icnarc | intensive care national audit & research centre

case mix programme

Quarterly Quality Report

Royal Papworth Hospital, Critical Care Unit

1 April 2018 to 31 March 2019

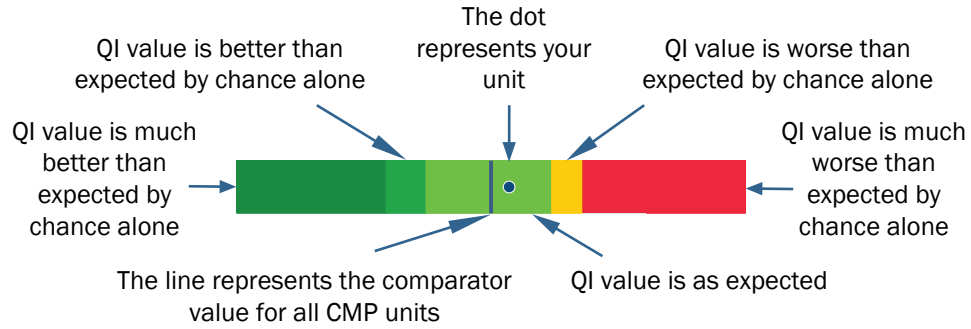
(N=2,588)

Date of report: 22/06/2019

Understanding your report

Quality indicator dashboard page

The Case Mix Programme (CMP) Quality indicator (QI) dashboard summarises the results for each QI for a single adult, critical care unit.



The comparator value

For the QIs High-risk admissions from the ward, High-risk sepsis admissions from the ward, Unit-acquired infections in blood, Out-of-hours discharges to the ward (not delayed), Discharges direct to home, Non-clinical transfers to another unit and Unplanned readmissions within 48 hours, the comparator value is the overall percentage for all CMP units for the time period of the report.

For the QIs Risk-adjusted acute hospital mortality and Risk-adjusted acute hospital mortality - predicted risk < 20%, the comparator value is one (1.0), where the observed acute hospital mortality is equal to that expected from the ICNARC$_{H-2018}$ model.

Similar units

In this report, similar units are other specialist cardiothoracic critical care units.

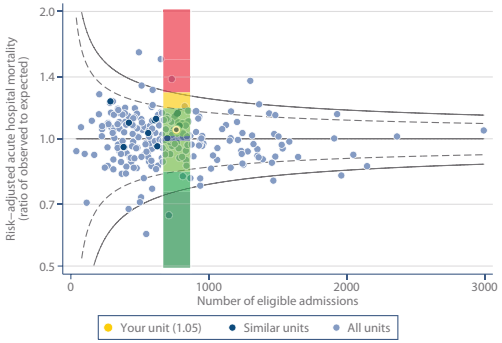
For more information regarding the QQR, please visit the ICNARC QQR webpage.

Quality indicator pages

Each QI has its own page and is presented as a funnel plot with a definition, a quarterly results table and a trend graph.

The grey lines in the funnel plot represent the control limits at two standard deviations (dashed) and three standard deviations (solid) from the comparator value. The control limits become narrower as the sample size increases - as larger sample sizes provide a more accurate estimate. Your unit is highlighted in orange.

[Please note that the QIs Bed days of care post 8-hour delay and post 24-hour delay are not displayed as funnel plots]



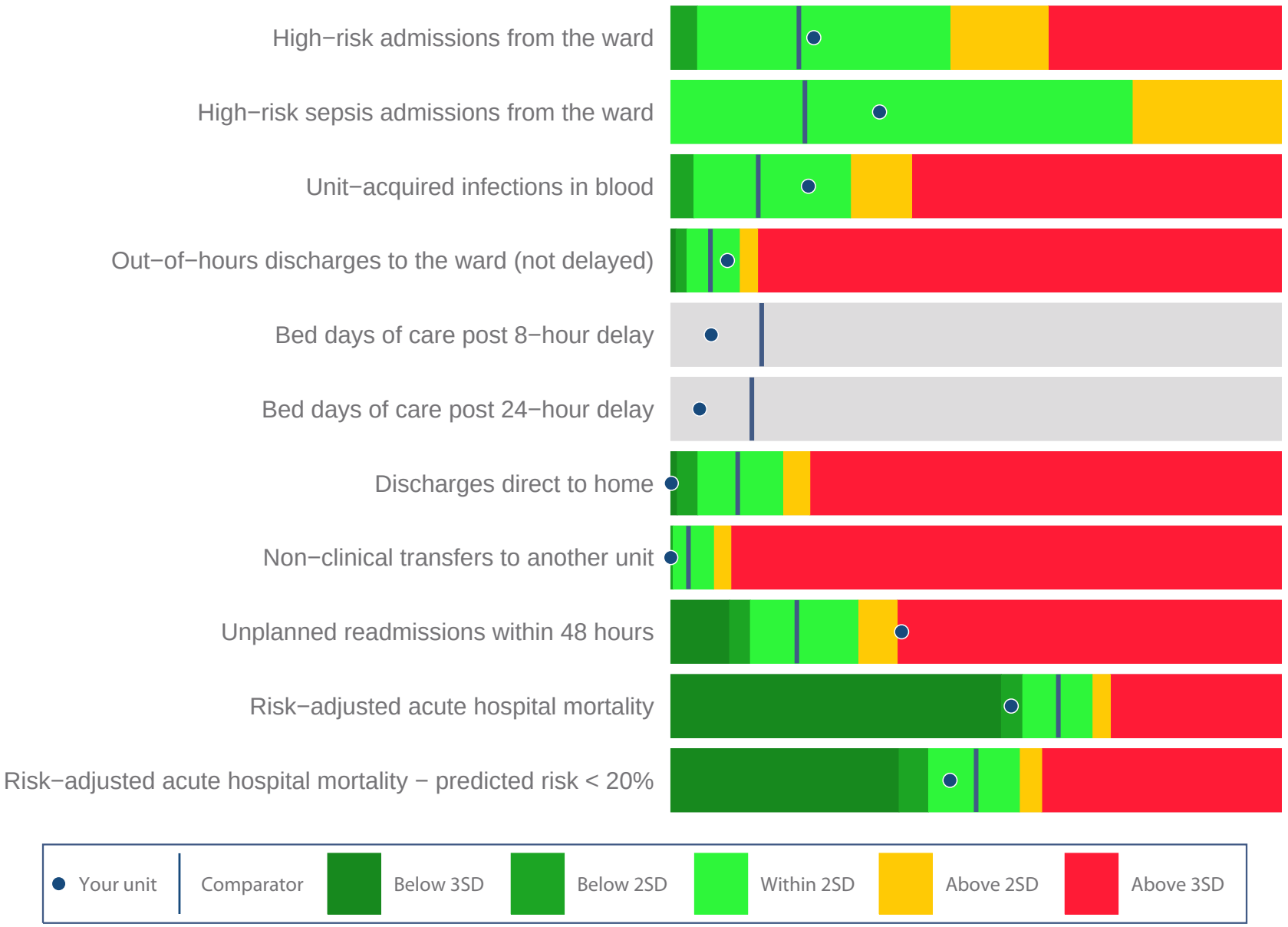
This funnel plot has been overlaid by the quality indicator dashboard to illustrate how the two relate to each other.

	Eligible	Numerator	Denominator	Result	
Quarter 1 [N=222]	212	38	39.2	0.97	
Quarter 2 [N=252]	244	41	48.3	0.85	
Quarter 3 [N=237]	224	46	42.3	1.09	
Quarter 4 [N=224]	215	46	48.2	0.95	
Full year [N=935]	895	171	178.1	0.96 (0.84, 1.10)	

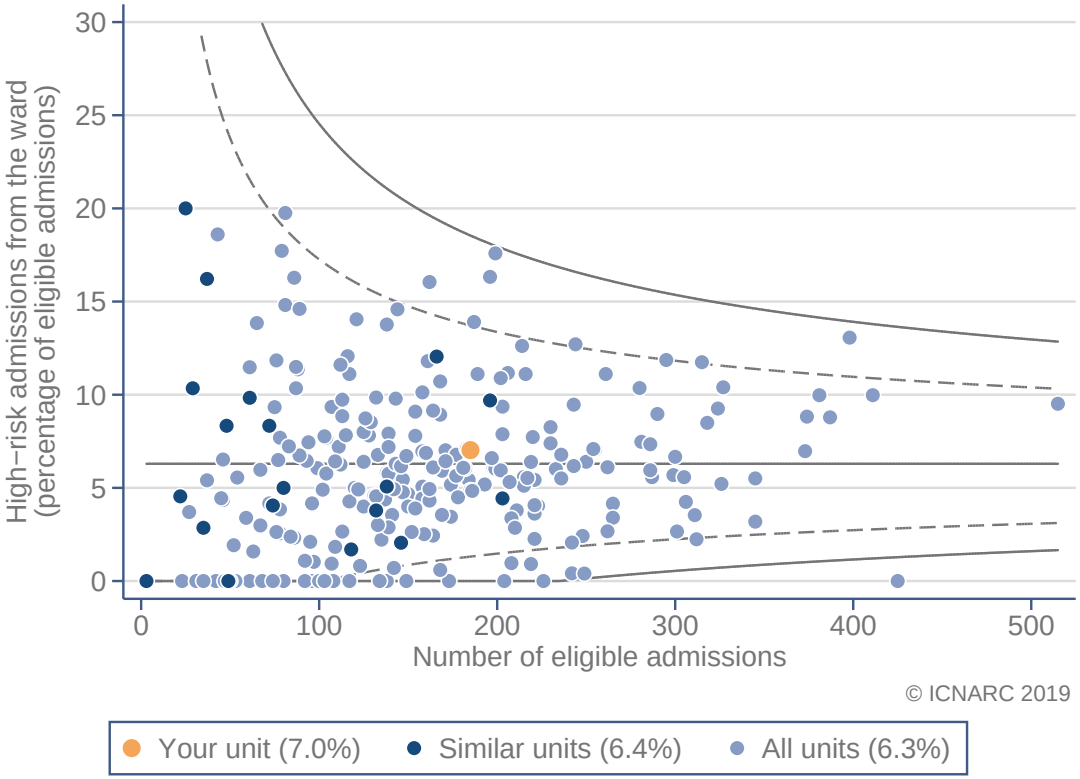
The traffic light colours in the quarterly results table correspond to the control limits on the funnel plot and to the colours used in the dashboard. In addition, the 95% confidence interval for your unit's value is presented for the full year (in brackets).

The orange shaded area around your unit's value in the trend graph is the 95% confidence interval for your unit.

