Healthcare Quarterly

Seclusion and Restraint Supplement

January to March 2022

The conclusions in this report are those of BHI and no official endorsement by the NSW
Minister for Health, the NSW Ministry of Health or any other NSW public health organisation
is intended or should be inferred.

Table of contents

Seclusion and physical restraint

Seclusion and restraint involves the use of interventions to restrict the freedom of movement of a patient. These restrictive practices are not therapeutic but may be needed to support care. They should only be used as a last resort when other options are unsuccessful in maintaining safety for the patient, staff or others.

In NSW, there are more than 40 public hospitals, plus the forensic hospital, with specialised acute mental health units that treat patients with varying severities of mental illness. There are Mental Health Intensive Care Units (MHICUs) in six of these hospitals, providing treatment for patients with a higher level of clinical severity and complexity who may be more likely to experience seclusion and restraint.

The Justice Health and Forensic Mental Health Network (JHFMHN) provides specialised mental health services for forensic patients. JHFMHN is reported separately and not included in NSW totals to acknowledge the differences in model of care and the patient cohort.

BHI does not report on seclusion and restraint events in non-acute specialised mental health inpatient units or in emergency departments (EDs).

Most episodes of care in acute mental health units did not have a seclusion or restraint event in January to March 2022 (Figure 1).

The NSW Health Performance Framework includes three key performance indicators (KPIs) related to the use of restrictive practices. The KPI target for the percentage of acute mental health episodes of care with at least one seclusion event in 2021–22 is less than 4.1% for each hospital.

The percentage of acute mental health episodes of care with at least one seclusion event was 3.5%, up 0.4 percentage points compared with the same quarter the previous year (Figure 1, Table 1). The percentage was 4.1 or above in seven hospitals: Concord (11.3), Morisset (9.1), Cumberland (7.5), Liverpool (6.9), Bankstown-Lidcombe (6.8), Gosford (5.9) and Coffs Harbour (4.2) (Table 1).

The percentage of acute mental health episodes of care with at least one physical restraint event was 4.3%, relatively stable (down 0.1 percentage points) compared with the same quarter the previous year (Figure 1, Table 1).

There is variation across public hospitals in the use of these interventions (Table 1).

For more information on analyses of seclusion and restraint, see *Measurement Matters – Reporting on seclusion and restraint in NSW public hospitals* at **bhi.nsw.gov.au/BHI_reports/measurement_matters**

A **seclusion event** occurs when a patient is placed alone in a room or an area at any time of day or night, with no freedom of exit. The duration of the event, or the size and type of area in which a patient is confined is not relevant in determining what is or is not seclusion.

A **restraint event** occurs when a patient's freedom of movement is restricted by physical means (i.e. hands-on immobilisation by healthcare staff) or mechanical means (i.e. application of devices).

Figure 1   Percentage of acute mental health episodes of care occurring in specialised acute mental health inpatient units with at least one seclusion or physical restraint event, January to March 2022*

3.5% with ≥1 **seclusion** event

96.5% with no **seclusion** event
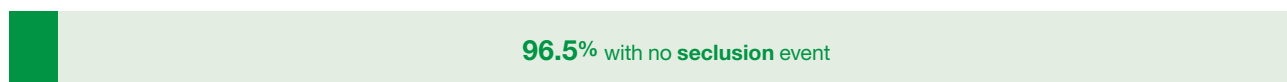
4.3% with ≥1 **physical restraint** event
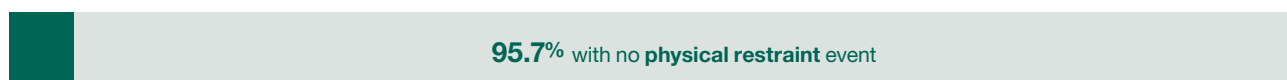
95.7% with no **physical restraint** event

* BHI does not report on seclusion and restraint events in non-acute specialised mental health inpatient units or in EDs.

Note: Seclusion and restraint data were drawn from the HIE on 20 April 2022, and manually collected measures received from InforMH, System Information and Analytics, NSW Ministry of Health on 6 May 2022.

Table 1   Percentage of acute mental health episodes of care occurring in specialised acute mental health inpatient units with at least one seclusion or physical restraint event, by public hospital, January to March 2022*

