



HEALTH QUALITY & SAFETY
COMMISSION NEW ZEALAND
Kupu Taurangi Hauora o Aotearoa

National hand hygiene compliance report: 1 November 2020 to 28 February 2021

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Introduction

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 November 2020 to 28 February 2021. The data used in this report was extracted on 3 March 2021.

Compliance is measured as part of the Health Quality & Safety Commission's (the Commission's) Hand Hygiene New Zealand (HHNZ) programme, one of the Commission's two current infection prevention and control (IPC) programmes. These targeted improvement initiatives aim to reduce the harm and cost of healthcare associated infections within Aotearoa New Zealand's health and disability sector.

The HHNZ programme uses the World Health Organization's '5 moments for hand hygiene' framework to drive culture change and establish best hand hygiene practice for every patient, every time.

Achievements in this audit period

- National compliance was 86.8 percent compared with 85.9 percent in the previous audit period.
- Sixteen DHBs achieved at or above the national target of 80 percent compliance.
- Eleven DHBs met or were less than 100 moments short of the minimum requirement of moments.

Well done to all the hand hygiene auditors, coordinators and Gold Auditor Trainers who have continued to audit and educate over the last year while being responsive to the demands of the COVID-19 pandemic. Compliance has improved and remained high over this period, which is important for patient safety.

Congratulations to Taranaki DHB for its improvement efforts. Its compliance has steadily improved over the last couple of years and in this audit period it has met the 80 percent target for the first time since March 2018.

The four DHBs that did not achieve the target of 80 percent compliance were close to the target with compliance rates of ≥ 78.9 percent.

Auditing requirements updated to ensure sustainability

Over the past few years, the HHNZ programme has focused on spread of auditing and improvement throughout all clinical areas so hand hygiene is consistent across all public hospitals. Spreading and sustaining the improvements already achieved in hand hygiene practice is essential to prevent healthcare associated infections and respond to the growing threat of infections caused by multi-drug resistant microorganisms.

As of 1 July 2019, modifications to some of the auditing requirements were made. These related to continuously auditing across all clinical areas throughout each audit period and amending the number of minimum moments required, per hospital ward, per audit period.

Thank you for your continued dedication to hand hygiene compliance across Aotearoa New Zealand hospitals. If you have any questions about the updated auditing requirements, please email HHNZ@hqsc.govt.nz.

Hand hygiene auditing periods

Start date	End date
1 July	31 October
1 November	28 February
1 March	30 June

Useful resources

- [Commission COVID-19 page](#)
- Hand hygiene posters, for public areas, can be found here: [How to hand rub/How to hand wash](#). These posters are available in English, te reo Māori, Samoan, Hindi, Tongan, Arabic and Simplified Chinese.
- Hard copies of some hand hygiene posters/resources are available for ordering through the Commission as part of the COVID-19 response – [order here](#).
- [HHNZ auditing manual \(2019\)](#)
- [Presentations from the HHNZ workshop \(2017\)](#)
- [Other HHNZ resources](#)

National hand hygiene compliance data: 1 November 2020 to 28 February 2021

The nationally aggregated hand hygiene compliance rate for this measurement period was 86.8 percent. The national average performance by DHB was similar, at 84.8 percent (this figure represents the average of DHBs that submitted data). The average rate gives equal weighting to each DHB's result, regardless of size, whereas the aggregate rate is more affected by the performance of large DHBs. The fact that the two rates are similar indicates there are comparable performance rates between large and small DHBs.

Table 1: National aggregated hand hygiene compliance, 1 November 2020 to 28 February 2021

Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
67,028	77,258	86.8%	86.5%	87.0%

