



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

## **National hand hygiene compliance report: 1 July 2020 to 31 October 2020**

## Contents

Introduction.....	3
Achievements in this audit period.....	3
Auditing requirements updated to ensure sustainability.....	3
Hand hygiene auditing periods.....	4
Useful resources.....	4
National hand hygiene compliance data: 1 July to 31 October 2020 .....	5
Table 1: National aggregated hand hygiene compliance, 1 July to 31 October 2020.....	5
Table 2: National compliance rates by DHB, 1 July to 31 October 2020.....	5
Table 3: Hand hygiene compliance by geographic region, 1 July to 31 October 2020.....	6
Table 4: Compliance by moment, 1 July to 31 October 2020 .....	6
Table 5: Department compliance rates, 1 July to 31 October 2020 .....	6
Table 6: Health care worker compliance rates, 1 July to 31 October 2020 .....	7
Hand hygiene compliance in glove use .....	7
National hand hygiene compliance over time .....	8
Figure 1: Trends in national aggregate and average hand hygiene compliance, October 2012 to October 2020 .....	8
National target .....	9
Figure 2: Compliance over time by DHB, October 2012 to 31 October 2020.....	9
Traffic light approach .....	10
Figure 3: Change in national hand hygiene compliance over time by moment, October 2012 to October 2020.....	10
Figure 4: Change in national hand hygiene compliance over time for health care workers, October 2012 to October 2020.....	10
Figure 5: Changes in national hand hygiene compliance by high-risk ward type, October 2012 to October 2020.....	11
Figure 6: Changes in national hand hygiene compliance by standard-risk ward type, July 2018 to October 2020 .....	11

## **Introduction**

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 July 2020 to 30 October 2020. The data used in this report was extracted on 12 November 2020.

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 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 85.9 percent compared with 87.2 percent in the previous audit period.
- Sixteen 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.

## **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](mailto: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 July to 31 October 2020

The nationally aggregated hand hygiene compliance rate for this measurement period was 85.9 percent. The national average performance by DHB was similar, at 83.2 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 July to 31 October 2020**

Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
73,769	85,880	85.9%	85.7%	86.1%

**Table 2: National compliance rates by DHB, 1 July to 31 October 2020**

DHB	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Auckland DHB	13,755	15,934	86.3%	85.8%	86.8%
Bay of Plenty DHB*	1,616	2,059	78.5%	76.7%	80.2%
Canterbury DHB*	4,442	5,263	84.4%	83.4%	85.4%
Capital & Coast DHB	2,493	2,916	85.5%	84.2%	86.7%
Counties Manukau DHB	14,638	17,061	85.8%	85.3%	86.3%
Hauora Tairāwhiti DHB	609	801	76.0%	73.0%	78.9%
Hawke's Bay DHB*	1,238	1,393	88.9%	87.1%	90.4%
Hutt Valley DHB	1,655	2,009	82.4%	80.7%	84.0%
Lakes DHB*	857	1,070	80.1%	77.6%	82.4%
MidCentral DHB	1,396	1,801	77.5%	75.5%	79.4%
Nelson Marlborough DHB	1,417	1,722	82.3%	80.4%	84.0%
Northland DHB*	1,610	1,839	87.5%	86.0%	89.0%
South Canterbury DHB	470	572	82.2%	78.8%	85.1%
Southern DHB*	2,140	2,546	84.1%	82.6%	85.4%
Taranaki DHB	1,562	1,992	78.4%	76.6%	80.2%
Waikato DHB	3,517	4,163	84.5%	83.4%	85.6%
Wairarapa DHB	247	293	84.3%	79.7%	88.0%
Waitematā DHB	19,017	21,133	90.0%	89.6%	90.4%
West Coast DHB	418	511	81.8%	78.2%	84.9%
Whanganui DHB	672	802	83.8%	81.1%	86.2%

\* 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. The information for this, currently held by HHNZ, has been reviewed to ensure accuracy.