Hospital	Number of acute mental health episodes of care	Seclusion		Physical restraint	
		% of episodes with at least one event	Percentage point change since one year ago	% of episodes with at least one event	Percentage point change since one year ago
NSW†	**11,249**	**3.5**	**0.4**	**4.3**	**-0.1**
Armidale	81	0.0	0.0	0.0	0.0
Bankstown-Lidcombe	222	6.8	1.8	6.3	3.0
Blacktown	457	3.3	0.8	3.9	1.2
Blue Mountains	89	1.1	1.1	6.7	-0.5
Braeside	38	0.0	0.0	5.3	3.1
Broken Hill	45	0.0	-5.2	4.4	4.4
Campbelltown	512	2.3	0.5	2.3	-0.4
Children's at Westmead	52	1.9	1.9	7.7	2.8
Coffs Harbour	192	4.2	1.3	4.7	0.6
Dubbo	102	0.0	-1.2	1.0	-0.2
Gosford	170	5.9	0.2	6.5	0.2
Goulburn	207	0.0	-0.4	5.3	-0.5
Greenwich	56	0.0	0.0	3.6	3.6
John Hunter	66	0.0	0.0	6.1	2.1
Kempsey	47	0.0	0.0	0.0	0.0
Lismore	171	1.8	-1.5	4.1	-1.1
Liverpool	465	6.9	0.9	5.2	1.1
Macquarie	53	0.0	-1.5	0.0	-4.5
Maitland	208	3.8	-2.6	3.4	0.7
Manning	79	0.0	0.0	2.5	-1.6
Morisset	11	9.1	1.4	9.1	-6.3
Nepean	591	3.2	-1.6	4.9	0.2
Port Macquarie	96	2.1	1.1	3.1	0.0
Royal North Shore	276	0.7	0.4	2.9	0.3
Royal Prince Alfred	769	3.5	1.7	1.8	-1.0
Shellharbour	388	2.6	0.5	3.9	-0.1
South East Regional	107	0.0	-1.1	4.7	1.5
St George	212	0.5	-1.2	8.5	3.8
St Joseph's	22	0.0	0.0	4.5	4.5
St Vincent's	288	0.3	-0.2	2.4	-1.1
Sutherland	220	2.3	-1.2	4.1	-0.4
Sydney Children's	174	0.6	-1.4	0.6	-1.4
Tamworth	229	0.9	-3.0	2.6	0.0
Tweed	191	1.6	0.6	2.6	-2.0
Wagga Wagga	297	1.7	0.1	4.0	0.2
Westmead	149	0.0	0.0	4.7	3.4
Wollongong	242	3.3	-0.2	2.5	-1.7
Wyong	284	3.5	-0.7	6.3	0.5
Concord	688	11.3	4.7	7.3	1.1
Cumberland	858	7.5	1.8	4.4	-1.8
Hornsby	351	1.1	-0.4	4.6	-3.0
Hunter New England Mater MH	751	3.6	-2.1	5.5	-1.2
Orange	380	2.4	-0.5	4.7	1.6
Prince of Wales	363	2.5	1.6	4.7	-3.8
The Forensic Hospital†	54	25.9	4.9	42.6	16.8

Left vertical labels: "No mental health intensive care unit" (Armidale–Wyong), "MHICU" (Concord–Prince of Wales), "JH" (The Forensic Hospital†)

* Episodes of care include same-day, overnight, completed and non-completed episodes excluding episodes at the Forensic Hospital. Episodes of care for the Forensic Hospital include same-day, overnight, completed and non-completed episodes.

† Justice Health (JH) is not included in NSW totals because of the differences in model of care and the patient cohort. For more information, see *Measurement Matters – Reporting on seclusion and restraint in NSW public hospitals*, available at **bhi.nsw.gov.au**

Notes: MHICU = Mental Health Intensive Care Unit. JHFMHN = Justice Health and Forensic Mental Health Network.

Results for Northern Beaches Hospital are not included.

Seclusion and physical restraint

Across January to March quarters, the percentage of acute mental health episodes of care in NSW with at least one seclusion event decreased from 4.2% in 2017 to 3.5% in 2022. However, there has been variation during that time (Figure 2).

The percentage of acute mental health episodes of care in NSW with at least one physical restraint event remained relatively stable over the past five years (Figure 3).

The percentage of acute mental health episodes of care with at least one seclusion or physical restraint event in hospitals with a MHICU was typically higher, and showed more variation than in hospitals without a MHICU (Figure 2, 3).

Figure 2

Percentage of acute mental health episodes of care occurring in specialised acute mental health inpatient units with at least one seclusion event, January 2017 to March 2022
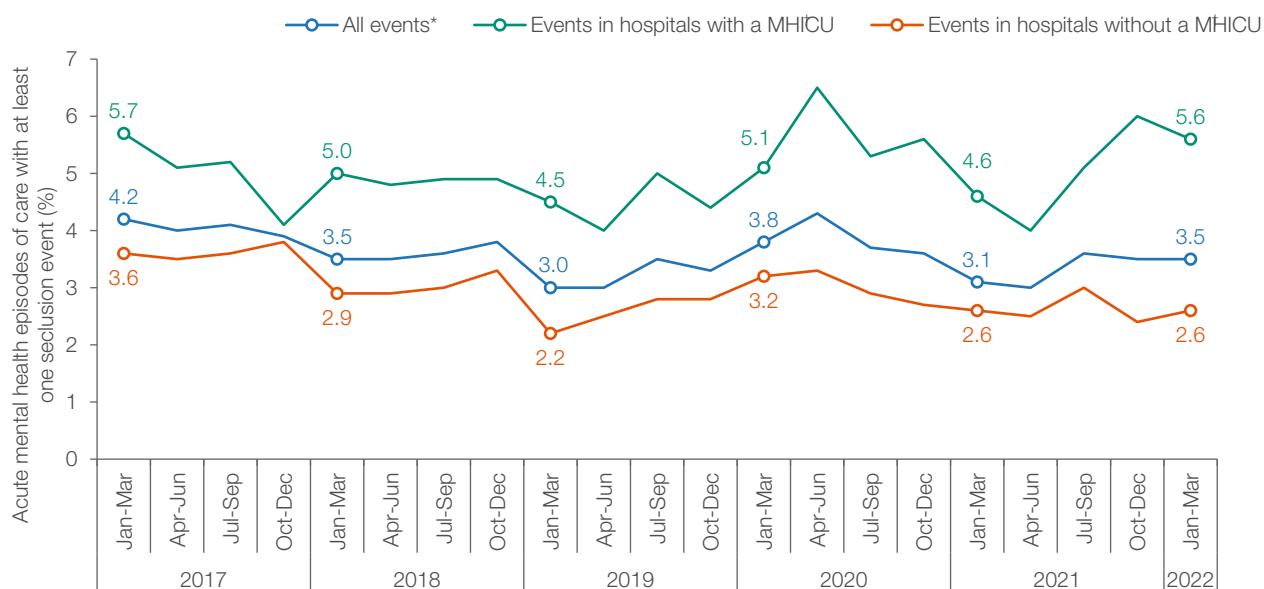
Figure 3