Quality indicator dashboard



High-risk admissions from the ward



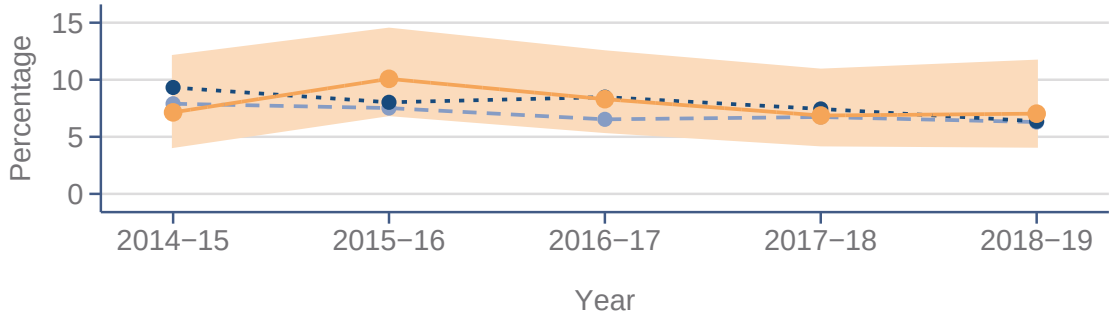
© ICNARC 2019

Your unit (7.0%) Similar units (6.4%) All units (6.3%)

	Eligible	Numerator	Denominator	Result
Quarter 1 [N=666]	42	1	42	2.4%
Quarter 2 [N=712]	58	3	58	5.2%
Quarter 3 [N=638]	44	3	44	6.8%
Quarter 4 [N=572]	41	6	41	14.6%
Full year [N=2588]	185	13	185	7.0% (4.2%, 11.7%)

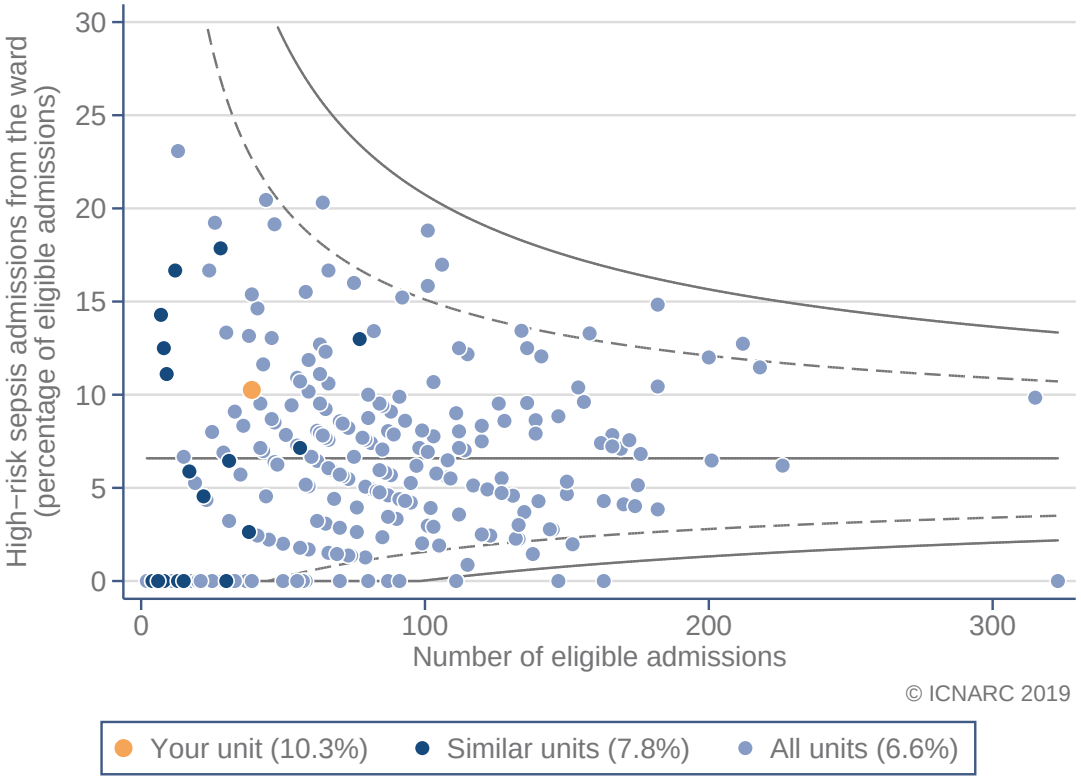
Definition

- Eligible: Critical care unit admissions from a ward (or intermediate care or obstetric area) in the same hospital
- Numerator: Number of eligible admissions with four or more organ dysfunctions (SOFA $\geq$ 2 per organ) during the first 24 hours following admission
- Denominator: Number of eligible admissions



© ICNARC 2019

High-risk sepsis admissions from the ward



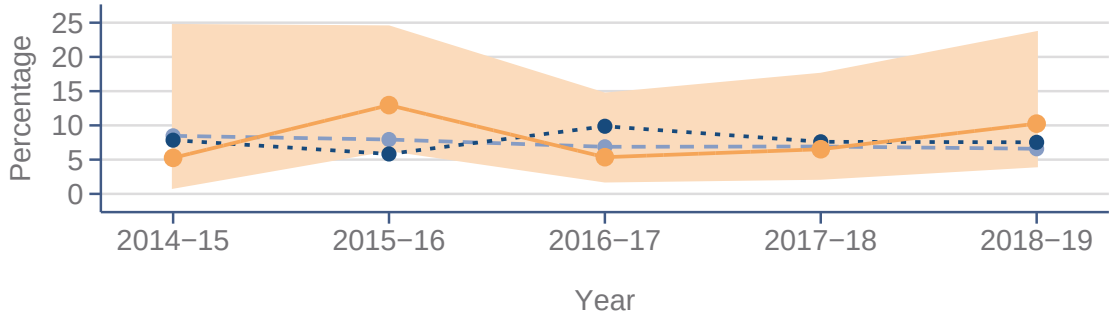
© ICNARC 2019

Your unit (10.3%) Similar units (7.8%) All units (6.6%)

	Eligible	Numerator	Denominator	Result
Quarter 1 [N=666]	10	1	10	10.0%
Quarter 2 [N=712]	10	3	10	30.0%
Quarter 3 [N=638]	10	0	10	0.0%
Quarter 4 [N=572]	9	0	9	0.0%
Full year [N=2588]	39	4	39	10.3% (4.1%, 23.6%)

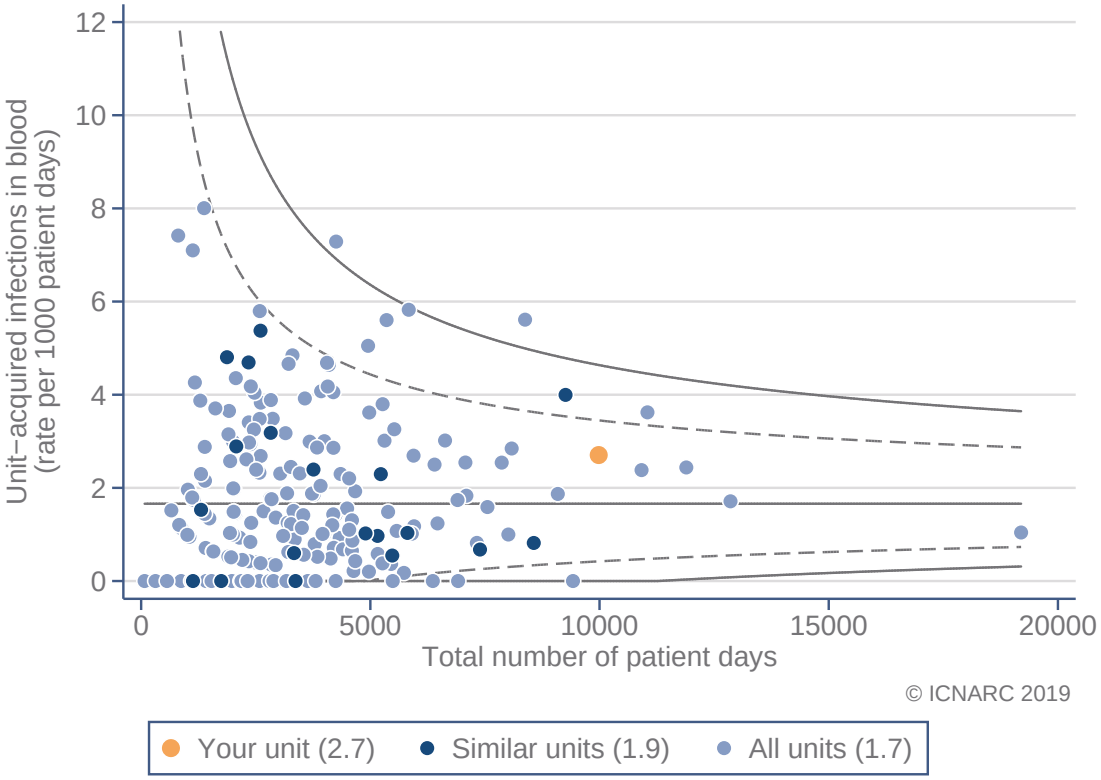
Definition

- Eligible: Critical care unit admissions with infection from a ward (or intermediate care or obstetric area) in the same hospital
- Numerator: Number of eligible admissions with four or more organ dysfunctions (SOFA $\geq$ 2 per organ) during the first 24 hours following admission
- Denominator: Number of eligible admissions



© ICNARC 2019

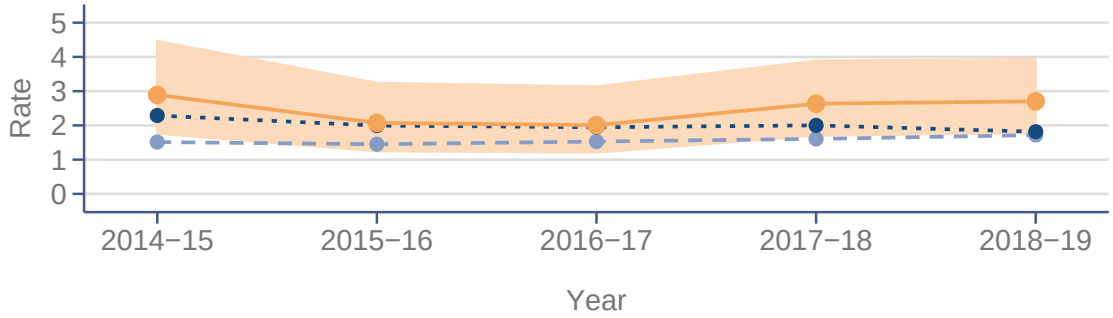
Unit-acquired infections in blood



	Eligible	Numerator	Denominator	Result
Quarter 1 [N=666]	258	9	2498	3.6
Quarter 2 [N=712]	267	1	2407	0.4
Quarter 3 [N=638]	248	10	2499	4.0
Quarter 4 [N=572]	239	7	2578	2.7
Full year [N=2588]	1012	27	9982	2.7 (1.8, 3.9)

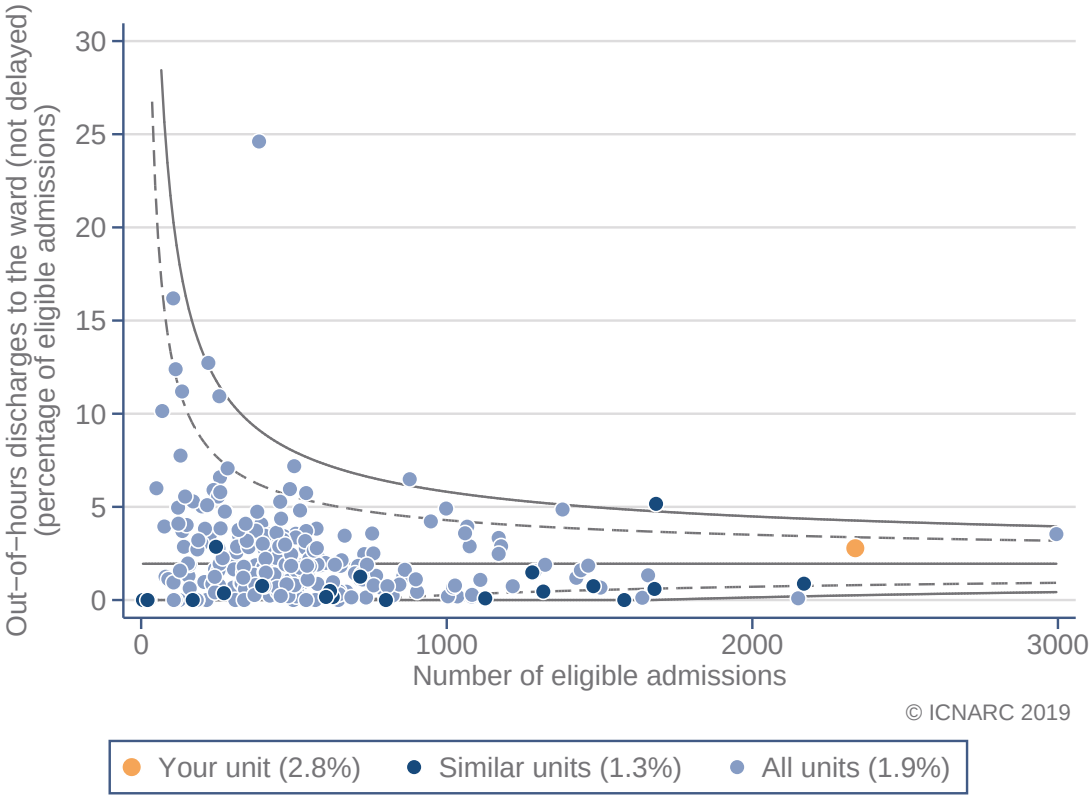
Definition

- Eligible: Critical care unit admissions staying at least 48 hours
- Numerator: Number of unit-acquired infections in blood, defined as the presence of infection in any blood sample taken for microbiological culture after 48 hours following admission
- Denominator: Total number of patient days that eligible admissions stayed in the critical care unit



