



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

**National hand hygiene compliance report:
1 March 2021 to 30 June 2021**

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Introduction

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 March 2021 to 30 June 2021. The data used in this report was extracted on 8 July 2021.

Compliance is measured as part of the Health Quality & Safety Commission's (the Commission's) Hand Hygiene New Zealand (HHNZ) programme, one of its 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 86.2 percent compared with 86.8 percent in the previous audit period.
- Fifteen DHBs achieved at or above the national target of 80 percent compliance.
- Fourteen 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 remained high over this period, which is important for patient safety.

Of note:

- Ten DHBs have exceeded the 80 percent compliance threshold over several years.
- The compliance rate for 10 DHBs was between 85 percent and 90 percent over the recent audit period.
- Five DHBs have exceeded the 80 percent compliance threshold over the last 3–5 audit periods.

The five DHBs that did not achieve the target of 80 percent compliance were close to the target with compliance rates of ≥ 76.7 percent.

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 resources](#)
- 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 March 2021 to 30 June 2021

The nationally aggregated hand hygiene compliance rate for this measurement period was 86.2 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. Similar rates indicates comparable performance by large/small DHBs.

Table 1: National aggregated hand hygiene compliance, 1 March 2021 to 30 June 2021

Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
68,386	79,352	86.2%	86.0%	86.4%

Table 2: National compliance rates by DHB, 1 March 2021 to 30 June 2021

DHB	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Auckland DHB	12,632	14,431	87.5%	87.0%	88.1%
Bay of Plenty DHB*	1,646	2,091	78.7%	76.9%	80.4%
Canterbury DHB*	3,613	4,296	84.1%	83.0%	85.2%
Capital & Coast DHB	2,667	3,120	85.5%	84.2%	86.7%
Counties Manukau DHB	14,565	16,933	86.0%	85.5%	86.5%
Hauora Tairāwhiti	607	763	79.6%	76.5%	82.3%
Hawke's Bay DHB	1,491	1,684	88.5%	86.9%	90.0%
Hutt Valley DHB	1,596	2,004	79.6%	77.8%	81.3%
Lakes DHB*	700	836	83.7%	81.1%	86.1%
MidCentral DHB*	715	832	85.9%	83.4%	88.1%
Nelson Marlborough DHB	1,392	1,689	82.4%	80.5%	84.2%
Northland DHB*	1,922	2,253	85.3%	83.8%	86.7%
South Canterbury DHB	583	655	89.0%	86.4%	91.2%
Southern DHB	2,450	3,063	80.0%	78.5%	81.4%
Taranaki DHB	1,074	1,400	76.7%	74.4%	78.9%
Waikato DHB*	2,307	2,691	85.7%	84.4%	87.0%
Wairarapa DHB	190	225	84.4%	79.1%	88.6%
Waitematā DHB	16,968	18,779	90.4%	89.9%	90.8%
West Coast DHB	582	714	81.5%	78.5%	84.2%
Whanganui DHB	686	866	79.2%	76.4%	81.8%

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

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 March 2021 to 30 June 2021

Region	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern	46,087	52,396	88.0%	87.7%	88.2%
Midland	6,334	7,781	81.4%	80.5%	82.3%
Central	7,345	8,731	84.1%	83.3%	84.9%
South Island	8,620	10,417	82.7%	82.0%	83.5%

Table 4: Compliance by moment, 1 March 2021 to 30 June 2021

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
1. Before touching a patient	18,692	22,854	81.8%	81.3%	82.3%
2. Before procedure	8,023	8,977	89.4%	88.7%	90.0%
3. After a procedure or body fluid exposure risk	10,334	11,098	93.1%	92.6%	93.6%
4. After touching a patient	20,849	23,163	90.0%	89.6%	90.4%
5. After touching a patient's surroundings	10,488	13,233	79.3%	78.6%	79.9%

Table 5: Department compliance rates, 1 March 2021 to 30 June 2021

Department type	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Acute aged care	2,220	2,487	89.3%	88.0%	90.4%
Ambulatory care	1,717	1,972	87.1%	85.5%	88.5%
Critical care unit	4,523	5,325	84.9%	84.0%	85.9%
Emergency department	3,579	4,493	79.7%	78.5%	80.8%
Maternity	1,758	2,067	85.1%	83.4%	86.5%
Medical	15,673	18,115	86.5%	86.0%	87.0%
Mixed	584	625	93.4%	91.2%	95.1%
Neonatal care	2,680	3,151	85.1%	83.8%	86.3%
Oncology/haematology	2,565	2,898	88.5%	87.3%	89.6%
Other	2,015	2,209	91.2%	90.0%	92.3%
Paediatrics	3,253	3,689	88.2%	87.1%	89.2%
Perioperative	4,282	4,675	91.6%	90.8%	92.4%
Radiology/radiation oncology	3,979	4,865	81.8%	80.7%	82.8%
Renal	871	1,024	85.1%	82.7%	87.1%
Surgical	5,326	5,904	90.2%	89.4%	90.9%