Table 2: National compliance rates by DHB, 1 November 2020 to 28 February 2021

DHB	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Auckland DHB	11,919	13,868	85.9%	85.4%	86.5%
Bay of Plenty DHB*	1,669	2,108	79.2%	77.4%	80.9%
Canterbury DHB*	3,416	4,034	84.7%	83.5%	85.8%
Capital & Coast DHB	2,474	2,904	85.2%	83.9%	86.4%
Counties Manukau DHB	13,128	15,114	86.9%	86.3%	87.4%
Hauora Tairāwhiti DHB	580	676	85.8%	83.0%	88.2%
Hawke's Bay DHB*	1,415	1,566	90.4%	88.8%	91.7%
Hutt Valley DHB	1,597	2001	79.8%	78.0%	81.5%
Lakes DHB*	741	873	84.9%	82.4%	87.1%
MidCentral DHB*	1,120	1,402	79.9%	77.7%	81.9%
Nelson Marlborough DHB	1,075	1,312	81.9%	79.8%	83.9%
Northland DHB*	1,636	1,940	84.3%	82.6%	85.9%
South Canterbury DHB*	265	310	85.5%	81.1%	89.0%
Southern DHB*	2,271	2,674	84.9%	83.5%	86.2%
Taranaki DHB	1,724	1,996	86.4%	84.8%	87.8%
Waikato DHB*	3,014	3,546	85.0%	83.8%	86.1%
Wairarapa DHB	184	207	88.9%	83.9%	92.5%
Waitematā DHB	17,752	19,442	91.3%	90.9%	91.7%
West Coast DHB	401	465	86.2%	82.8%	89.1%
Whanganui DHB	647	820	78.9%	76.0%	81.6%

* DHB more than 100 moments short of the minimum requirement for this audit period.

Please note: The minimum number of moments for each DHB is based on the number of areas (departments or wards) and the total number of beds for each hospital.

Table 3: Hand hygiene compliance by geographic region, 1 November 2020 to 28 February 2021

Region	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern	44,435	50,364	88.2%	87.9%	88.5%
Midland	7,728	9,199	84.0%	83.2%	84.7%
Central	7,437	8,900	83.6%	82.8%	84.3%
South Island	7,428	8,795	84.5%	83.7%	85.2%

Table 4: Compliance by moment, 1 November 2020 to 28 February 2021

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
1. Before touching a patient	18,833	22,670	83.1%	82.6%	83.6%
2. Before procedure	7,564	8,480	89.2%	88.5%	89.8%
3. After a procedure or body fluid exposure risk	9,593	10,250	93.6%	93.1%	94.0%
4. After touching a patient	20,430	22,471	90.9%	90.5%	91.3%
5. After touching a patient's surroundings	10,608	13,387	79.2%	78.5%	79.9%

Table 5: Department compliance rates, 1 November 2020 to 28 February 2021

Department type	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Acute aged care	1,923	2,111	91.1%	89.8%	92.2%
Ambulatory care	1,766	2,029	87.0%	85.5%	88.4%
Critical care unit	4,165	4,870	85.5%	84.5%	86.5%
Emergency department	2,657	3,293	80.7%	79.3%	82.0%
Maternity	1,690	1,943	87.0%	85.4%	88.4%
Medical	16,152	18,575	87.0%	86.5%	87.4%
Mixed	1,488	1,593	93.4%	92.1%	94.5%
Neonatal care	2,925	3,319	88.1%	87.0%	89.2%
Oncology/haematology	2,675	3,015	88.7%	87.5%	89.8%
Other	1,839	2,019	91.1%	89.8%	92.3%
Paediatrics	2,931	3,467	84.5%	83.3%	85.7%
Perioperative	3,730	4,036	92.4%	91.6%	93.2%
Radiology/radiation oncology	3,846	4,693	82.0%	80.8%	83.0%
Renal	850	977	87.0%	84.7%	89.0%
Surgical	4,899	5,508	88.9%	88.1%	89.7%

Table 6: Health care worker compliance rates, 1 November 2020 to 28 February 2021

Health care worker	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Nurse/midwife	40,583	45,286	89.6%	89.3%	89.9%
Medical practitioner	9,396	11,996	78.3%	77.6%	79.1%
Allied health care worker	2,897	3,311	87.5%	86.3%	88.6%
Phlebotomy invasive technician	2,763	2,997	92.2%	91.2%	93.1%
Health care assistant	6,858	7,999	85.7%	85.0%	86.5%
Cleaner and meal staff	1,299	1,652	78.6%	76.6%	80.5%
Administrative and clerical staff	208	255	81.6%	76.4%	85.8%
Student doctor	256	303	84.5%	80.0%	88.1%
Other – orderly and not categorised elsewhere	1,544	2,048	75.4%	73.5%	77.2%
Student allied health	60	64	93.8%	85.0%	97.5%
Student nurse/midwife	1,163	1,346	86.4%	84.5%	88.1%