**Table 3: Hand hygiene compliance by geographic region, 1 July to 31 October 2020**

Region	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern	49,020	55,967	87.6%	87.3%	87.9%
Midland	8,161	10,085	80.9%	80.1%	81.7%
Central	7,701	9,214	83.6%	82.8%	84.3%
South Island	8,887	10,614	83.7%	83.0%	84.4%

**Table 4: Compliance by moment, 1 July to 31 October 2020**

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
1. Before touching a patient	20,392	24,963	81.7%	81.2%	82.2%
2. Before procedure	8,243	9,371	88.0%	87.3%	88.6%
3. After a procedure or body fluid exposure risk	10,774	11,606	92.8%	92.3%	93.3%
4. After touching a patient	22,530	25,052	89.9%	89.6%	90.3%
5. After touching a patient's surroundings	11,830	14,888	79.5%	78.8%	80.1%

**Table 5: Department compliance rates, 1 July to 31 October 2020**

Department type	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Acute aged care	2,368	2,576	91.9%	90.8%	92.9%
Ambulatory care	1,906	2,122	89.8%	88.5%	91.0%
Critical care unit	4,206	4,964	84.7%	83.7%	85.7%
Emergency department	3,248	4,150	78.3%	77.0%	79.5%
Maternity	1,843	2,132	86.4%	84.9%	87.8%
Medical	17,692	20,409	86.7%	86.2%	87.1%
Mixed	2,661	3,043	87.4%	86.2%	88.6%
Neonatal care	2,634	2,981	88.4%	87.2%	89.5%