Percentage of acute mental health episodes of care occurring in specialised acute mental health inpatient units with at least one physical restraint event, January 2017 to March 2022
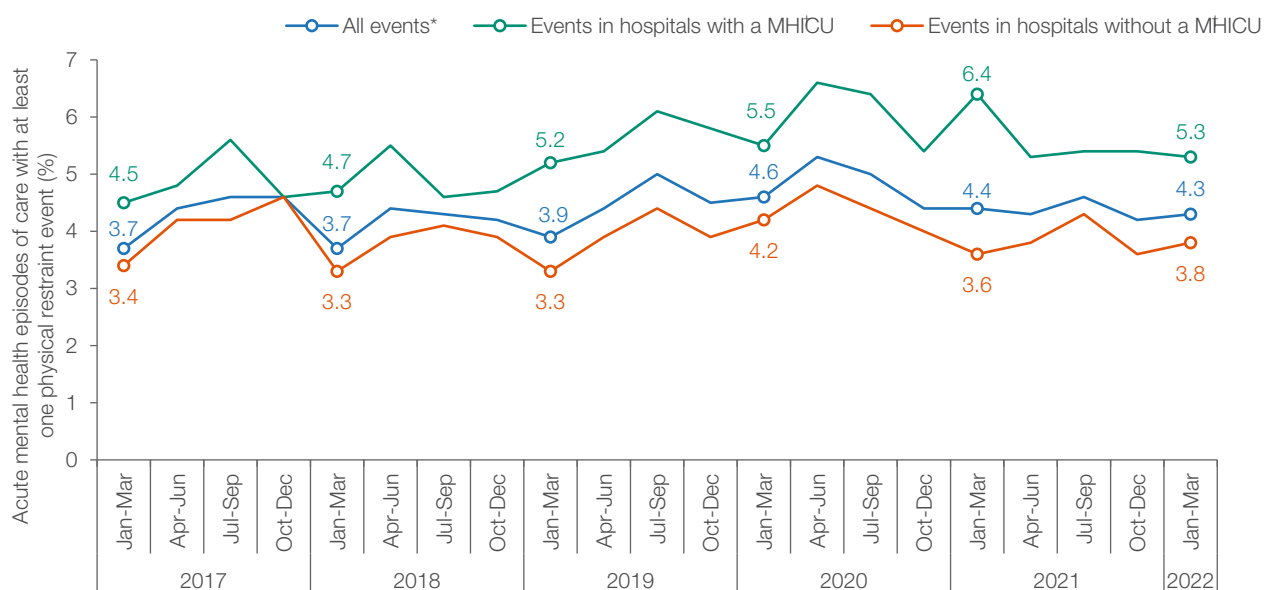
* 'All events' includes all seclusion or physical restraint events occurring in specialised acute mental health inpatient units, excluding episodes in the Justice Health and Forensic Mental Health Network (JHFMHN).
† MHICU = Mental Health Intensive Care Unit
Note: For more information, including which hospitals are included each quarter, please refer to the technical supplement to this *Healthcare Quarterly* and *Measurement Matters – Reporting on seclusion and restraint in NSW public hospitals*, available at **bhi.nsw.gov.au**

Seclusion and restraint events and rate

Use of seclusion and restraint in hospitals can be affected by a range of factors including the acuity and mix of patients, local models of care, staffing levels and training, and the physical environment of the unit.

Across NSW, there were 642 seclusion events in January to March 2022, down 10 events compared with the same quarter the previous year. There were 842 physical restraint events, down 117 (Table 2).

The number of seclusion and restraint events varied across public hospitals. The highest numbers of seclusion and restraint events mostly occurred in hospitals with a MHICU and at the Forensic Hospital (Table 2).

There were 35 mechanical restraint events in NSW public hospitals with specialised acute mental health units (excluding the Forensic Hospital). This was up by 4 events compared with the same quarter the previous year (data not shown by hospital due to small numbers). At the Forensic Hospital, there were 142 mechanical restraint events, up by 72 events compared with the same quarter the previous year (data not shown).

The NSW Health KPI target for rate of seclusion in 2021–22 is less than 5.1 per 1,000 bed days for each hospital. In January to March 2022, the NSW rate of seclusion was 5.6, up 0.5 compared with the same quarter the previous year (Table 2).

The rate of seclusion was below 5.1 per 1,000 bed days in 34 hospitals. The rate was 5.1 or above in 10 hospitals: Liverpool (17.0), Bankstown-Lidcombe (14.9), Cumberland (14.3), Concord (11.9), Hunter New England Mater Mental Health Centre (9.2), Sutherland (8.5), Blacktown (8.4), Maitland (5.8), Royal Prince Alfred (5.4) and Gosford (5.1) (Table 2).

The rate of physical restraint was 7.4 per 1,000 bed days, relatively stable (down 0.1) compared with the same quarter the previous year (Table 2).

For more information on analyses of seclusion and restraint, see *Measurement Matters – Reporting on seclusion and restraint in NSW public hospitals* at **bhi.nsw.gov.au/BHI_reports/measurement_matters**

Table 2   Number and rate of seclusion and physical restraint events occurring in specialised acute mental health inpatient units, by public hospital, January to March 2022