Hand hygiene compliance in glove use

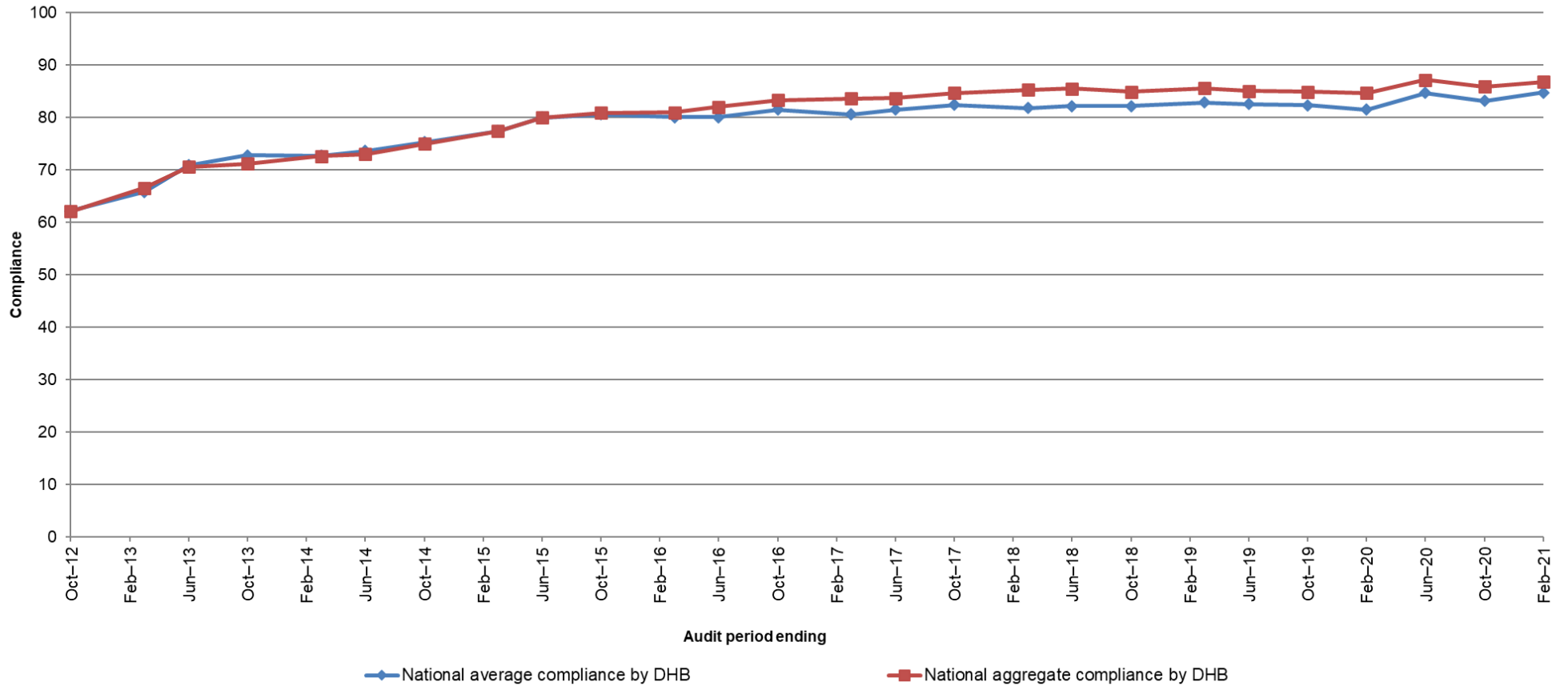
Inappropriate use of non-sterile gloves remains a barrier to excellent hand hygiene practice.

The latest glove statistics are:

- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 5.2 percent compared with 5.7 percent in the previous audit period
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 11.7 percent compared with 13.3 in the previous audit period
- of all moments where glove use was recorded, health care workers failed to complete hand hygiene 14.7 percent of the time compared with 15.4 percent in the previous audit period.