Oncology/haematology	2,311	2,569	90.0%	88.7%	91.1%
Other	2,980	3,637	81.9%	80.7%	83.2%
Paediatrics	5,034	5,444	92.5%	91.7%	93.1%
Perioperative	4,756	6,001	79.3%	78.2%	80.3%
Radiology/radiation oncology	808	950	85.1%	82.6%	87.2%
Renal	5,228	5,901	88.6%	87.8%	89.4%
Surgical	14,128	16,995	83.1%	82.6%	83.7%

**Table 6: Health care worker compliance rates, 1 July to 31 October 2020**

Health care worker	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Administrative and clerical staff	208	259	80.3%	75.0%	84.7%
Allied health care worker	3,110	3,632	85.6%	84.4%	86.7%
Cleaner and meal staff	1,400	1,738	80.6%	78.6%	82.3%
Health care assistant	6,950	8,142	85.4%	84.6%	86.1%
Medical practitioner	10,134	12,976	78.1%	77.4%	78.8%
Nurse/midwife	43,474	49,134	88.5%	88.2%	88.8%
Other – orderly and not categorised elsewhere	1,598	2,161	73.9%	72.1%	75.8%
Phlebotomy invasive technician	2,580	2,798	92.2%	91.2%	93.1%
Student allied health	197	230	85.7%	80.5%	89.6%
Student doctor	562	656	85.7%	82.8%	88.1%
Student nurse/midwife	3,556	4,154	85.6%	84.5%	86.6%

### Hand hygiene compliance in glove use

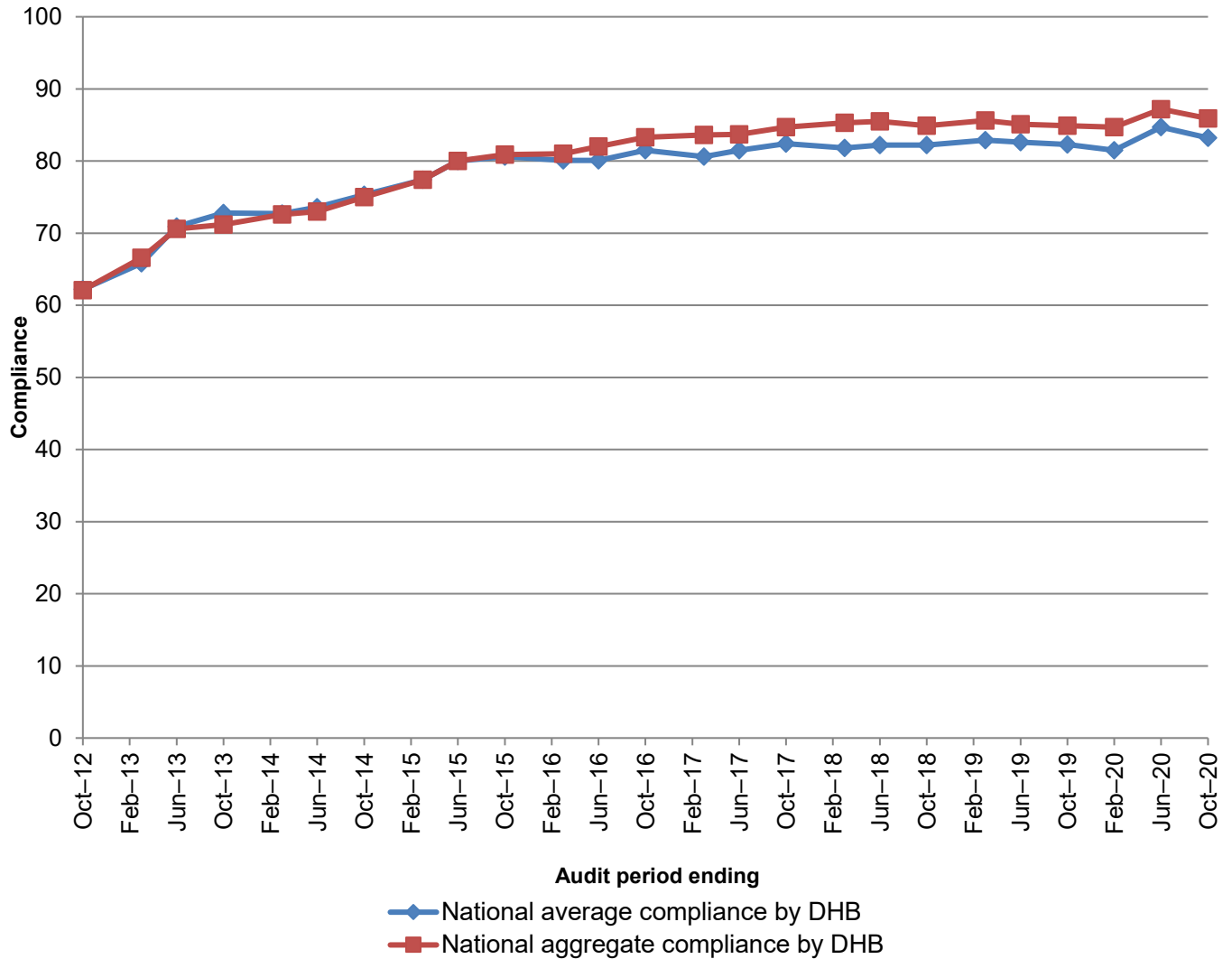
Inappropriate use of non-sterile gloves remains a barrier to excellent hand hygiene practice.