Hospital	Seclusion			Physical restraint		
	Total number of seclusion events	Change in events since one year ago	Rate per 1,000 bed days	Total number of physical restraint events	Change in events since one year ago	Rate per 1,000 bed days
NSW	**642**	**-10**	**5.6**	**842**	**-117**	**7.4**
Armidale	0	0	0	0	0	0
Bankstown-Lidcombe	35	19	14.9	17	-1	7.2
Blacktown	21	4	8.4	23	3	9.2
Blue Mountains	<5	1	0.8	9	3	7.3
Braeside	0	0	0	11	10	7.8
Broken Hill	0	-3	0	<5	2	6.5
Campbelltown	15	2	3.3	22	4	4.8
Children's at Westmead	<5	1	2	11	7	22.1
Coffs Harbour	8	0	3.5	15	1	6.6
Dubbo	0	-1	0	<5	0	1.4
Gosford	11	2	5.1	14	0	6.6
Goulburn	0	-1	0	20	-1	13.2
Greenwich	0	0	0	6	6	3.6
John Hunter	0	0	0	17	1	39.9
Kempsey	0	0	0	0	0	0
Lismore	<5	-10	1.7	12	-10	5
Liverpool	69	12	17	35	9	8.6
Macquarie	0	-1	0	0	-3	0
Maitland	10	-5	5.8	7	0	4
Manning	0	0	0	<5	-4	2.5
Morisset	<5	-5	2.5	<5	-2	10.1
Nepean	25	-26	4.8	35	-10	6.8
Port Macquarie	<5	-3	2.7	<5	-5	3.6
Royal North Shore	<5	1	0.8	18	4	6.8
Royal Prince Alfred	34	12	5.4	16	-21	2.5
Shellharbour	12	-2	4	22	-7	7.3
South East Regional	0	-1	0	7	1	8.2
St George	<5	-6	0.5	32	1	14.9
St Joseph's	0	0	0	<5	3	3.4
St Vincent's	<5	-1	0.4	8	-23	3
Sutherland	14	5	8.5	23	3	13.9
Sydney Children's	<5	-14	2	<5	-19	2
Tamworth	<5	-16	1.1	7	-3	3.9
Tweed	5	3	2.4	11	2	5.2
Wagga Wagga	6	0	2.1	27	11	9.5
Westmead	0	0	0	13	10	5.8
Wollongong	9	-5	3.7	7	-8	2.8
Wyong	16	3	4.2	30	10	7.9
Concord	130	48	11.9	103	7	9.4
Cumberland	109	15	14.3	52	-4	6.8
Hornsby	<5	-16	1	34	-26	8.6
Hunter New England Mater MH	67	-25	9.2	112	-12	15.4
Orange	12	-2	2.9	20	-10	4.9
Prince of Wales	13	5	2.8	29	-46	6.3
The Forensic Hospital	63	41	16	228	44	57.8

Row group labels (left margin): No mental health intensive care unit (Armidale through Wyong), MHICU (Concord through Prince of Wales), JH (The Forensic Hospital)

* Justice Health (JH) is not included in NSW totals because of the differences in model of care and the patient cohort. For more information, see *Measurement Matters: Reporting on seclusion and restraint in NSW public hospitals,* available at **bhi.nsw.gov.au**

Notes: MHICU = Mental Health Intensive Care Unit. JHFMHN = Justice Health and Forensic Mental Health Network.

Results for Northern Beaches Hospital are not included.

Seclusion events and rate

Across January to March quarters, the number of seclusion events decreased from 860 in 2017 to 642 in 2022, down 25.3% (218). The number of seclusion events in hospitals with a MHICU remained relatively stable over the past five years (Figure 4).

The rate of seclusion is the number of seclusion events per 1,000 bed days. Since 2018–19, the NSW Ministry of Health's KPI target for the rate of seclusion has been less than 5.1 per 1,000 bed days.

Across January to March quarters, the rate decreased from 6.6 per 1,000 bed days in 2017 to 5.6 per 1,000 in 2022. The rate of seclusion in hospitals with a MHICU was typically higher and showed more variation than in hospitals without a MHICU (Figure 5).