© ICNARC 2019

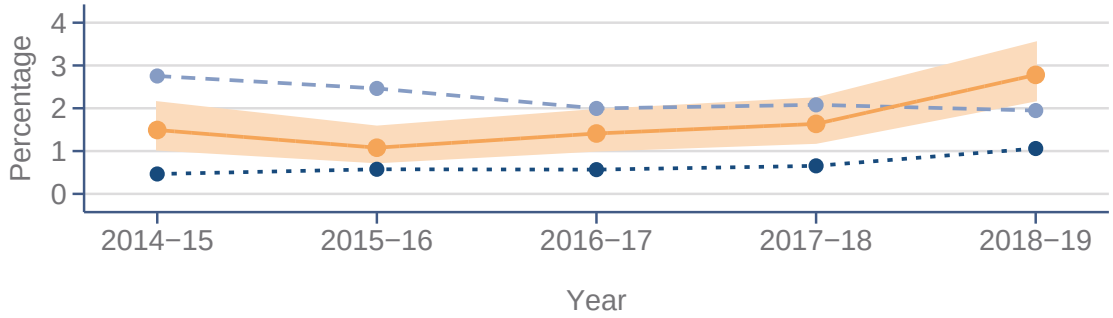
Out-of-hours discharges to the ward (not delayed)



	Eligible	Numerator	Denominator	Result
Quarter 1 [N=666]	604	17	604	2.8%
Quarter 2 [N=712]	657	18	657	2.7%
Quarter 3 [N=638]	571	13	571	2.3%
Quarter 4 [N=572]	505	17	505	3.4%
Full year [N=2588]	2337	65	2337	2.8% (2.2%, 3.5%)

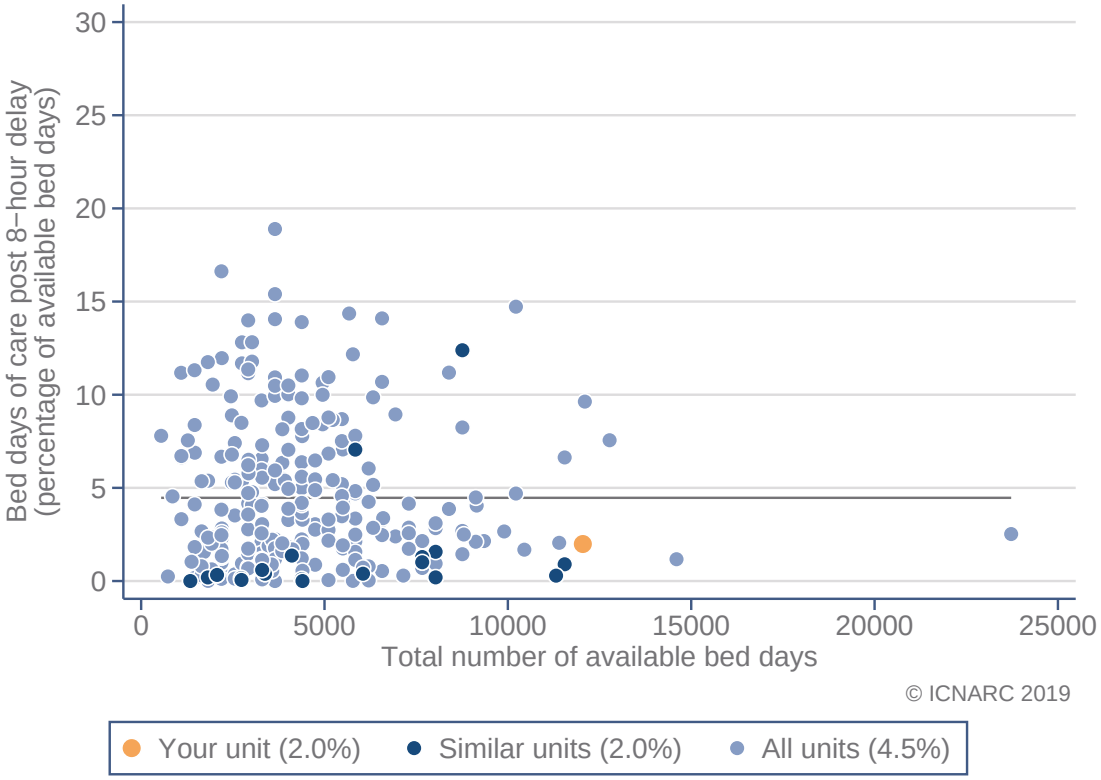
Definition

- Eligible: Critical care unit survivors discharged to a ward in the same hospital
- Numerator: Number of eligible admissions discharged between 22:00 and 06:59 and not delayed (i.e. not declared fully ready for discharge by 18:00 on that day)
- Denominator: Number of eligible admissions



© ICNARC 2019

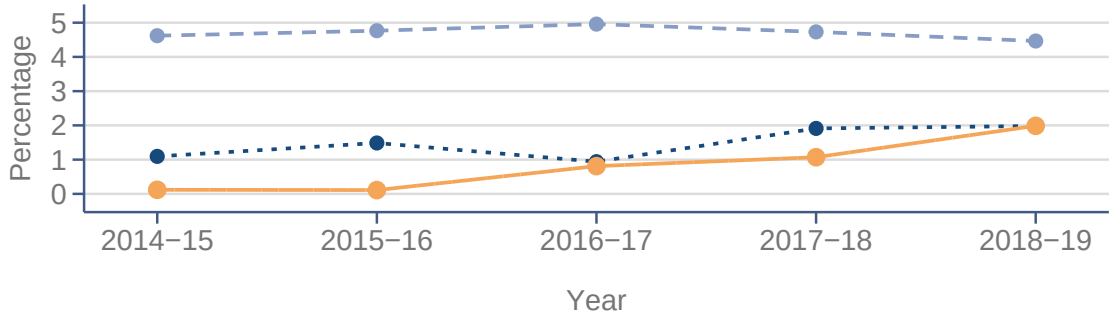
Bed days of care post 8-hour delay



	Eligible	Numerator	Denominator	Result
Quarter 1 [N=666]	604	31.7	3003	1.1%
Quarter 2 [N=712]	658	60.3	3036	2.0%
Quarter 3 [N=638]	571	62.6	3036	2.1%
Quarter 4 [N=572]	505	84.7	2970	2.9%
Full year [N=2588]	2338	239.4	12045	2.0%

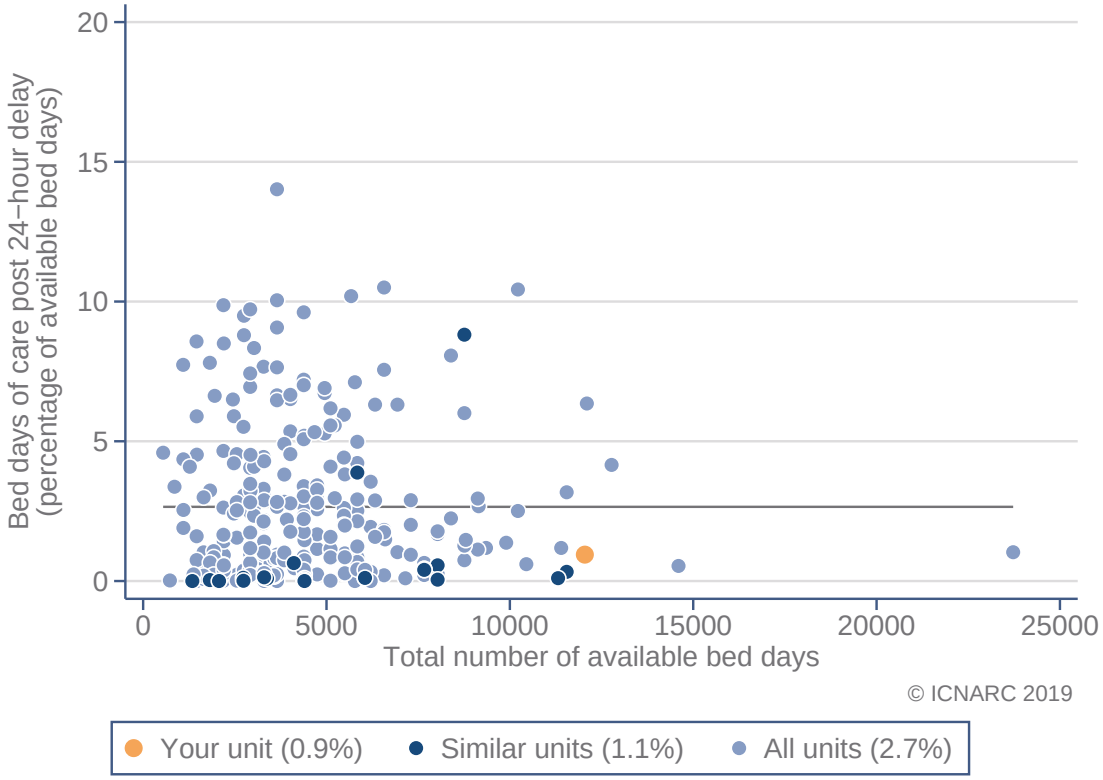
Definition

- Eligible: Critical care unit survivors discharged to a ward in the same hospital (or direct to home)
- Numerator: Bed days of care provided for critical care unit survivors more than 8 hours after the reported time fully ready for discharge
- Denominator: Total number of available bed days in the critical care unit



© ICNARC 2019

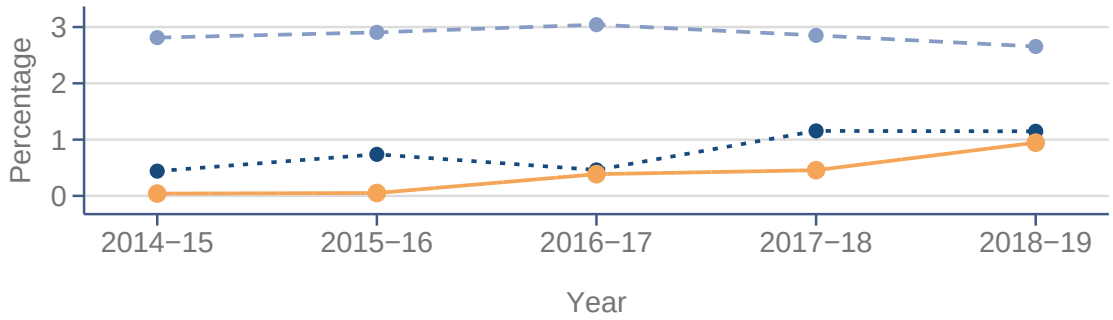
Bed days of care post 24-hour delay



	Eligible	Numerator	Denominator	Result
Quarter 1 [N=666]	604	12.7	3003	0.4%
Quarter 2 [N=712]	658	26.3	3036	0.9%
Quarter 3 [N=638]	571	30.5	3036	1.0%
Quarter 4 [N=572]	505	44.5	2970	1.5%
Full year [N=2588]	2338	113.9	12045	0.9%