National hand hygiene compliance over time

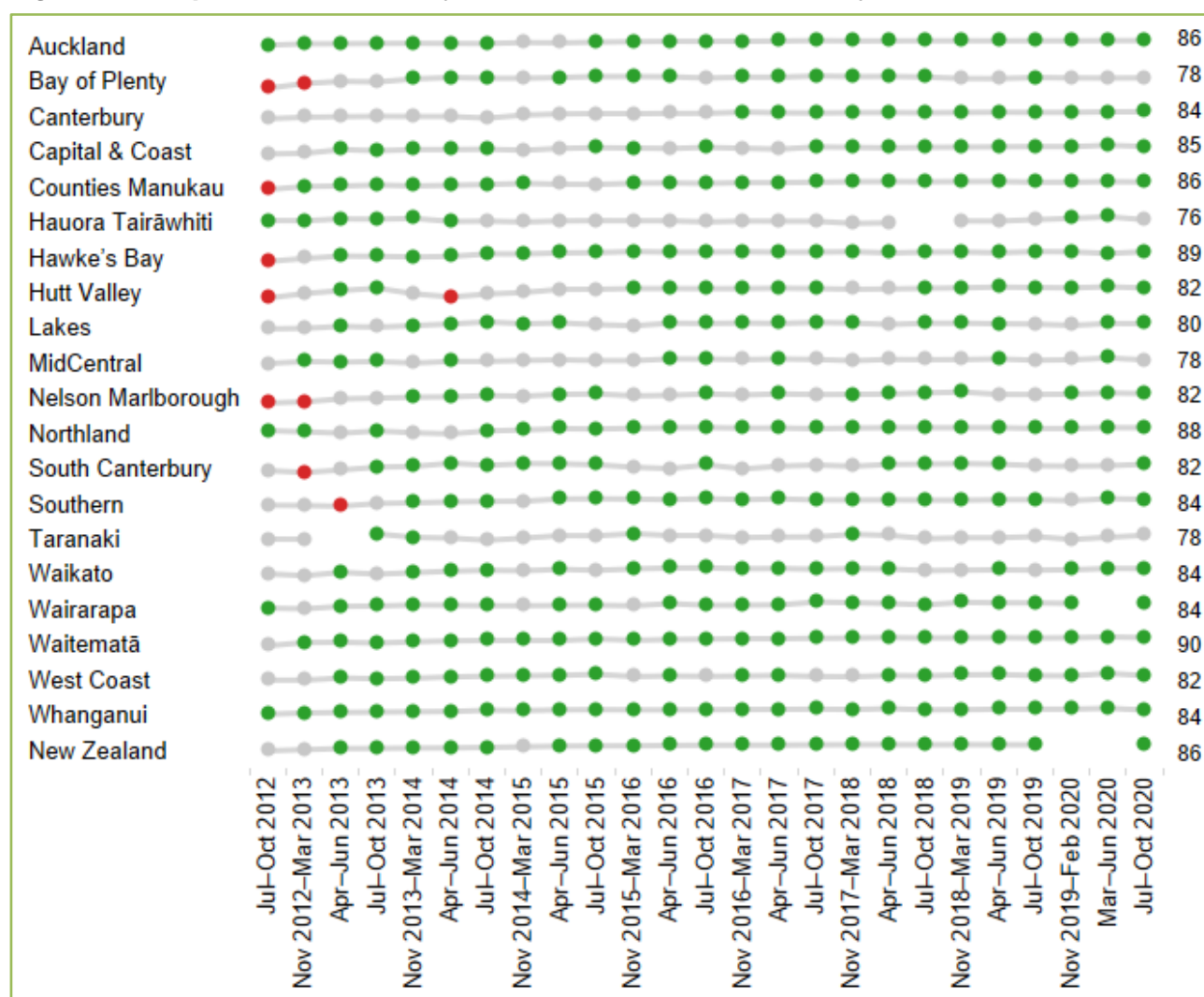
Figure 1: Trends in national aggregate and average hand hygiene compliance, October 2012 to February 2021



National target

The national target for hand hygiene compliance has increased over time, as the programme has successfully gained traction in DHBs. The target was set at 64 percent in June 2012, 70 percent in June 2013, 75 percent in June 2014 and 80 percent in June 2015. The programme is now focused on spreading and embedding good hand hygiene practice to support sustained increases in compliance across DHBs.

Figure 2: Compliance over time by DHB, October 2012 to February 2021



Upper group:	<ul style="list-style-type: none"> ≥ 70 percent before quarter 3, 2014 ≥ 75 percent before quarter 3, 2015 ≥ 80 percent from quarter 3, 2015
Middle group:	Percentage is 60 percent to target
Lower group:	Percentage < 60 percent

Note: Colours may not accurately represent compliance as rates are rounded to the nearest whole number before colour groups are assigned.

Traffic light approach

The red–amber–green figures (Figures 3–5) use a ‘traffic light’ approach. A cell is coloured green if the 80 percent target was achieved, amber if within 5 percent of the target, and red if more than 5 percent from the target. Every year’s rate until 2019 has been averaged.