Figure 4

Number of seclusion events occurring in specialised acute mental health inpatient units, January 2017 to March 2022
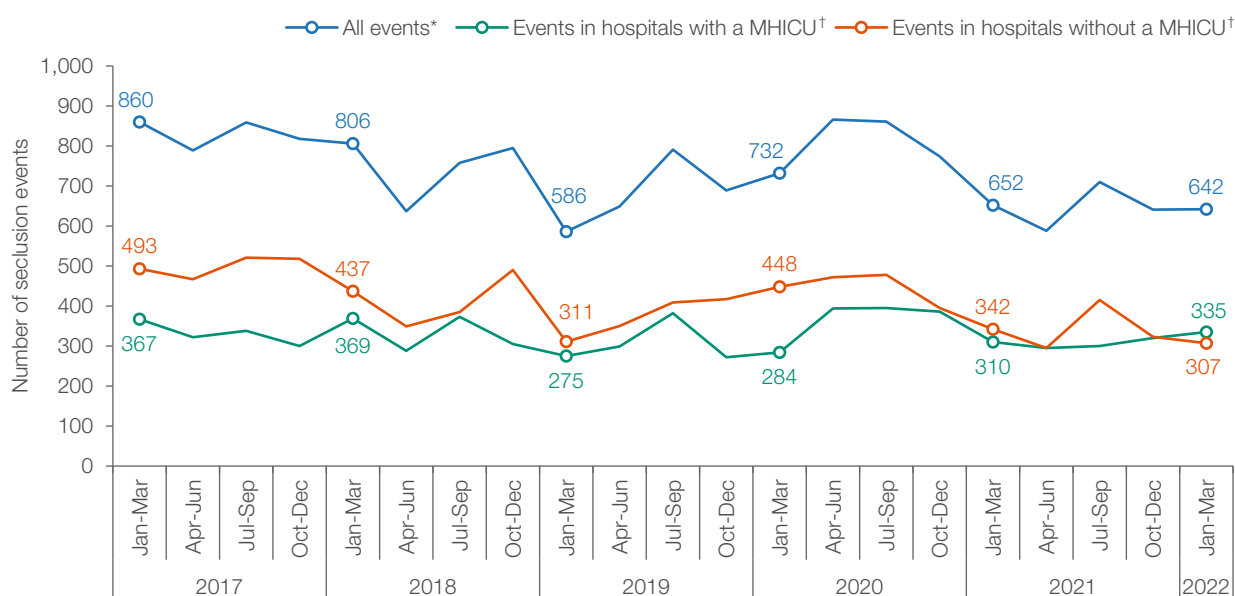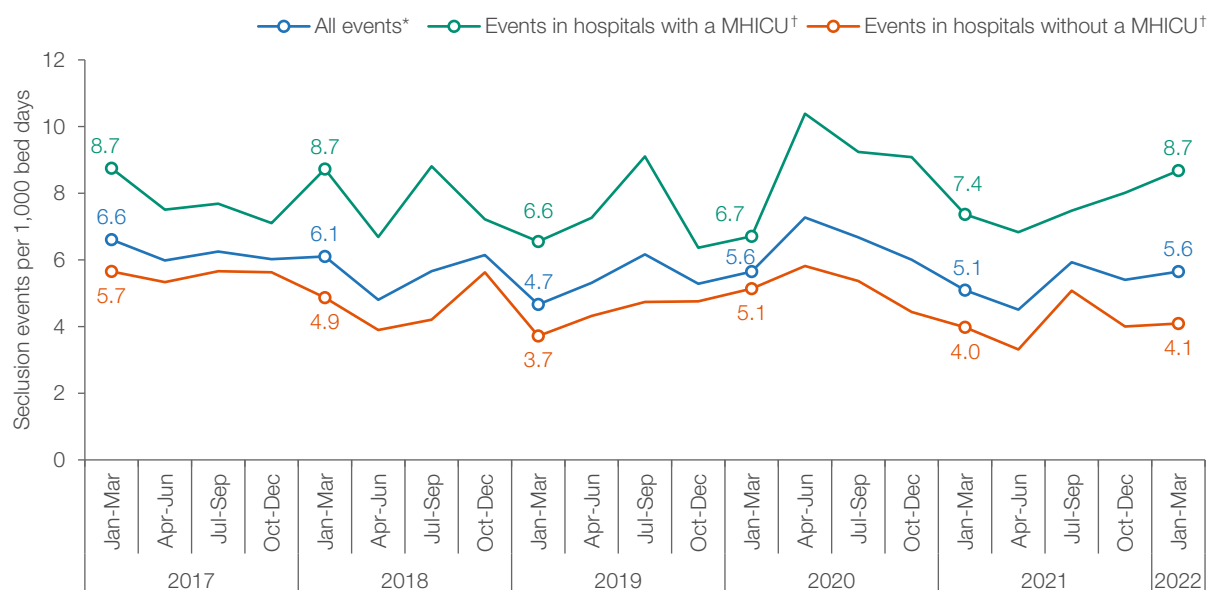
Legend: —○— All events* —○— Events in hospitals with a MHICU† —○— Events in hospitals without a MHICU†

Y-axis: Number of seclusion events

Selected data labels (blue, All events*): 860, 806, 586, 732, 652, 642
Selected data labels (green, Events in hospitals with a MHICU†): 367, 369, 275, 284, 310, 335
Selected data labels (orange, Events in hospitals without a MHICU†): 493, 437, 311, 448, 342, 307

X-axis quarters: Jan–Mar, Apr–Jun, Jul–Sep, Oct–Dec across 2017, 2018, 2019, 2020, 2021 and Jan–Mar 2022

Figure 5

Number of seclusion events per 1,000 bed days in specialised acute mental health inpatient units, January 2017 to March 2022

Legend: —○— All events* —○— Events in hospitals with a MHICU† —○— Events in hospitals without a MHICU†

Y-axis: Seclusion events per 1,000 bed days

Selected data labels (blue, All events*): 6.6, 6.1, 4.7, 5.6, 5.1, 5.6
Selected data labels (green, Events in hospitals with a MHICU†): 8.7, 8.7, 6.6, 6.7, 7.4, 8.7
Selected data labels (orange, Events in hospitals without a MHICU†): 5.7, 4.9, 3.7, 5.1, 4.0, 4.1

X-axis quarters: Jan–Mar, Apr–Jun, Jul–Sep, Oct–Dec across 2017, 2018, 2019, 2020, 2021 and Jan–Mar 2022

* 'All events' includes all seclusion events occurring in specialised acute mental health inpatient units, excluding episodes in the Justice Health and Forensic Mental Health Network (JHFMHN).
† MHICU = Mental Health Intensive Care Unit
Note: For more information, including which hospitals are included each quarter, please refer to the technical supplement to this *Healthcare Quarterly* and *Measurement Matters – Reporting on seclusion and restraint in NSW public hospitals*, available at **bhi.nsw.gov.au**

Physical restraint events and rate

The number of physical restraint events showed some seasonal variation over five years, trending upwards from 742 in January to March 2017 to a peak of 1,144 in April to June 2020, before decreasing to 842 in January to March 2022 (Figure 6).

The rate of physical restraint refers to the number of physical restraint events per 1,000 bed days. The rate has risen over five years from 5.7 in January to March 2017 to 7.4 in January to March 2022. The rate peaked in April to June 2020, followed by a decrease to January to March 2022. The rate of physical restraint in hospitals with a MHICU was typically higher and showed more variation than in hospitals without a MHICU (Figure 7).