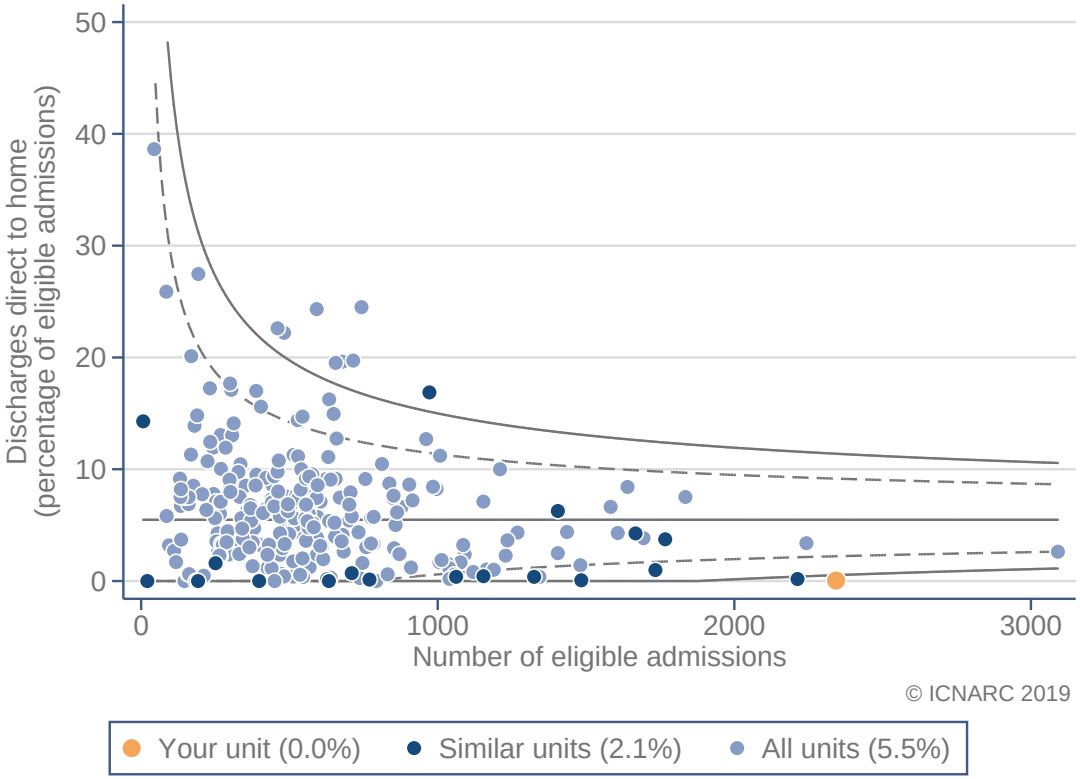
Definition

- Eligible: Critical care unit survivors discharged to a ward in the same hospital (or direct to home)
- Numerator: Bed days of care provided for critical care unit survivors more than 24 hours after the reported time fully ready for discharge
- Denominator: Total number of available bed days in the critical care unit



© ICNARC 2019

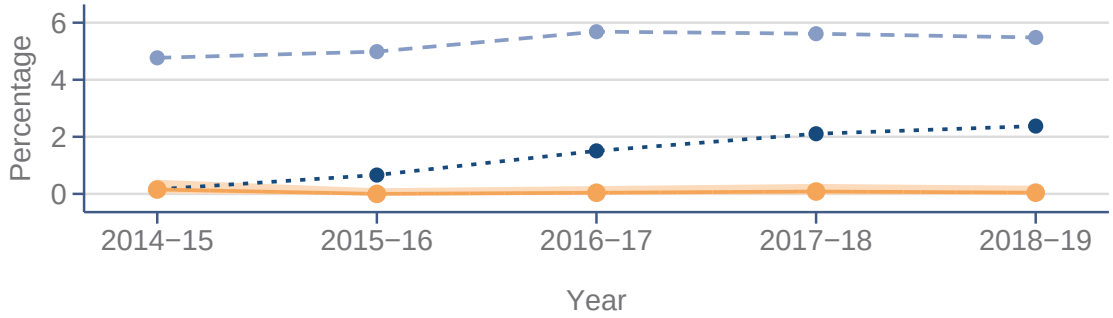
Discharges direct to home



	Eligible	Numerator	Denominator	Result
Quarter 1 [N=666]	606	0	606	0.0%
Quarter 2 [N=712]	659	1	659	0.2%
Quarter 3 [N=638]	571	0	571	0.0%
Quarter 4 [N=572]	507	0	507	0.0%
Full year [N=2588]	2343	1	2343	0.0% (0.0%, 0.2%)

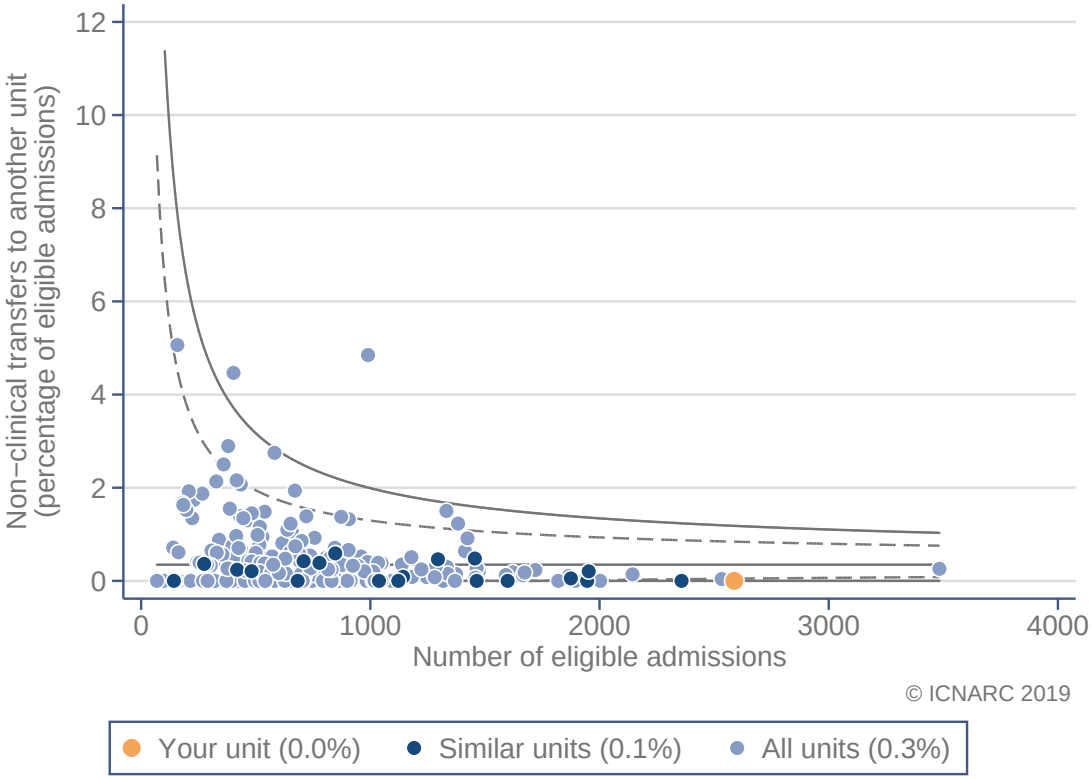
Definition

- Eligible: Critical care unit survivors with a reason for discharge from the critical care unit of ending critical care, excluding planned admissions direct from home
- Numerator: Number of eligible admissions discharged direct to a non-hospital location
- Denominator: Number of eligible admissions



© ICNARC 2019

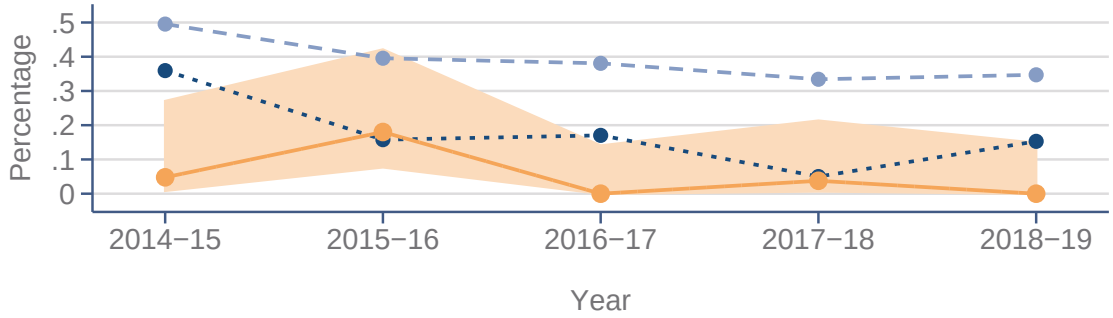
Non-clinical transfers to another unit



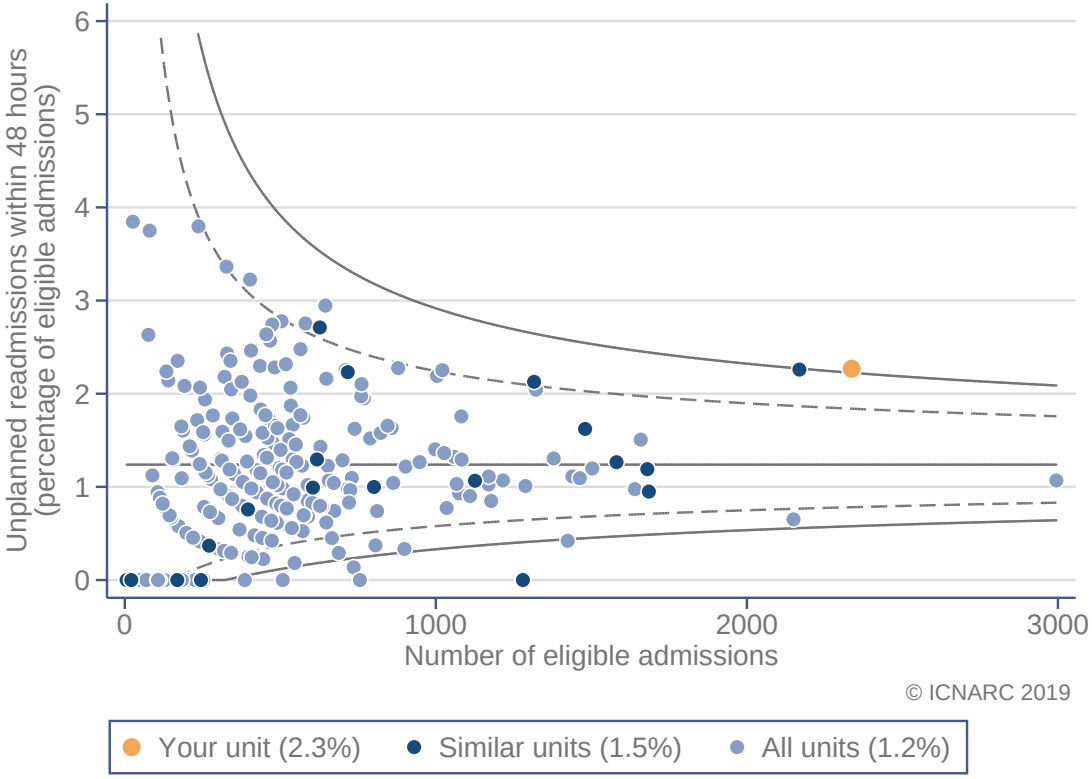
	Eligible	Numerator	Denominator	Result
Quarter 1 [N=666]	666	0	666	0.0%
Quarter 2 [N=712]	712	0	712	0.0%
Quarter 3 [N=638]	638	0	638	0.0%
Quarter 4 [N=572]	572	0	572	0.0%
Full year [N=2588]	2588	0	2588	0.0% (0.0%, 0.1%)

Definition

- Eligible: All critical care unit admissions, excluding those still in the unit at the time this report was run
- Numerator: Number of critical care unit survivors receiving Level 3 care on discharge and discharged for comparable critical care to a Level 3 bed in a critical care unit in another acute hospital
  [For HDUs, number of critical care unit survivors receiving Level 2 care on discharge and discharged for comparable critical care to a Level 2 bed in a critical care unit in another acute hospital]
- Denominator: Number of eligible admissions



Unplanned readmissions within 48 hours



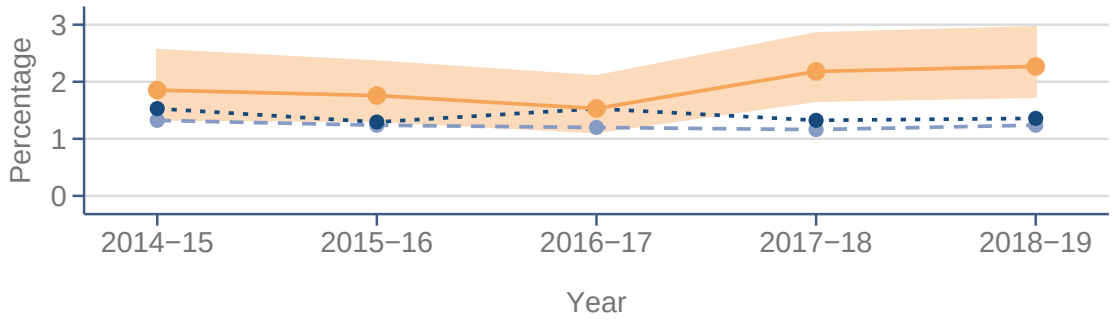
© ICNARC 2019

Your unit (2.3%) Similar units (1.5%) All units (1.2%)