Table 6: Health care worker compliance rates, 1 March 2021 to 30 June 2021

Health care worker	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Nurse/midwife	40,705	45,565	89.3%	89.0%	89.6%
Medical practitioner	9,640	12,304	78.3%	77.6%	79.1%
Allied health care worker	2,850	3,395	83.9%	82.7%	85.1%
Phlebotomy invasive technician	2,414	2,608	92.6%	91.5%	93.5%
Health care assistant	6,372	7,478	85.2%	84.4%	86.0%
Cleaner and meal staff	1,376	1,716	80.2%	78.2%	82.0%
Administrative and clerical staff	183	223	82.1%	76.5%	86.5%
Student doctor	387	469	82.5%	78.8%	85.7%
Other – orderly and not categorised elsewhere	1,587	2,173	73.0%	71.1%	74.9%
Student allied health	161	187	86.1%	80.4%	90.3%
Student nurse/midwife	2,709	3,205	84.5%	83.2%	85.7%

Hand hygiene compliance in glove use

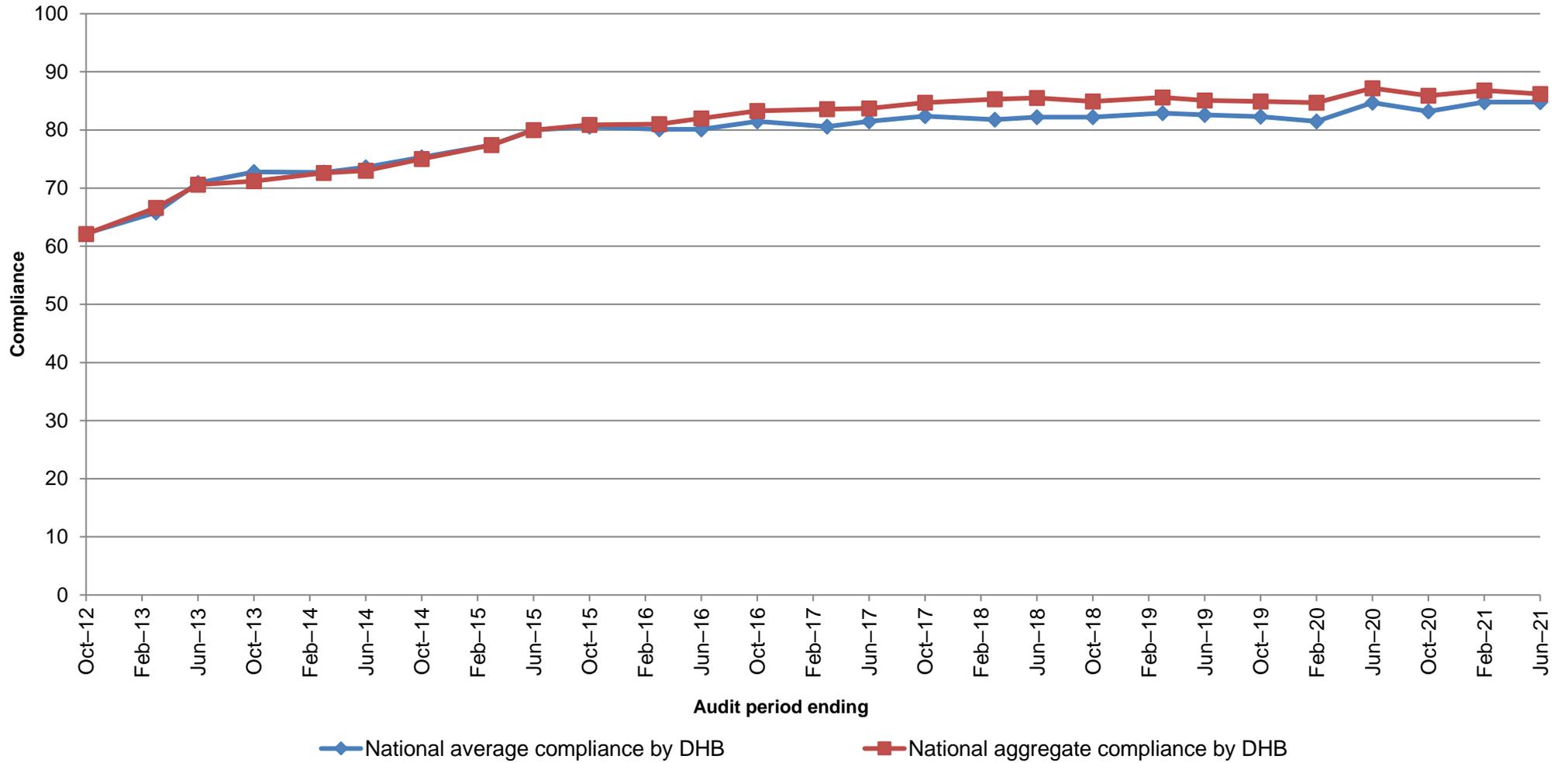
Inappropriate use of non-sterile gloves remains a barrier to excellent hand hygiene practice.

