an index hospitalisation for total knee replacement. The percentage of index hospitalisations that were female patients at this hospital was 67% compared to 60% for NSW.

60-day return to acute care following hospitalisation for total knee replacement

Hospital-specific RSRRs report the ratio of actual or 'observed' number of returns to acute care to the 'expected' number of returns. A competing risk regression model draws on the NSW patient population's characteristics and outcomes to estimate the expected number of returns for each hospital, given the characteristics of its patients. An RSRR less than 1.0 indicates lower-than-expected returns to acute care, and a ratio higher than 1.0 indicates higher-than-expected returns. Small deviations from 1.0 are not considered to be meaningful. Funnel plots with 95% and 99.8% control limits around the NSW rate are used to identify outliers.

Hospital level total knee replacement RSRR by number of expected returns to acute care (readmissions)[7]



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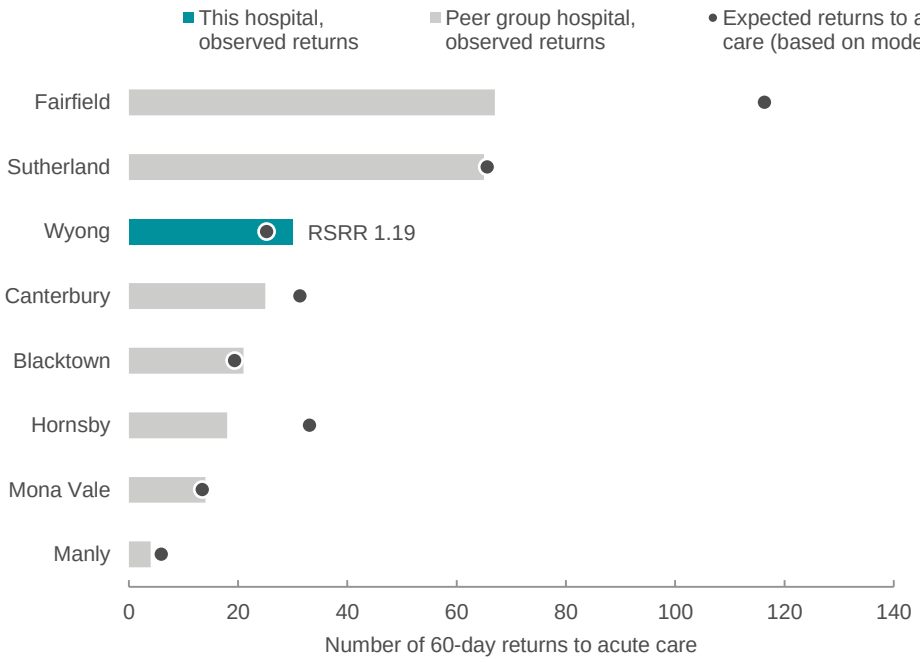

60-day return to acute care following hospitalisation for total knee replacement

Location of returns to acute care[9]

	This hospital	NSW
Total returns to acute care following total knee replacement index hospitalisation	30	1,533
Returned to the hospital where acute care was completed	18	997
Returned to a different hospital	12	536
Of these:		
To an urban public hospital	6	
To a regional or rural public hospital	1	
To a private hospital	5	

Reasons for and time to returns to acute care[10]

Orthopaedic complications (within time specified)
Orthopaedic complications (outside time specified)
Potentially related to hospital care (within time specified)
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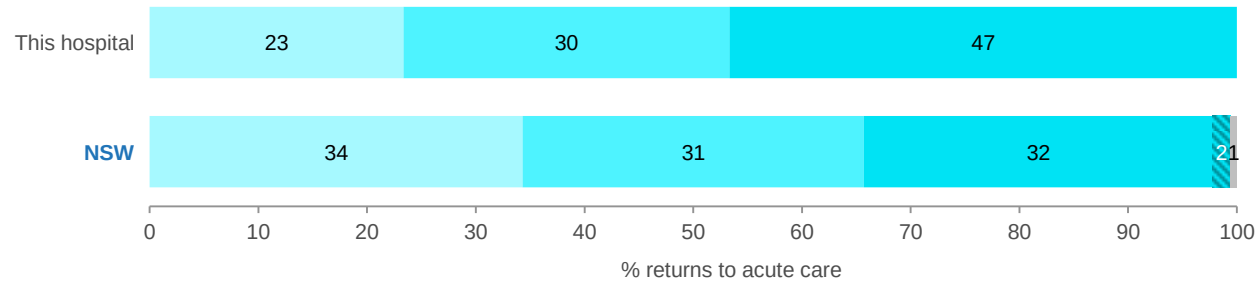
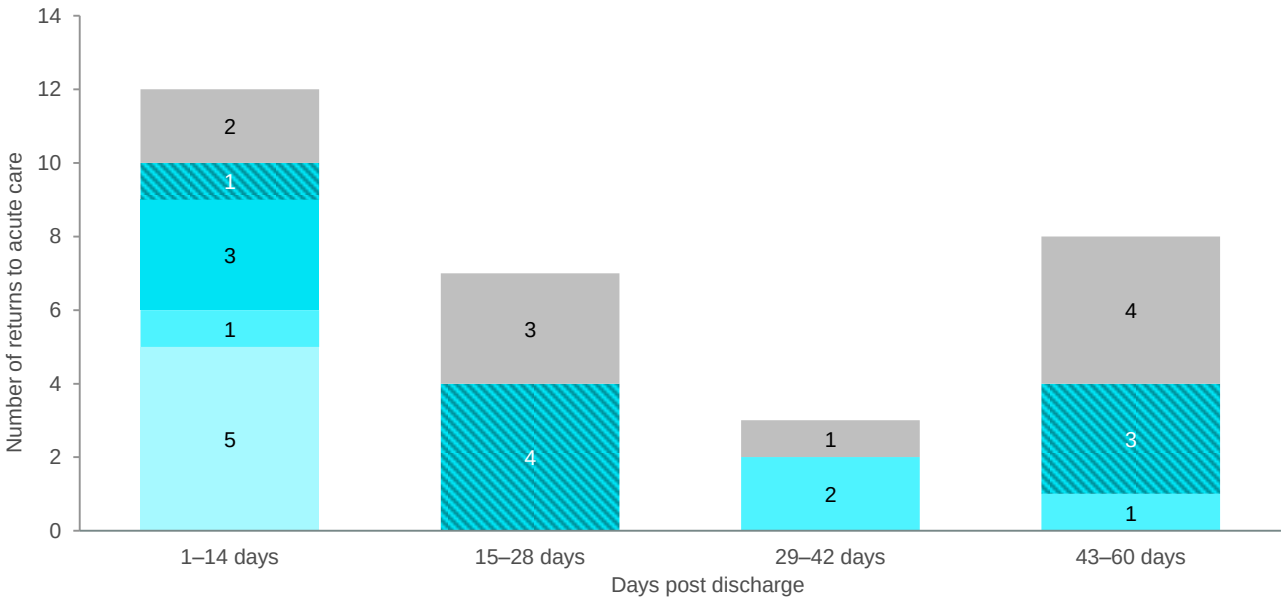
Other conditions

Distribution of reasons for returns to acute care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