	Eligible	Numerator	Denominator	Result
Quarter 1 [N=666]	604	15	604	2.5%
Quarter 2 [N=712]	657	22	657	3.3%
Quarter 3 [N=638]	571	10	571	1.8%
Quarter 4 [N=572]	505	6	505	1.2%
Full year [N=2588]	2337	53	2337	2.3% (1.7%, 3.0%)

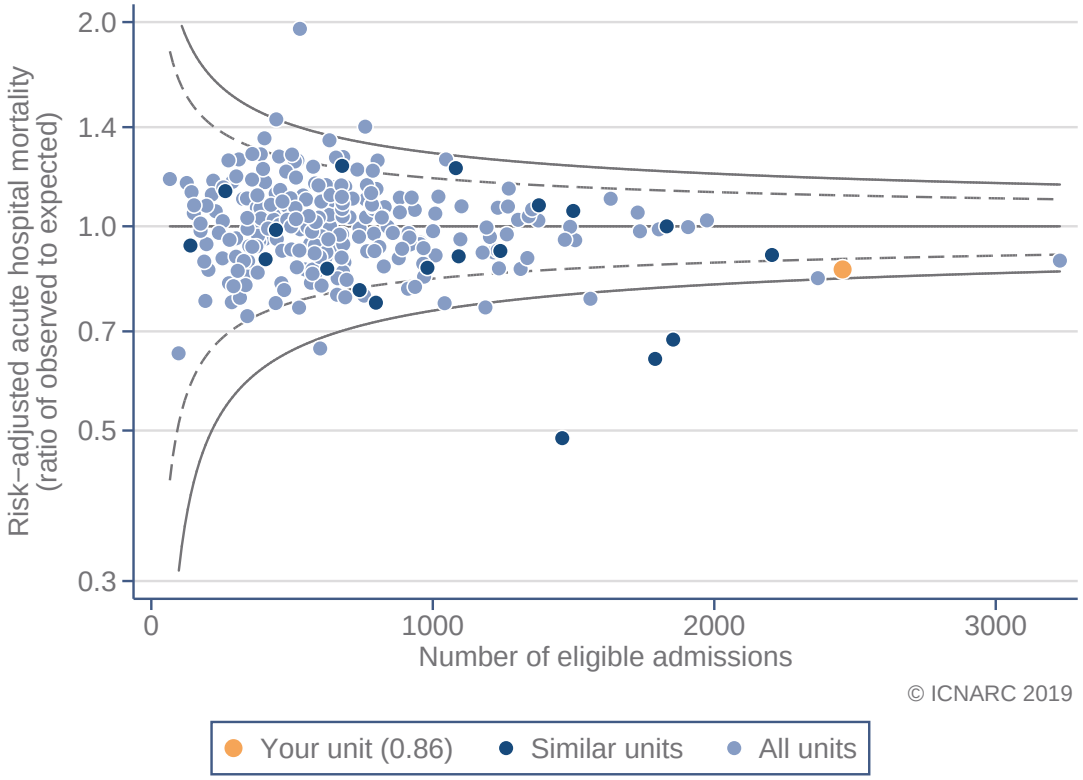
Definition

- Eligible: Critical care unit survivors discharged to a ward within the same hospital
- Numerator: Number of eligible admissions subsequently readmitted (unplanned) to the same critical care unit within 48 hours of discharge
- Denominator: Number of eligible admissions



© ICNARC 2019

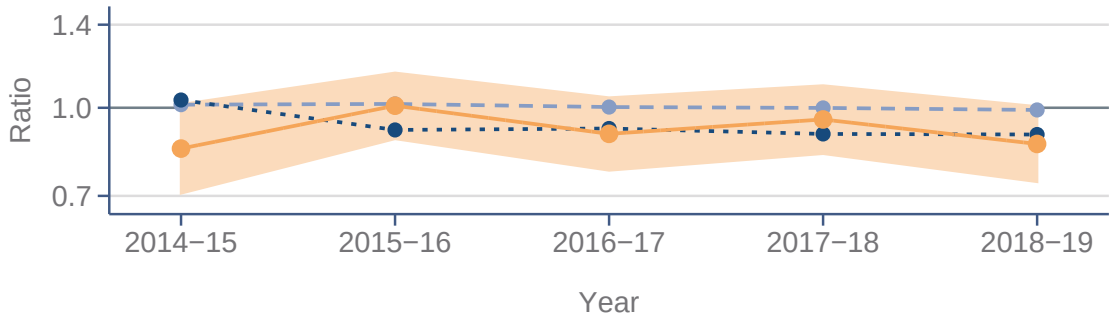
Risk-adjusted acute hospital mortality



	Eligible	Numerator	Denominator	Result
Quarter 1 [N=666]	630	37	46.1	0.80
Quarter 2 [N=712]	676	28	38.3	0.73
Quarter 3 [N=638]	612	53	46.9	1.13
Quarter 4 [N=572]	538	36	47.0	0.77
Full year [N=2588]	2456	154	178.3	0.86 (0.74, 1.01)

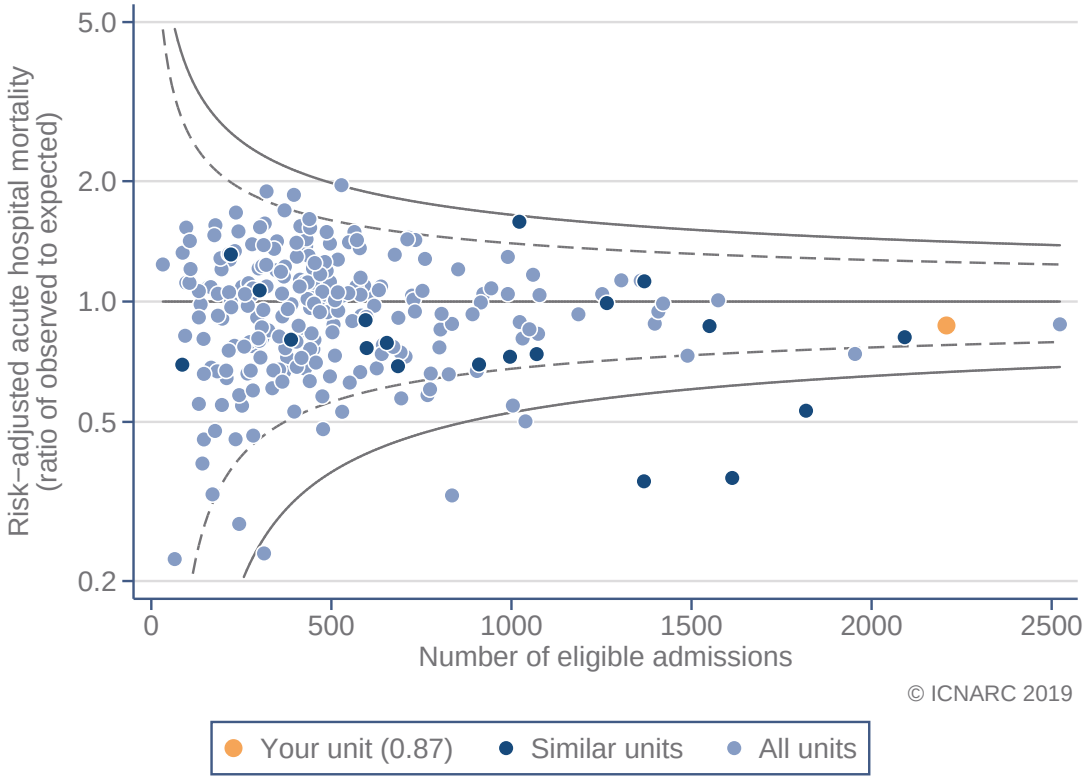
Definition

- Eligible: All critical care unit admissions, excluding readmissions, patients dead on admission and those admitted to facilitate organ donation
- Numerator: Observed number of eligible admissions that died before ultimate discharge from acute hospital
- Denominator: Expected number of acute hospital deaths among eligible admissions from the ICNARC$_{H-2018}$ model



© ICNARC 2019

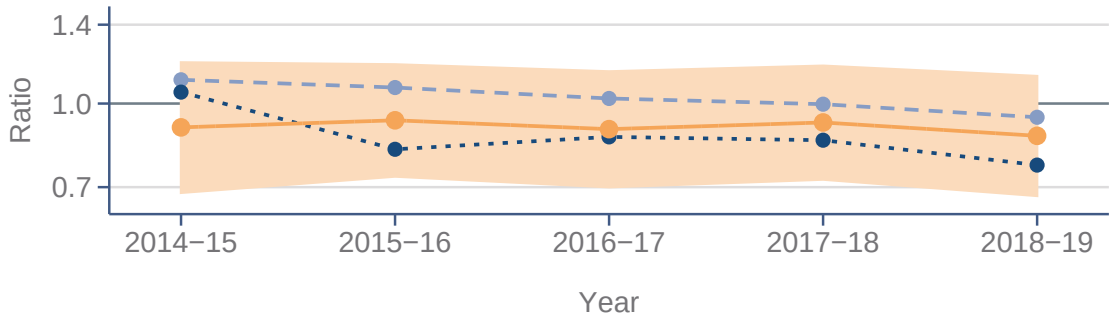
Risk-adjusted acute hospital mortality - predicted risk < 20%



	Eligible	Numerator	Denominator	Result
Quarter 1 [N=666]	569	11	17.2	0.64
Quarter 2 [N=712]	627	11	18.0	0.61
Quarter 3 [N=638]	540	22	15.4	1.43
Quarter 4 [N=572]	472	13	14.9	0.87
Full year [N=2588]	2208	57	65.4	0.87 (0.67, 1.12)

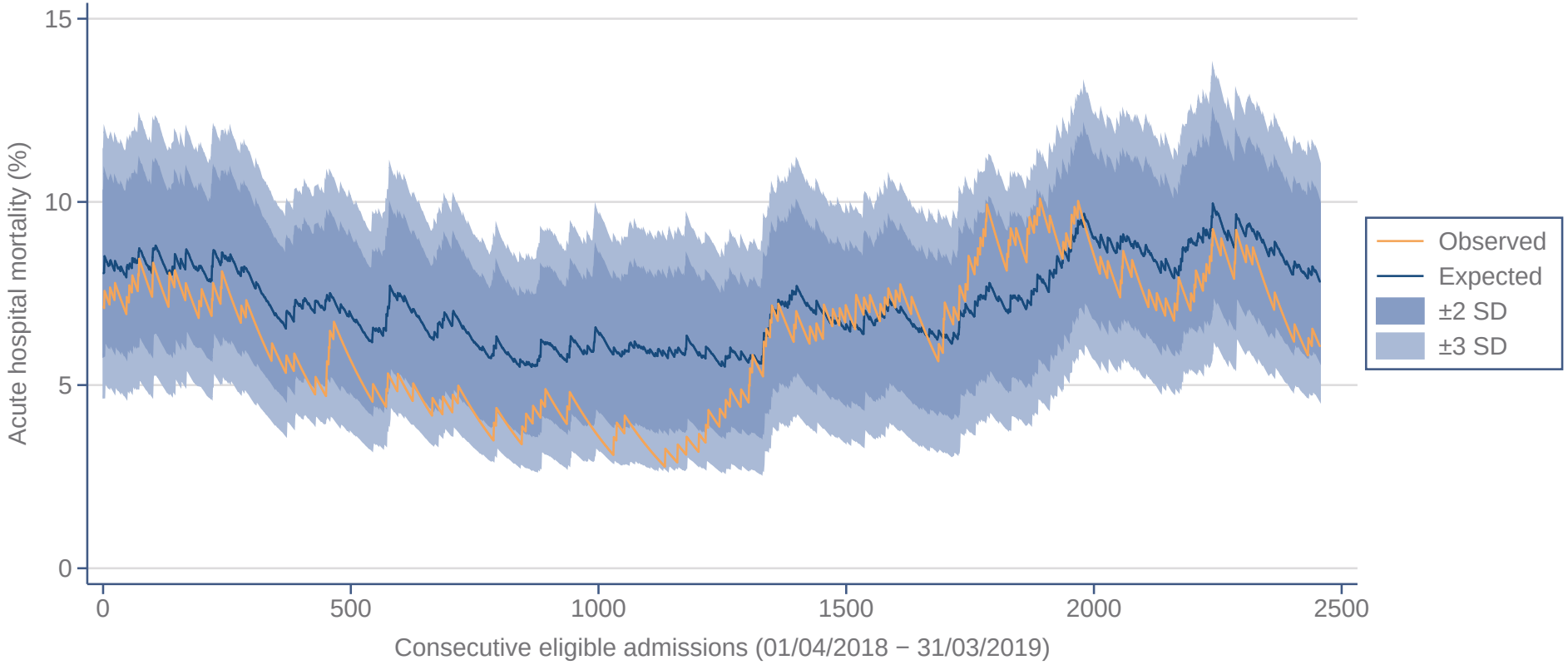
Definition

- Eligible: All critical care unit admissions with a predicted risk of death < 20% on the ICNARC$_{H-2018}$ model, excluding readmissions, patients dead on admission and those admitted to facilitate organ donation
- Numerator: Observed number of eligible admissions that died before ultimate discharge from acute hospital
- Denominator: Expected number of acute hospital deaths among eligible admissions from the ICNARC$_{H-2018}$ model