The latest glove statistics are:

- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 5.1 percent compared with 5.2 percent in the previous audit period
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 12.1 percent compared with 11.7 in the previous audit period
- of all moments where glove use was recorded, health care workers failed to complete hand hygiene 15.4 percent of the time compared with 14.7 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 June 2021



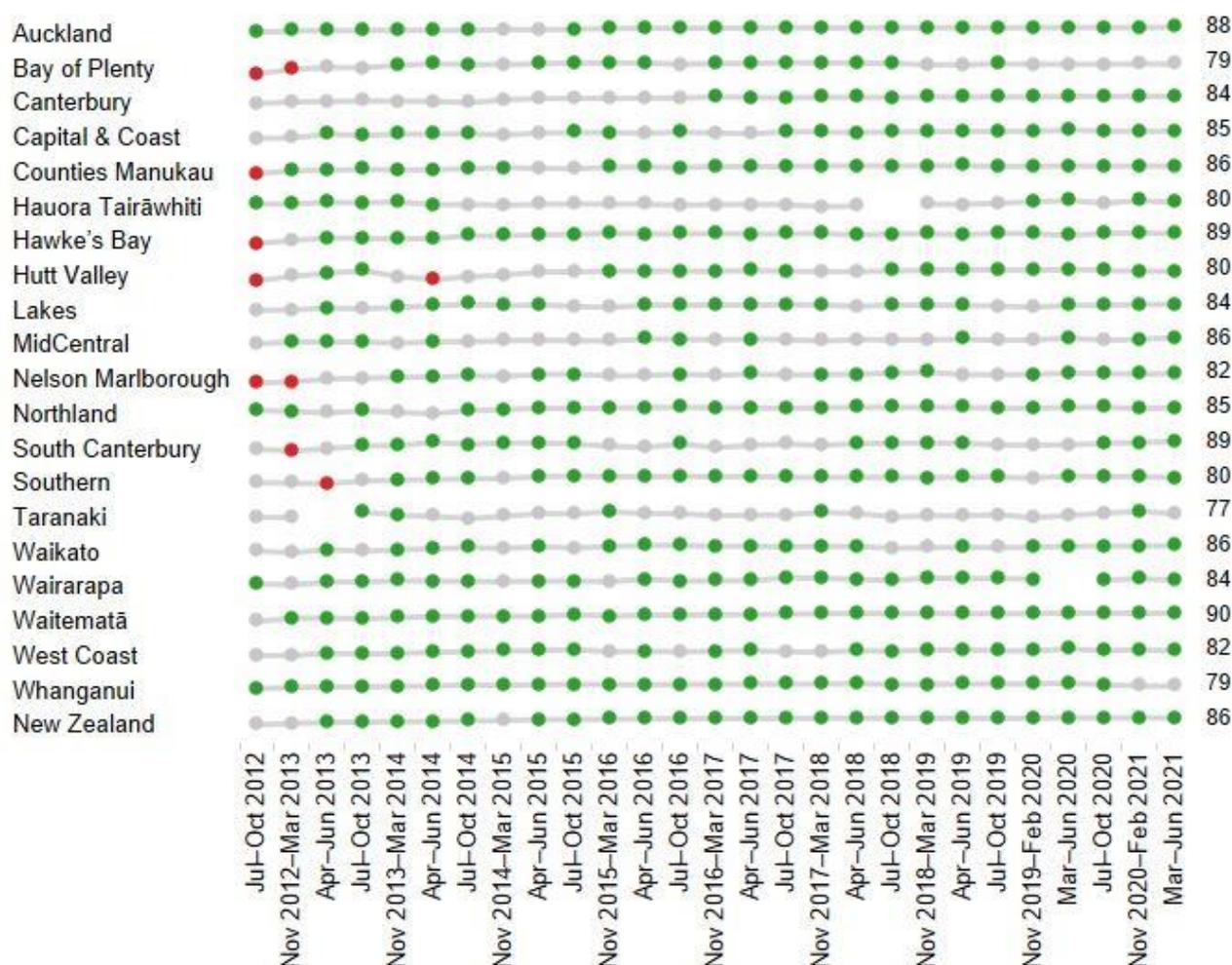
National target

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 June 2021

Measure definition

Five moments: Percentage of opportunities for hand hygiene taken.