Figure 3: Change in national hand hygiene compliance over time by moment, October 2012 to February 2021

Key

< 75%	75–80%	≥ 80% target achieved
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Moment	2012	2013	2014	2015	2016	2017	2018	2019	Feb 20	Jun 20	Oct 20	Feb 21
Before touching a patient	55.5	64.7	69.1	75.6	78.1	79.9	81.3	81.5	81.6	83.8	81.7	83.1
Before a procedure	55.6	62.6	69.7	78.2	81.9	84.4	87.8	87.8	88.1	90.1	88.0	89.2
After a procedure or body fluid exposure risk	69.4	74.1	78.3	84.2	88.8	90.7	91.9	92.4	92.4	93.3	92.8	93.6
After touching a patient	71.9	76.5	80.0	85.9	87.1	88.7	89.2	89.3	88.7	91.0	89.9	90.9
After touching a patient’s surroundings	54.9	64.6	69.0	75.7	76.6	77.9	78.5	77.0	75.1	79.6	79.5	79.2

Figure 4: Change in national hand hygiene compliance over time for health care workers, October 2012 to February 2021

Key

< 75%	75–80%	≥ 80% target achieved
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Health care worker	2012	2013	2014	2015	2016	2017	2018	2019	Feb 20	Jun 20	Oct 20	Feb 21
Allied health care worker	62.7	66.7	73.0	78.8	80.5	83.5	85.6	84.6	84.9	88.4	85.6	87.5
Health care assistant	61.5	71.7	74.1	76.4	79.2	81.4	83.9	85.9	83.0	85.4	85.4	85.7
Medical practitioner	55.0	60.1	64.5	72.7	75.5	75.5	78.2	78.2	76.3	81.5	78.1	78.3
Nurse/midwife	65.0	72.0	76.2	82.4	85.7	87.1	87.8	88.1	87.9	89.7	88.5	89.6
Phlebotomy invasive technician	70.4	74.7	81.5	81.6	88.2	89.6	90.4	91.5	92.3	94.2	92.2	92.2
Student allied health	46.7	65.2	70.3	79.7	83.1	80.9	83.9	84.8	77.8	90.7	85.7	93.8
Student doctor	42.6	53.7	63.9	78.9	77.6	79.9	71.5	79.0	78.2	81.0	85.7	84.5
Student nurse/midwife	61.2	69.0	70.6	78.4	82.1	83.5	85.0	84.1	83.5	87.4	85.6	86.4

Figure 5: Changes in national hand hygiene compliance by high-risk ward type, October 2012 to February 2021

Key

< 75%	75–80%	≥ 80% target achieved
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High risk ward type	2012	2013	2014	2015	2016	2017	2018	2019	Feb 20	Jun 20	Oct 20	Feb 21
Critical care	61.0	67.1	71.0	76.3	80.7	84.0	82.6	83.3	82.2	84.7	84.7	85.5
Emergency department	34.1	56.3	66.5	70.0	75.1	77.0	78.3	80.4	79.1	84.0	78.3	80.7
Neonatal intensive care	70.1	73.2	81.3	85.0	87.2	88.4	90.7	91.0	89.2	90.8	88.4	88.7
Oncology/haematology	68.7	72.2	78.2	84.3	88.3	87.0	86.9	88.4	87.4	92.2	90.0	91.1
Renal	64.7	73.5	79.7	81.3	87.0	88.6	89.0	88.7	86.8	88.8	88.6	88.1

Figure 6: Changes in national hand hygiene compliance by standard-risk ward type, October 2018 to February 2021

On 1 July 2019 the requirement to audit across all clinical areas began.

Key

< 75%	75–80%	≥ 80% target achieved
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Standard risk ward type	Oct 18	Mar 18	Jun 19	Oct 19	Feb 20	Jun 20	Oct 20	Feb 21
Acute aged care	87.1	89.5	89.5	88.7	88.5	92.2	91.9	91.1
Ambulatory care	87.8	87.6	84.9	85.1	86.0	89.4	89.8	87.0
Maternity	88.9	86.1	84.3	85.5	82.7	88.6	86.4	87.0
Medical	84.3	84.0	84.6	83.8	85.0	88.0	86.7	87.0
Mixed	85.7	87.0	83.0	81.4	84.5	86.8	87.4	88.1
Paediatrics	89.1	90.2	88.5	89.7	90.5	93.6	92.5	92.4
Perioperative	85.6	80.2	83.7	76.7	79.5	81.8	79.3	82.0
Radiology/radiation oncology	80.7	83.0	83.1	85.7	83.0	86.7	85.1	87.0
Surgical	81.8	83.7	83.6	84.3	83.3	83.5	83.1	85.3