© ICNARC 2019

Risk-adjusted acute hospital mortality (EWMA plot)



© ICNARC 2019

Explanation

- The Exponentially Weighted Moving Average (EWMA) plot shows the trends in observed and expected acute hospital mortality in your unit for the time period of the report
- Expected acute hospital mortality is calculated from the ICNARC$_{H-2018}$ model
- The plots are updated after each consecutive eligible admission and points are 'exponentially weighted' – giving a larger weighting to the most recent admissions to smooth the appearance of the lines
- The blue shaded areas of the plot represent 2 and 3 standard deviations (SD) above and below the expected line
- If the observed line is above the blue shaded areas, this means the observed acute hospital mortality is significantly higher than expected
- If the observed line is below the blue shaded areas, this means the observed acute hospital mortality is significantly lower than expected

Case mix (i)

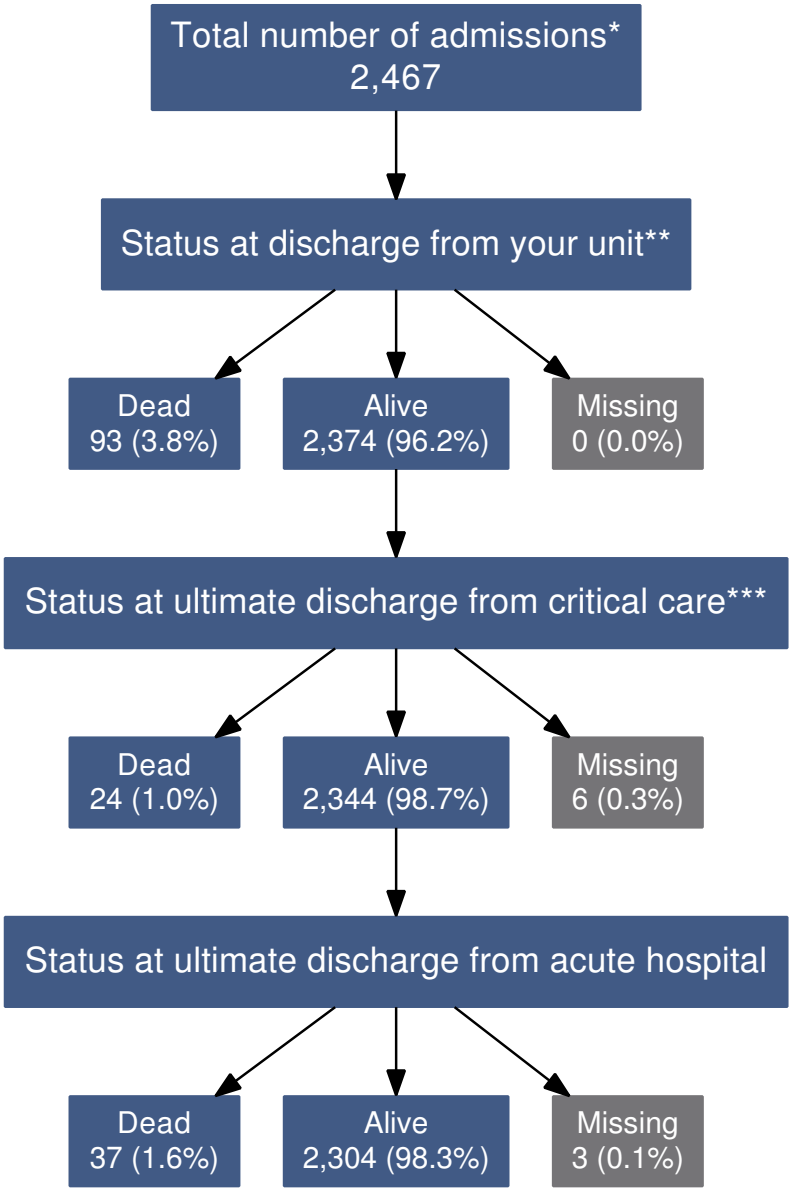
	Your unit	Similar units	All units
Age (years), mean (SD)	65.9 (13.9)	64.6 (13.8)	61.0 (17.4)
Male, n (%)	1736 (67.1)	(69.6)	(57.2)
Severe conditions in past medical history, n (%)			
Severe liver disease	1 (0.0)	(0.2)	(2.3)
Severe respiratory disease or home ventilation	60 (2.3)	(1.3)	(2.5)
Haematological malignancy	0 (0.0)	(0.6)	(1.8)
Metastatic disease	2 (0.1)	(1.0)	(3.6)
Immunocompromise*	19 (0.7)	(2.6)	(7.2)
Prior dependency, n (%)			
Able to live without assistance with daily activities	2318 (89.6)	(86.9)	(77.4)
Some (minor/major) assistance with daily activities	268 (10.4)	(13.0)	(21.5)
Total assistance with all daily activities	1 (0.0)	(0.1)	(1.1)
CPR within 24 hours prior to admission, n (%)			
Community CPR	66 (2.6)	(2.3)	(2.9)
In-hospital CPR	22 (0.9)	(1.7)	(2.3)

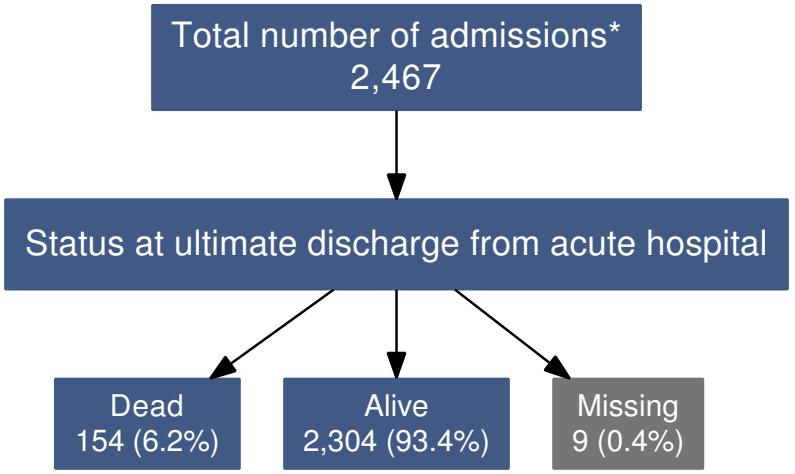
* Daily high-dose steroid treatment, chemotherapy, radiotherapy, congenital immunohumoral or cellular immune deficiency state or AIDS

Case mix (ii)

	Your unit	Similar units	All units
Source of admission, n (%)			
Emergency department or not in hospital – unplanned admission	69 (2.7)	(6.8)	(23.5)
Emergency department or not in hospital – planned admission	23 (0.9)	(0.8)	(0.6)
Theatre – planned admission following elective/scheduled surgery	1977 (76.4)	(67.8)	(27.7)
Theatre – unplanned admission following elective/scheduled surgery	3 (0.1)	(1.5)	(3.2)
Theatre – admission following emergency/urgent surgery	159 (6.1)	(9.5)	(17.0)
Ward or intermediate care area	226 (8.7)	(9.0)	(22.5)
Other critical care unit – repatriation	3 (0.1)	(0.0)	(0.6)
Other critical care unit – planned or unplanned transfer	100 (3.9)	(3.4)	(4.2)
Other acute hospital (not critical care)	28 (1.1)	(1.1)	(0.8)
Severity scores, mean (SD)			
ICNARC Physiology Score	14.9 (6.9)	13.8 (6.8)	15.3 (8.5)
APACHE II Acute Physiology Score	8.7 (3.8)	8.8 (4.2)	10.4 (5.6)
APACHE II Score	13.0 (4.2)	13.1 (4.9)	14.6 (6.4)
ICNARC$_{H-2018}$ model predicted risk of acute hospital mortality (%), median (IQR)	1.9 (0.9, 5.8)	1.9 (0.9, 5.5)	4.7 (1.3, 20.4)

Outcome



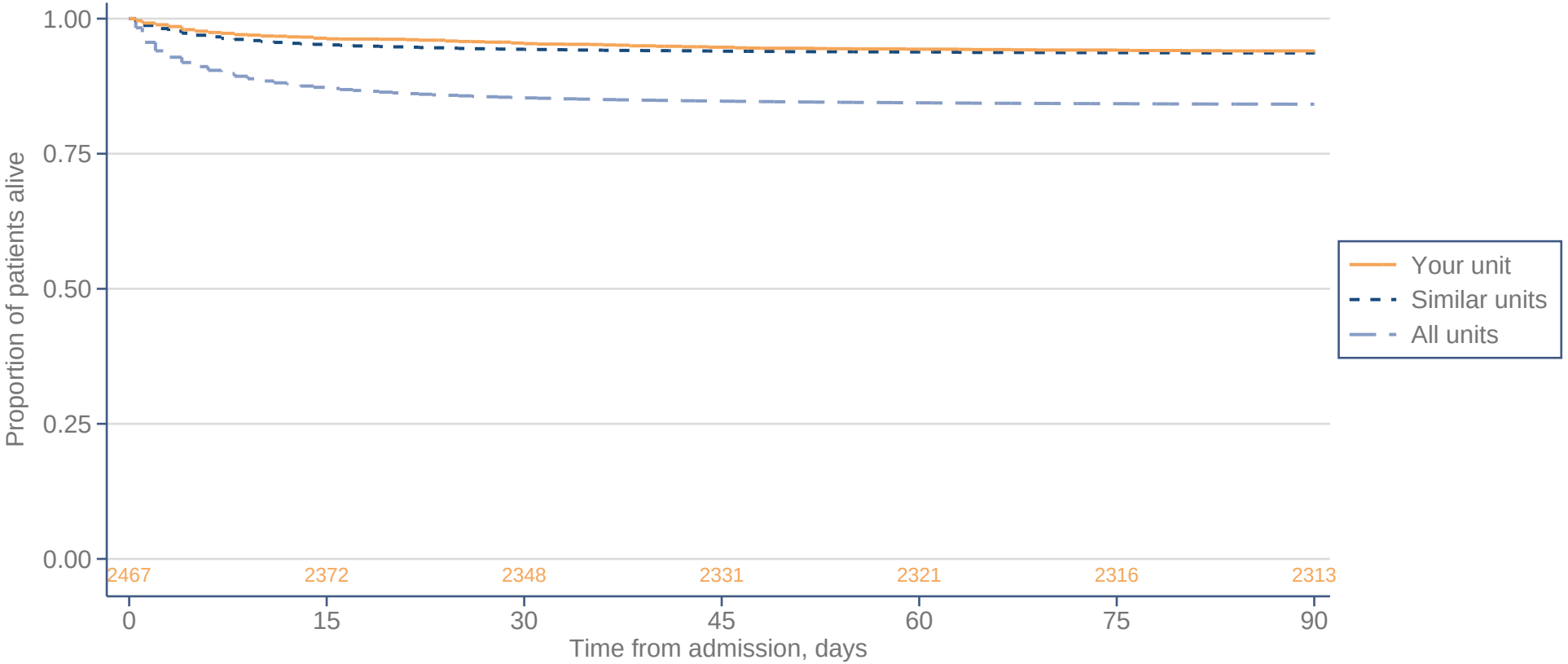


* Excluding readmissions of the same patient within the same acute hospital stay
** Where a patient was admitted to your unit more than once during the same acute hospital stay, the first admission is used
*** For all patients discharged alive from your unit, including those not transferred to another critical care unit

Explanation

- In the staged outcome flow (left), the numbers of admissions at each stage are reported as percentages of those alive at the previous stage
- In the overall outcome flow (above), the status at ultimate discharge from acute hospital is presented as the percentage of all admissions (i.e. excluding readmissions of the same patient in the same acute hospital stay)