Figure 6

Number of physical restraint events occurring in specialised acute mental health inpatient units, January 2017 to March 2022
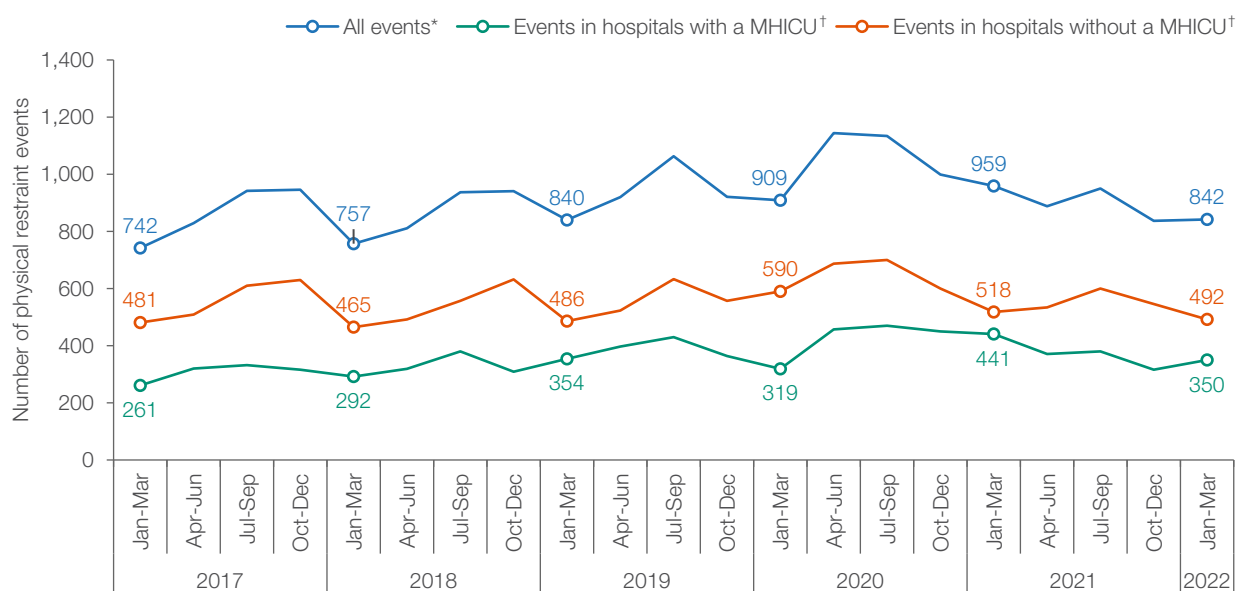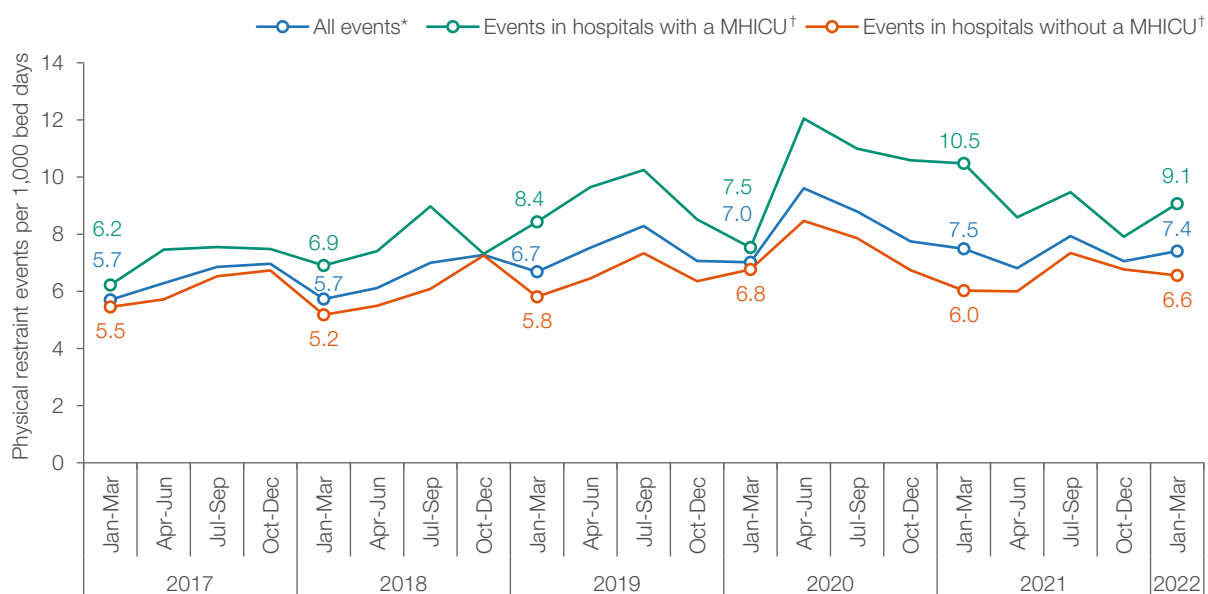

Figure 7

Number of physical restraint events per 1,000 bed days in specialised acute mental health inpatient units, January 2017 to March 2022

* 'All events' includes all physical restraint events occurring in specialised acute mental health inpatient units, excluding episodes in the JHFMHN.
† MHICU = Mental Health Intensive Care Unit
Note: For more information, including which hospitals are included each quarter, please refer to the technical supplement to this *Healthcare Quarterly* and *Measurement Matters – Reporting on seclusion and restraint in NSW public hospitals*, available at **bhi.nsw.gov.au**

Duration of seclusion and physical restraint events

While seclusion and restraint are used to maintain safety for a patient, staff or others, the length of time that an individual is exposed to these restrictive interventions should be as short as possible.

When examining average duration of seclusion and restraint events, it should be noted that variation can be affected by a single event lasting considerably longer than others.

The NSW Health KPI target for the average duration of seclusion events in 2021–22 is less than four hours.

Statewide, the average duration of a seclusion event was 11 hours 18 minutes in January to March 2022, up 4 hours 54 minutes compared with the same quarter the previous year (Table 3). The average duration was longer than four hours in 11 hospitals: Coffs Harbour (22h 48m), Cumberland (22h 20m), Nepean (18h 56m), Concord (14h 46m), Liverpool (13h 43m), Prince of Wales (8h 33m), Blacktown (6h 59m), Royal Prince Alfred (6h 42m), Bankstown-Lidcombe (6h 32m), The Tweed (5h 27m) and Shellharbour (5h 20m) (Table 3).