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 June 2021

Key

< 75% 75–80% ≥ 80% target achieved

Moment	2012	2013	2014	2015	2016	2017	2018	2019	2020	Feb 21	Jun 21
Before touching a patient	55.5	64.7	69.1	75.6	78.1	79.9	81.3	81.5	82.4	83.1	82.3
Before a procedure	55.6	62.6	69.7	78.2	81.9	84.4	87.8	87.8	88.7	89.2	89.4
After a procedure or body fluid exposure risk	69.4	74.1	78.3	84.2	88.8	90.7	91.9	92.4	92.8	93.6	93.1
After touching a patient	71.9	76.5	80.0	85.9	87.1	88.7	89.2	89.3	89.9	90.9	90.0
After touching a patient's surroundings	54.9	64.6	69.0	75.7	76.6	77.9	78.5	77.0	79.5	79.2	79.3

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

Key

< 75%	75–80%	≥ 80% target achieved
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Health care worker	2012	2013	2014	2015	2016	2017	2018	2019	2020	Feb 21	Jun 21
Allied health care worker	62.7	66.7	73.0	78.8	80.5	83.5	85.6	84.6	86.3	87.5	83.9
Health care assistant	61.5	71.7	74.1	76.4	79.2	81.4	83.9	85.9	84.6	85.7	85.2
Medical practitioner	55.0	60.1	64.5	72.7	75.5	75.5	78.2	78.2	78.6	78.3	79.1
Nurse/midwife	65.0	72.0	76.2	82.4	85.7	87.1	87.8	88.1	88.7	89.6	89.3
Phlebotomy invasive technician	70.4	74.7	81.5	81.6	88.2	89.6	90.4	91.5	92.9	92.2	92.6
Student allied health	46.7	65.2	70.3	79.7	83.1	80.9	83.9	84.8	84.7	93.8	86.1
Student doctor	42.6	53.7	63.9	78.9	77.6	79.9	71.5	79.0	81.6	84.5	82.5
Student nurse/midwife	61.2	69.0	70.6	78.4	82.1	83.5	85.0	84.1	85.5	86.4	84.5

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

Key

< 75%	75–80%	≥ 80% target achieved
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High-risk ward type	2012	2013	2014	2015	2016	2017	2018	2019	2020	Feb 21	Jun 21
Critical care	61.0	67.1	71.0	76.3	80.7	84.0	82.6	83.3	83.9	85.5	84.9
Emergency department	34.1	56.3	66.5	70.0	75.1	77.0	78.3	80.4	80.5	80.7	79.7
Neonatal intensive care	70.1	73.2	81.3	85.0	87.2	88.4	90.7	91.0	89.5	88.7	88.5
Oncology/haematology	68.7	72.2	78.2	84.3	88.3	87.0	86.9	88.4	89.9	91.1	91.2
Renal	64.7	73.5	79.7	81.3	87.0	88.6	89.0	88.7	88.1	88.1	90.2

Figure 6: Changes in national hand hygiene compliance by standard-risk ward type, October 2018 to June 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	Jun 21
Acute aged care	87.1	89.5	89.5	88.7	88.5	92.2	91.9	91.1	89.3
Ambulatory care	87.8	87.6	84.9	85.1	86.0	89.4	89.8	87.0	87.1
Maternity	88.9	86.1	84.3	85.5	82.7	88.6	86.4	87.0	85.1
Medical	84.3	84.0	84.6	83.8	85.0	88.0	86.7	87.0	86.5
Mixed	85.7	87.0	83.0	81.4	84.5	86.8	87.4	88.1	85.1
Paediatrics	89.1	90.2	88.5	89.7	90.5	93.6	92.5	92.4	91.6
Perioperative	85.6	80.2	83.7	76.7	79.5	81.8	79.3	82.0	81.8
Radiology/ radiation oncology	80.7	83.0	83.1	85.7	83.0	86.7	85.1	87.0	85.1
Surgical	81.8	83.7	83.6	84.3	83.3	83.5	83.1	85.3	84.4