Survival (K-M plot)



© ICNARC 2019

Explanation

- The Kaplan-Meier (K-M) plot shows the proportion of patients that remain alive by the number of days following admission to the critical care unit
- The numbers at the foot of the figure are the numbers of patients that have not died or been lost to follow-up for your unit at that time point
- Patients discharged from acute hospital before 90 days are assumed to have survived to 90 days

Admission groups

	Number of admissions (%)			Acute hospital mortality*, n/N (%)		
	Your unit	Similar units	All units	Your unit	Similar units	All units
Elective/scheduled surgery	1980 (76.5)	(69.3)	(30.9)	48/1961 (2.4)	(2.3)	(2.2)
Emergency/urgent surgery	159 (6.1)	(9.5)	(17.0)	9/136 (6.6)	(6.7)	(12.8)
Non-surgical	449 (17.3)	(21.2)	(52.2)	97/361 (26.9)	(22.6)	(26.1)
Elective/scheduled CABG†	728 (28.1)	(25.2)	(3.1)	12/721 (1.7)	(1.5)	(1.5)
Elective/scheduled valve surgery†	917 (35.4)	(24.6)	(3.1)	22/907 (2.4)	(2.5)	(2.6)
Mechanically ventilated§	2290 (88.5)	(69.8)	(36.9)	131/2219 (5.9)	(6.6)	(25.6)
Sepsis (Sepsis-3)§	135 (5.2)	(5.9)	(24.9)	26/110 (23.6)	(18.5)	(26.3)
Sepsis (0 organ dysfunctions)	3 (0.1)	(0.4)	(2.3)	N<5	(3.8)	(7.7)
Sepsis (1 organ dysfunction)	34 (1.3)	(2.2)	(10.1)	4/30 (13.3)	(10.2)	(15.1)
Sepsis (2 organ dysfunctions)	35 (1.4)	(1.7)	(6.9)	2/22 (9.1)	(13.1)	(28.1)
Sepsis (3 organ dysfunctions)	23 (0.9)	(0.9)	(3.6)	2/17 (11.8)	(29.4)	(45.8)
Sepsis (4 or more organ dysfunctions)	40 (1.5)	(0.7)	(2.0)	18/38 (47.4)	(49.6)	(62.6)
Septic shock (Sepsis-3)§	63 (2.4)	(1.6)	(3.7)	16/55 (29.1)	(24.3)	(51.3)
Acute kidney injury (all)§	814 (31.5)	(45.8)	(55.0)	90/751 (12.0)	(11.1)	(22.0)
Acute kidney injury (KDIGO stage I)	483 (18.7)	(19.8)	(18.2)	30/455 (6.6)	(7.4)	(15.0)
Acute kidney injury (KDIGO stage II)	209 (8.1)	(21.0)	(25.5)	37/191 (19.4)	(11.2)	(19.9)
Acute kidney injury (KDIGO stage III)	122 (4.7)	(5.0)	(11.3)	23/105 (21.9)	(26.3)	(38.2)

* Excluding readmissions of the same patient within the same acute hospital stay
† Primary reason for admission
§ During the first 24 hours following admission
KDIGO - Kidney Disease: Improving Global Outcomes

Infection

	Your unit	Similar units	All units
Total number of admissions	2588		
MRSA present, n (%)			
Admission MRSA	6 (0.2)	(0.4)	(0.9)
Unit-acquired MRSA	3 (0.1)	(0.0)	(0.1)
No MRSA	2578 (99.6)	(84.1)	(94.2)
No samples taken	1 (0.0)	(15.4)	(4.8)
Clostridium difficile present, n (%)			
Admission C. difficile	0 (0.0)	(0.1)	(0.3)
Unit-acquired C. difficile	4 (0.2)	(0.0)	(0.1)
No C. difficile	112 (4.3)	(8.0)	(19.8)
No samples taken	2472 (95.5)	(91.9)	(79.8)
VRE present, n (%)			
Admission VRE	18 (0.7)	(0.2)	(0.7)
Unit-acquired VRE	34 (1.3)	(0.1)	(0.2)
No VRE	2506 (96.8)	(21.6)	(35.9)
No samples taken	30 (1.2)	(78.1)	(63.1)
Number of admissions staying at least 48 hours	1012		
Total patient days for admissions staying at least 48 hours	9982		
Unit-acquired infections, n (rate per 1,000 patient days)			
Unit-acquired MRSA	3 (0.3)	(0.1)	(0.3)
Unit-acquired C. difficile	4 (0.4)	(0.1)	(0.3)
Unit-acquired VRE	34 (3.4)	(0.4)	(0.5)
Unit-acquired infection in blood [number of patients]	27 (1.0) [24]	(0.9)	(0.9)

Length of stay

	N	Median (IQR) or n (%)			Mean (SD)		
	Your unit	Your unit	Similar units	All units	Your unit	Similar units	All units
Length of stay in acute hospital prior to admission to your unit (days)*	2467	1 (1, 1)	1 (1, 3)	1 (0, 2)	3 (6)	4 (10)	3 (13)
Length of stay in your unit (days)							
All admissions†	2588	1.2 (0.9, 3.9)	2.0 (1.0, 4.0)	2.2 (1.0, 4.8)	4.1 (8.0)	3.7 (6.2)	4.5 (7.5)
Unit survivors	2488	1.2 (0.9, 3.7)	1.9 (0.9, 3.9)	2.2 (1.0, 4.8)	3.8 (7.2)	3.5 (5.7)	4.4 (7.3)
Unit non-survivors	100	4.6 (1.8, 13.9)	3.8 (1.2, 8.4)	2.4 (0.8, 6.1)	12.4 (17.6)	7.5 (12.0)	5.2 (8.9)
Duration from reported time fully ready for discharge to time of discharge‡, n (%)							
≤ 4 hours	2338	1531 (65.5)	(69.4)	(42.0)			
> 4 hours and ≤ 24 hours	2338	644 (27.5)	(24.5)	(40.7)			
> 24 hours	2338	163 (7.0)	(6.1)	(17.3)			
Length of stay in acute hospital following discharge from your unit (days)*§							
All unit survivors	2360	6 (4, 11)	4 (3, 8)	7 (4, 15)	10 (14)	8 (13)	14 (20)
Acute hospital survivors	2302	6 (4, 10)	4 (3, 8)	7 (4, 15)	10 (13)	8 (12)	13 (20)
Acute hospital non-survivors	56	12 (5, 29)	10 (4, 27)	8 (3, 21)	21 (25)	21 (27)	17 (25)
Total length of stay in acute hospital (days)*							
All patients	2453	10 (7, 18)	9 (6, 16)	10 (5, 21)	16 (19)	15 (19)	18 (26)
Acute hospital survivors	2304	9 (7, 18)	9 (6, 16)	11 (6, 22)	16 (18)	14 (18)	19 (26)
Acute hospital non-survivors	149	13 (5, 36)	9 (4, 23)	7 (2, 17)	24 (26)	18 (28)	15 (24)

* Excluding readmissions of the same patient within the same acute hospital stay
† Excluding admissions still in the critical care unit at the time this report was run
‡ Reported for unit survivors discharged to a ward in the same hospital (or direct to home)
§ Reported for unit survivors only

Occupied bed-days by reported specialty

	N*	Occupied bed-days (%)		
	Your unit	Your unit	Similar units	All units
Cardiothoracic surgery	2311	7983 (75.5)	(30.3)	(3.5)
Respiratory medicine	69	986 (9.3)	(1.7)	(3.6)
Cardiothoracic transplantation	44	833 (7.9)	(3.6)	(0.4)
Cardiology	159	693 (6.6)	(13.0)	(4.3)
Other†	5	77 (0.7)	(51.5)	(88.2)

* Number of admissions, excluding admissions still in the critical care unit at the time this report was run
† Specialties occupying less than 1% of bed-days in your unit

Organ monitoring and support

	Number of admissions receiving support (%)			Days of support* (% of all patient days)		
	Your unit	Similar units	All units	Your unit	Similar units	All units
Basic respiratory support	512 (19.8)	(55.5)	(48.7)	921 (6.9)	(25.5)	(26.0)
Advanced respiratory support	2383 (92.1)	(73.5)	(40.1)	7530 (56.6)	(41.9)	(37.4)
Basic cardiovascular support	1002 (38.7)	(69.5)	(85.7)	3967 (29.8)	(47.6)	(70.4)
Advanced cardiovascular support	2184 (84.4)	(57.3)	(20.5)	8936 (67.1)	(40.5)	(11.3)
Renal support	233 (9.0)	(6.2)	(8.9)	2052 (15.4)	(9.5)	(9.0)
Neurological support	7 (0.3)	(3.3)	(9.0)	28 (0.2)	(3.0)	(7.7)
Gastrointestinal support	460 (17.8)	(11.6)	(29.7)	5415 (40.7)	(25.5)	(44.6)
Dermatological support	62 (2.4)	(3.5)	(2.6)	136 (1.0)	(3.9)	(2.9)
Liver support	0 (0.0)	(0.4)	(1.1)	0 (0.0)	(0.1)	(0.7)
Healthcare Resource Group [HRG code]						
6 organs supported [XC01Z]	1 (0.0)	(0.1)	(0.1)	19 (0.1)	(0.4)	(0.6)
5 organs supported [XC02Z]	11 (0.4)	(0.8)	(0.7)	483 (3.7)	(4.3)	(3.0)
4 organs supported [XC03Z]	90 (3.5)	(4.5)	(3.6)	1691 (13.0)	(14.7)	(11.0)
3 organs supported [XC04Z]	498 (19.2)	(31.4)	(14.9)	4418 (34.1)	(35.6)	(24.1)
2 organs supported [XC05Z]	1816 (70.2)	(40.0)	(27.5)	5971 (46.1)	(32.4)	(28.5)
1 organ supported [XC06Z]	155 (6.0)	(20.9)	(50.2)	376 (2.9)	(11.9)	(31.9)
0 organs supported [XC07Z]	2 (0.1)	(1.7)	(2.2)	2 (0.0)	(0.7)	(0.9)
No Level 2 or 3 care received [UZ01Z]	15 (0.6)	(0.6)	(0.8)	N/A		

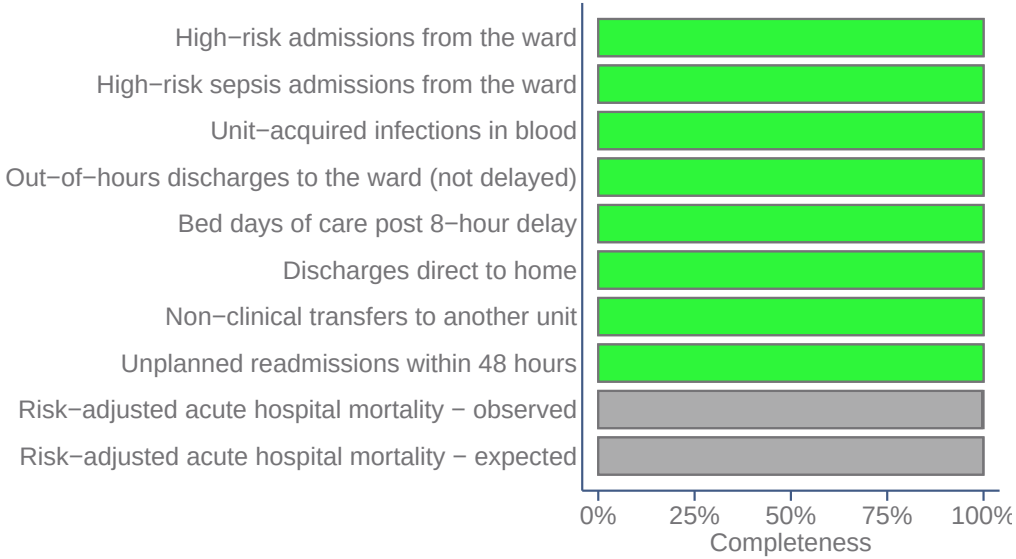
* For Healthcare Resource Groups, only days receiving Level 2 or 3 care are counted