In January to March 2022, the average duration of a physical restraint event was 4 minutes, down 1 minute compared with the same quarter the previous year (Table 3).

The average duration of a mechanical restraint event in NSW public hospitals (excluding the Forensic Hospital) was 1 hour 56 minutes. This was up 42 minutes compared with the same quarter the previous year (data not shown by hospital due to small numbers). At the Forensic Hospital, the average duration of a mechanical restraint event was 1 hour 10 minutes, up 42 minutes compared with the same quarter the previous year (data not shown).

Table 3 Average duration of seclusion and physical restraint events occurring in specialised acute mental health inpatient units, by public hospital, January to March 2022

Hospital	Seclusion		Physical restraint	
	Average duration	Change since one year ago	Average duration	Change since one year ago
NSW	**11h 18m**	**4h 54m**	**4m**	**-1m**
Armidale	0m	0m	0m	0m
Bankstown-Lidcombe	6h 32m	3h 12m	1m	0m
Blacktown	6h 59m	3h 42m	2m	1m
Blue Mountains	†	‡	8m	5m
Braeside	0m	0m	1m	‡
Broken Hill	0m	‡	†	‡
Campbelltown	2h 9m	13m	2m	1m
Children's at Westmead	†	‡	1m	‡
Coffs Harbour	22h 48m	18h 59m	3m	0m
Dubbo	0m	‡	†	‡
Gosford	2h 12m	59m	1m	-3m
Goulburn	0m	‡	1m	-1m
Greenwich	0m	0m	1m	1m
John Hunter	0m	0m	2m	1m
Kempsey	0m	0m	0m	0m
Lismore	†	‡	2m	-1m
Liverpool	13h 43m	8h 0m	1m	0m
Macquarie	0m	‡	0m	‡
Maitland	3h 18m	1h 12m	2m	-2m
Manning	0m	0m	†	‡
Morisset	†	‡	†	‡
Nepean	18h 56m	11h 48m	3m	1m
Port Macquarie	†	‡	†	‡
Royal North Shore	†	‡	1m	-1m
Royal Prince Alfred	6h 42m	3h 29m	6m	-3m
Shellharbour	5h 20m	1h 34m	3m	-4m
South East Regional	0m	‡	2m	-3m
St George	†	‡	1m	0m
St Joseph's	0m	0m	†	‡
St Vincent's	†	‡	4m	2m
Sutherland	55m	12m	6m	4m
Sydney Children's	†	‡	†	‡
Tamworth	†	‡	13m	9m
Tweed	5h 27m	‡	3m	-1m
Wagga Wagga	40m	6m	2m	0m
Westmead	0m	0m	1m	‡
Wollongong	3h 43m	26m	2m	-4m
Wyong	1h 4m	0m	6m	3m
Concord	14h 46m	-1h 41m	4m	-4m
Cumberland	22h 20m	11h 54m	2m	-1m
Hornsby	†	‡	8m	-5m
Hunter New England Mater MH	3h 6m	-7m	7m	1m
Orange	47m	12m	5m	-3m
Prince of Wales	8h 33m	-1h 50m	2m	-1m
The Forensic Hospital	11h 57m	1h 40m	4m	-4m

Row group labels (vertical, left side): No mental health intensive care unit (Armidale through Wyong); MHICU (Concord through Prince of Wales); JH (The Forensic Hospital)

* Justice Health (JH) is not included in NSW totals because of the differences in model of care and the patient cohort. For more information, see *Measurement Matters – Reporting on seclusion and restraint in NSW public hospitals*, available at **bhi.nsw.gov.au**

† Suppressed due to small number of seclusion/physical restraint events in the reporting period, to protect patient privacy.

‡ Suppressed due to small number of seclusion/physical restraint events in the reporting period or in the same quarter the previous year, to protect patient privacy.

Notes: MHICU = Mental Health Intensive Care Unit. JHFMHN = Justice Health and Forensic Mental Health Network.

Results for Northern Beaches Hospital are not included.

Duration of seclusion and physical restraint events

The NSW Health KPI for average seclusion duration of less than four hours has been in place since 2017–18.

The average duration of a seclusion event at NSW level has been longer than the NSW Health KPI target of four hours since January to March 2017 (Figure 8).

The average duration of a seclusion event increased from 6 hours 24 minutes in January to March 2017 to 11 hours 18 minutes in January to March 2022, the longest of any quarter in the past five years. The increase in average duration of a seclusion event was more pronounced in hospitals with a MHICU than in hospitals without a MHICU (Figure 8).

The average duration of a physical restraint event varied over five years. It peaked in October to December 2018, followed by a gradual decrease to 3 minutes 39 seconds in January to March 2022. The average duration of a physical restraint event in hospitals with a MHICU was typically longer than in hospitals without a MHICU (Figure 9).