The latest glove statistics are:

- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 5.7 percent compared with 4.2 percent in the Mar–Jun 2020 audit period
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 13.3 percent compared with 10.8 in the Mar–Jun 2020 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 7.2 percent in the Mar–Jun 2020 audit period.

## National hand hygiene compliance over time

**Figure 1: Trends in national aggregate and average hand hygiene compliance, October 2012 to October 2020**

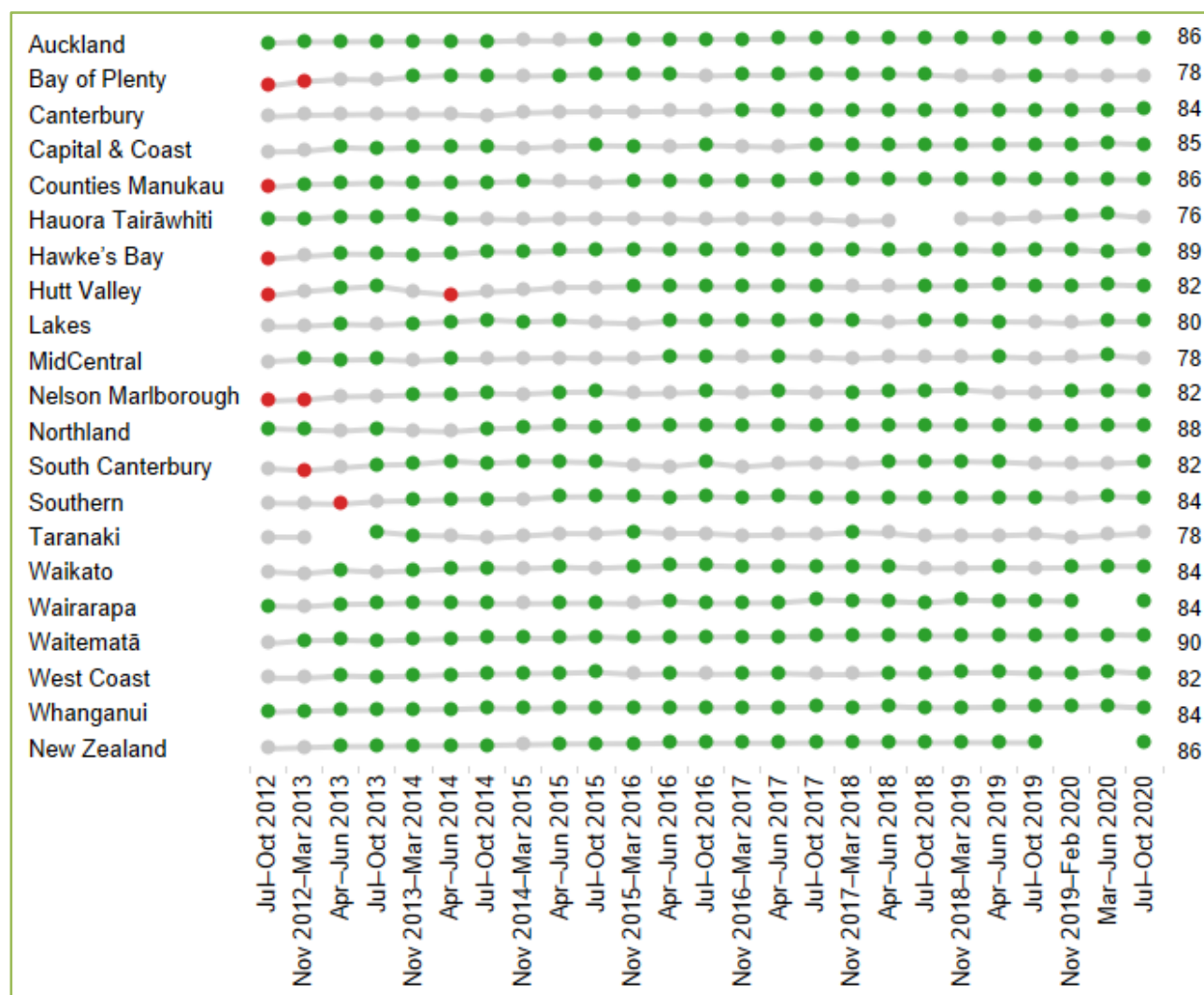




## National target

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 October 2020**



Upper group:	<ul style="list-style-type: none"> <li>≥ 70 percent before quarter 3, 2014</li> <li>≥ 75 percent before quarter 3, 2015</li> <li>≥ 80 percent from quarter 3, 2015</li> </ul>
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 October 2020**

### Key

< 75%    75–80%    ≥ 80% target achieved

Moment	2012	2013	2014	2015	2016	2017	2018	2019	Feb 20	Jun 20	Oct 20
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
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
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
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
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

**Figure 4: Change in national hand hygiene compliance over time for health care workers, October 2012 to October 2020**

### Key

< 75%    75–80%    ≥ 80% target achieved

Health care worker	2012	2013	2014	2015	2016	2017	2018	2019	Feb 20	Jun 20	Oct 20
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
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
Medical practitioner	55.0	60.1	64.5	72.7	75.5	75.5	78.2	78.2	76.3	81.5	78.1
Nurse/midwife	65.0	72.0	76.2	82.4	85.7	87.1	87.8	88.1	87.9	89.7	88.5
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
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
Student doctor	42.6	53.7	63.9	78.9	77.6	79.9	71.5	79.0	78.2	81.0	85.7
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

**Figure 5: Changes in national hand hygiene compliance by high-risk ward type, October 2012 to October 2020**

**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
Critical care	61.0	67.1	71.0	76.3	80.7	84.0	82.6	83.3	82.2	84.7	84.7
Emergency department	34.1	56.3	66.5	70.0	75.1	77.0	78.3	80.4	79.1	84.0	78.3
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
Oncology/haematology	68.7	72.2	78.2	84.3	88.3	87.0	86.9	88.4	87.4	92.2	90.0
Renal	64.7	73.5	79.7	81.3	87.0	88.6	89.0	88.7	86.8	88.8	88.6

**Figure 6: Changes in national hand hygiene compliance by standard-risk ward type, October 2018 to October 2020**

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
Acute aged care	87.1	89.5	89.5	88.7	88.5	92.2	91.9
Ambulatory care	87.8	87.6	84.9	85.1	86.0	89.4	89.8
Maternity	88.9	86.1	84.3	85.5	82.7	88.6	86.4
Medical	84.3	84.0	84.6	83.8	85.0	88.0	86.7
Mixed	85.7	87.0	83.0	81.4	84.5	86.8	87.4
Paediatrics	89.1	90.2	88.5	89.7	90.5	93.6	92.5
Perioperative	85.6	80.2	83.7	76.7	79.5	81.8	79.3
Radiology / radiation oncology	80.7	83.0	83.1	85.7	83.0	86.7	85.1
Surgical	81.8	83.7	83.6	84.3	83.3	83.5	83.1