End-of-life care

	Your unit	Similar units	All units
Unit non-survivors, n (%)	100 (3.9)	(4.6)	(11.1)
Length of stay in your unit for unit non-survivors (hours), median (IQR)	110 (43, 333)	90 (28, 201)	57 (20, 146)
Treatment withheld/withdrawn, n (% of unit non-survivors)			
Treatment withheld	0 (0.0)	(8.7)	(6.5)
Treatment withdrawn	30 (30.0)	(37.4)	(46.1)
Treatment withheld then withdrawn	0 (0.0)	(7.8)	(11.7)
Time from admission to treatment withdrawal (hours), median (IQR)	165 (85, 699)	117 (48, 241)	69 (24, 162)
Time from treatment withdrawal to death (hours), median (IQR)	0 (0, 1)	1 (1, 4)	2 (1, 4)
Brainstem death declared, n (% of unit non-survivors)	5 (5.0)	(3.5)	(6.4)
Solid organ donation, n (% of brainstem/cardiac deaths)			
Donation following brainstem death (DBD)	2 (40.0)	(31.4)	(53.3)
Donation following cardiac death (DCD)	3 (3.2)	(2.0)	(2.2)
Time from death to removal of body (hours), median (IQR)	3 (2, 4)	3 (2, 4)	2 (2, 3)

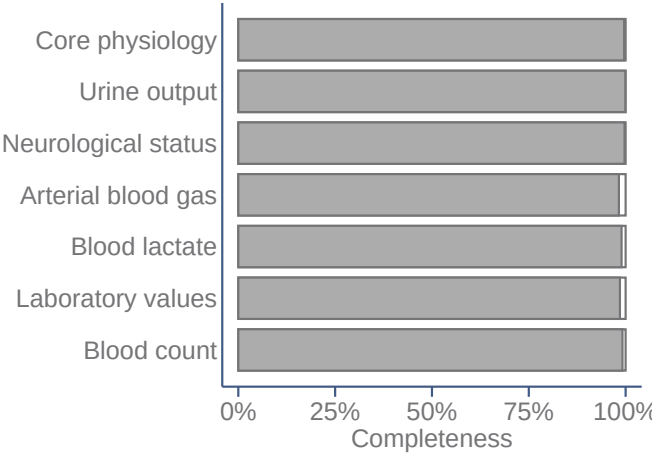
Data completeness

Quality indicators



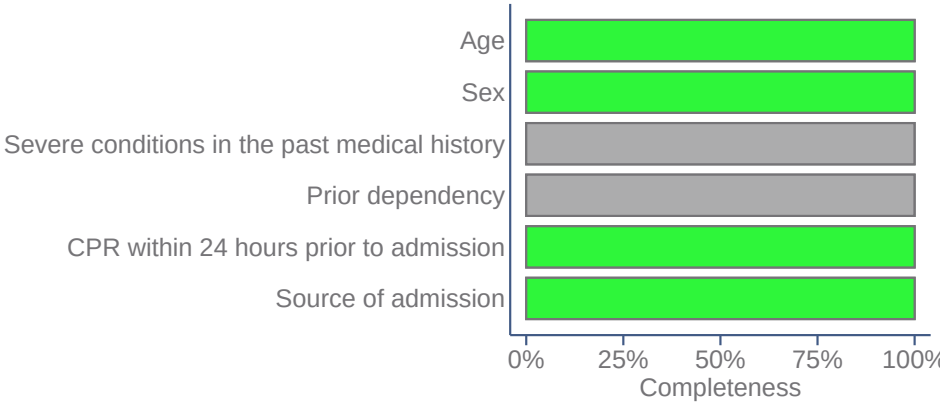
© ICNARC 2019

Physiology



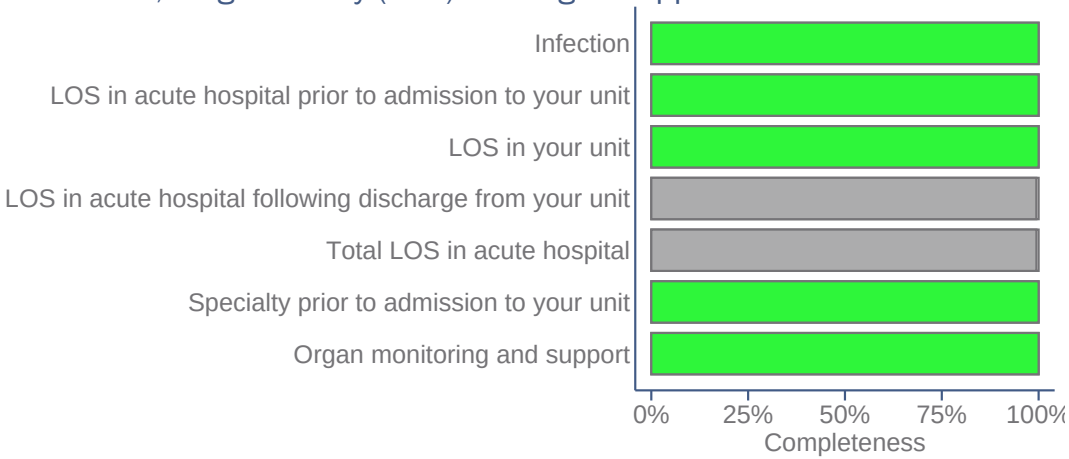
© ICNARC 2019

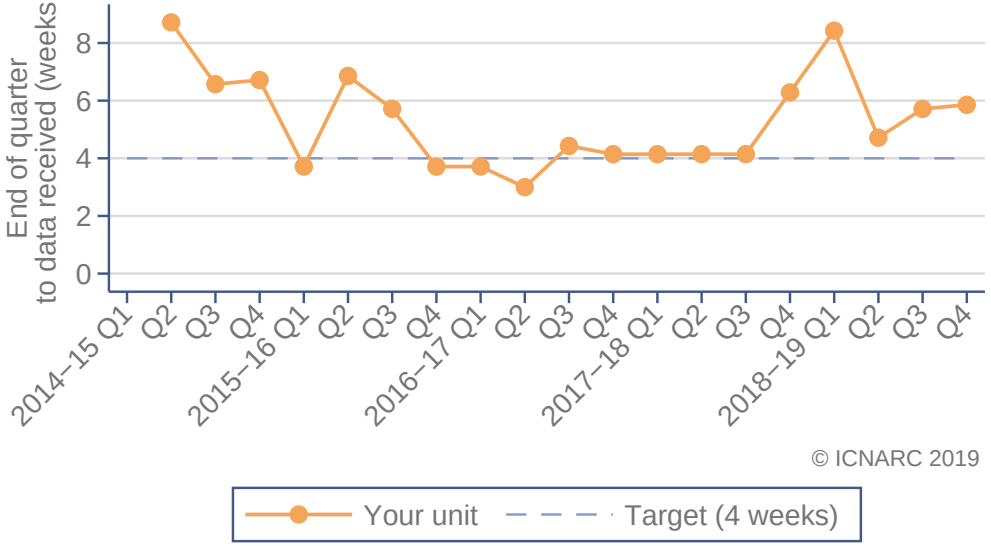
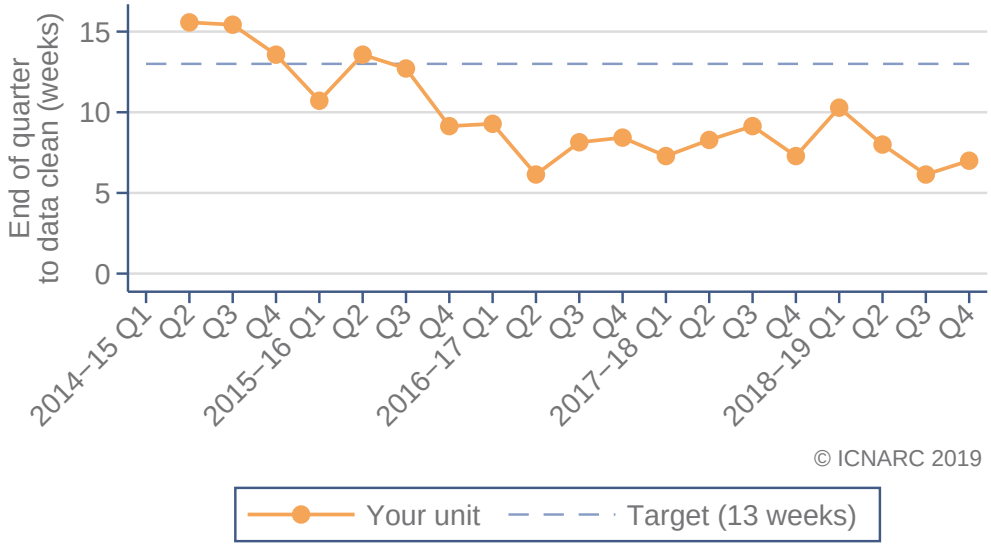
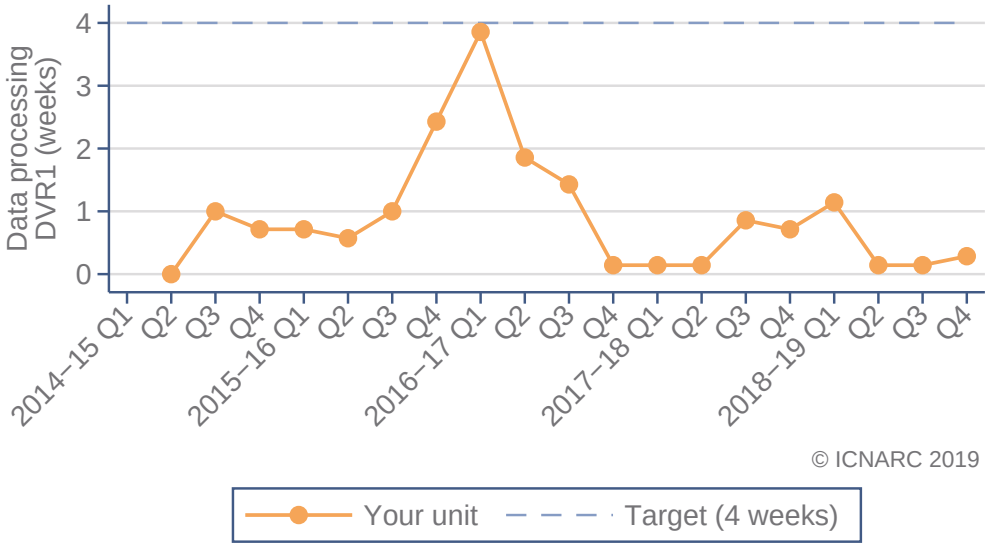
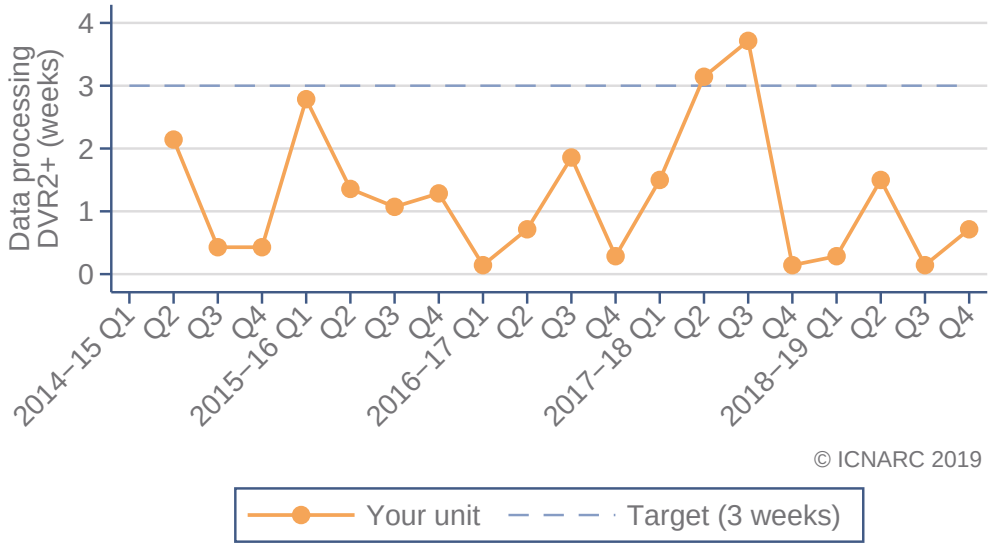
Case mix



© ICNARC 2019

Infection, length of stay (LOS) and organ support



© ICNARC 2019

Participation