Figure 8   Average duration of seclusion events occurring in specialised acute mental health inpatient units, January 2017 to March 2022
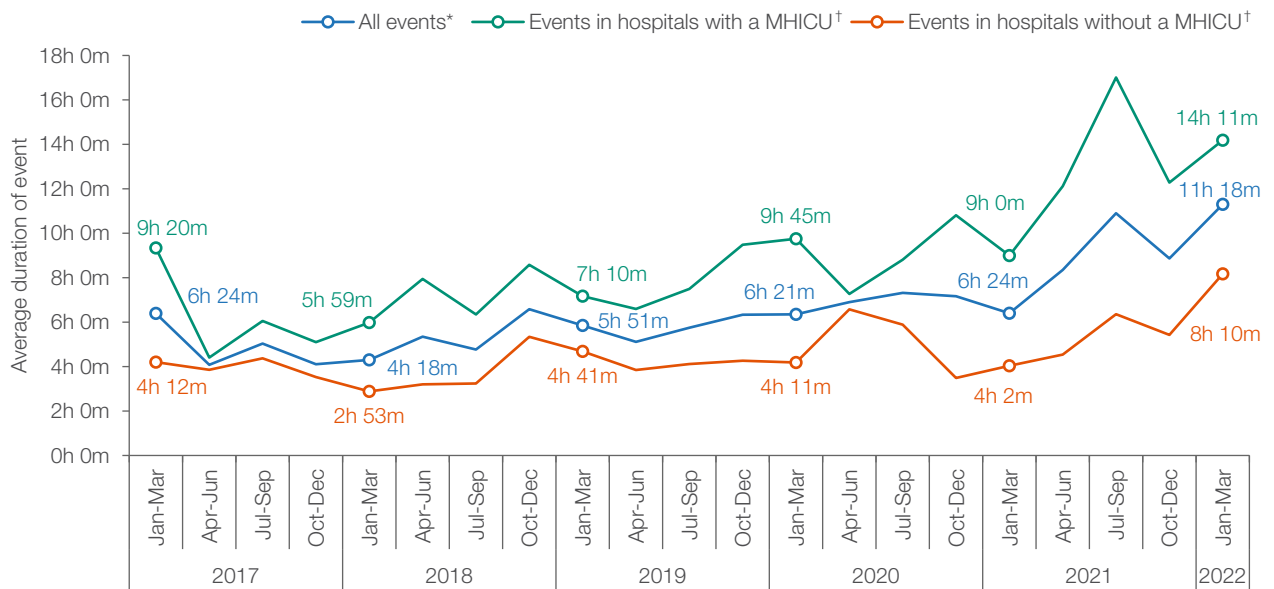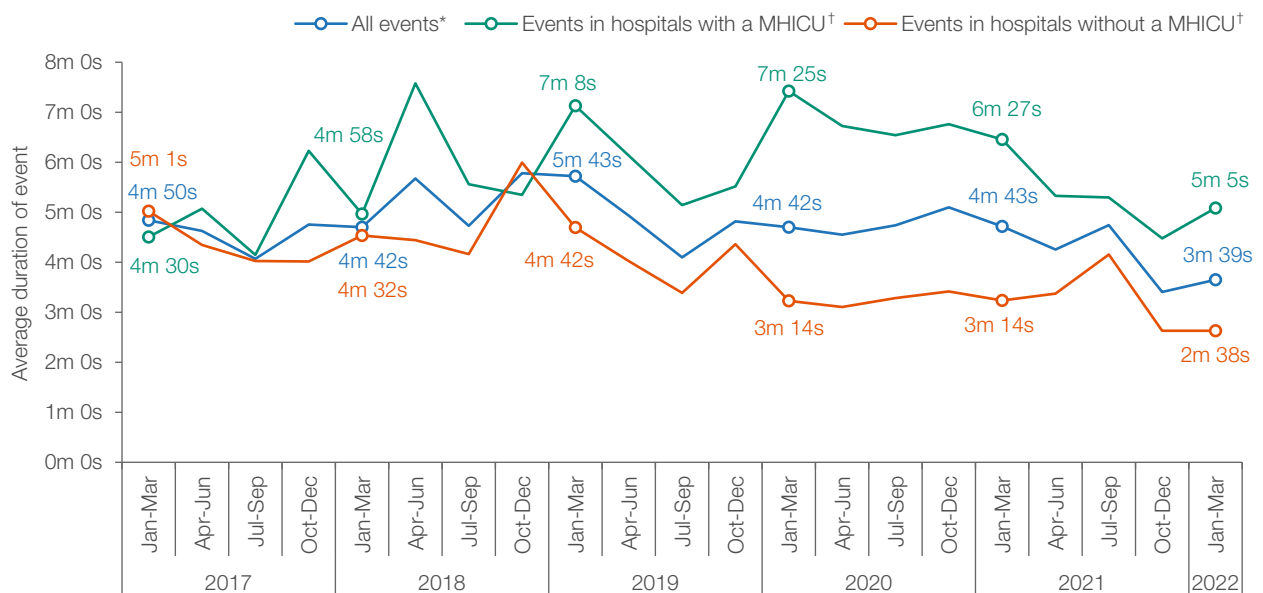

Figure 9   Average duration of physical restraint events occurring in specialised acute mental health inpatient units, January 2017 to March 2022

* 'All events' includes all seclusion or physical restraint events occurring in specialised acute mental health inpatient units, excluding episodes in the JHFMHN.
† MHICU = Mental Health Intensive Care Unit
Note: For more information, including which hospitals are included each quarter, please refer to the technical supplement to this *Healthcare Quarterly* and *Measurement Matters – Reporting on seclusion and restraint in NSW public hospitals*, available at **bhi.nsw.gov.au**

About the Bureau of Health Information

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

BHI was established in 2009 and supports the accountability of the healthcare system by providing regular and detailed information to the community, government and healthcare professionals. This in turn supports quality improvement by highlighting how well the healthcare system is functioning and where there are opportunities to improve.

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

BHI publishes a range of reports and information products, including interactive tools, that provide objective, accurate and meaningful information about how the health system is performing.

BHI's work relies on the efforts of a wide range of healthcare, data and policy experts. All of our assessment efforts leverage the work of hospital coders, analysts, technicians and healthcare providers who gather, codify and supply data. Our public reporting of performance information is enabled and enhanced by the infrastructure, expertise and stewardship provided by colleagues from NSW Health and its pillar organisations.

bhi.nsw.gov.au