



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

## **National hand hygiene compliance report: 1 July 2016 to 31 October 2016**

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## **Introduction**

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 July 2016 to 31 October 2016.

Compliance is measured as part of the Health Quality & Safety Commission's (the Commission) Hand Hygiene New Zealand (HHNZ) programme.

The HHNZ programme is one of two programmes that are part of the Commission's infection prevention and control (IPC) programme. These targeted improvement initiatives aim to reduce the harm and cost of healthcare associated infections within New Zealand's health and disability sector.

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

Auckland DHB delivered the HHNZ programme on behalf of the Commission between 2011 and 2015. In February 2016 the programme was transitioned to the Commission.

## **Achievements in this audit period**

- DHBs achieved the national hand hygiene compliance target of 80 percent set in June 2015 for the fifth consecutive audit period.
- Compliance among many health care worker categories continued to improve. Particularly pleasing is the continued improvement among nurses and midwives, medical practitioners, health care assistants and allied health care workers.
- There are continual improvements being made in the areas where patients at high risk of infection are cared for, including emergency departments.
- Hand hygiene compliance and glove use has also continued to improve in all three situations: before gloves are put on, when gloves are taken off and at the appropriate times during patient care.
- Fourteen DHBs maintained or improved their compliance rate compared with the previous audit period.
- Fifteen DHBs achieved at or above the national target of 80 percent.

## **Continuing to drive improvement**

A key focus for the Hand Hygiene New Zealand programme in 2017 is to encourage the spread of auditing and other improvement activities across the clinical areas in DHBs. Spreading and sustaining the improvements already achieved in hand hygiene practice is essential to prevent healthcare associated infections and to respond to the growing threat of infections caused by multi-resistant microorganisms.

Table 2 shows that some DHBs have already taken the step of spreading their improvement efforts beyond the national reporting wards and are submitting all data collected across the organisation for each audit period. In future reports we will discuss how these DHBs have achieved organisation-wide engagement, including the barriers they have encountered and the local solutions they have developed to 'do the right thing, for every patient, every time'.

Thank you to all DHBs for responding to the recent hand hygiene stocktake survey. From a national perspective it is very helpful to have an understanding of the number of gold auditors in each DHB and region, and the assistance being given by larger DHBs to their smaller neighbours in sustaining gold auditor capability. We are pleased to see that seven DHBs are submitting compliance data for their emergency departments currently as these have often been cited as 'harder to engage' clinical areas in improvement activities. The full results of the survey will be released to stakeholders as soon as possible.

## **Useful resources**

[District health boards celebrate World Hand Hygiene Day](#)

[Frontline ownership having a positive impact on hand hygiene compliance](#)

[Front line ownership workshop with Dr Michael Gardam](#)

## National hand hygiene compliance data: 1 July 2016 to 31 October 2016

The nationally aggregated hand hygiene compliance rate for this measurement period is 83.3 percent. The national average performance by district health board (DHB) is similar at 81.5 percent. 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 within two percentage points indicates that performance rates between large and small DHBs are very similar.

**Table 1: Aggregated hand hygiene compliance, 1 July 2016 to 31 October 2016**

Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
52,562	63,114	83.3%	83.0%	83.6%

**Table 2: National compliance rates by DHB, 1 July 2016 to 31 October 2016**

District health board	1 July 2016 to 31 October 2016			Lower 95% confidence interval	Upper 95% confidence interval
	Correct moments	Total moments	Compliance rate		
Northland DHB	3,122	3,536	88.3%	87.2%	89.3%
Hawke's Bay DHB	1,572	1,796	87.5%	85.9%	89.0%
Waikato DHB	2,247	2,586	86.9%	85.5%	88.1%
Southern DHB	2,493	2,889	86.3%	85.0%	87.5%
Waitemata DHB	15,859	18,762	84.5%	84.0%	85.0%
Whanganui DHB	960	1,138	84.4%	82.1%	86.4%
Auckland DHB	10,404	12,426	83.7%	83.1%	84.4%
Capital & Coast DHB	2,064	2,512	82.2%	80.6%	83.6%
Counties Manukau Health	2,637	3,256	81.0%	79.6%	82.3%
Nelson-Marlborough DHB	1,083	1,341	80.8%	78.6%	82.8%
MidCentral DHB	1,638	2,031	80.6%	78.9%	82.3%
Wairarapa DHB	216	268	80.6%	75.4%	84.9%
Lakes DHB	718	892	80.5%	77.8%	83.0%
South Canterbury DHB	499	623	80.1%	76.8%	83.0%
Hutt Valley DHB	1,467	1,835	79.9%	78.1%	81.7%
West Coast DHB	726	916	79.3%	76.5%	81.8%
Canterbury DHB	1,992	2,529	78.8%	77.1%	80.3%
Bay of Plenty DHB	1,653	2,121	77.9%	76.1%	79.6%
Taranaki DHB	611	788	77.5%	74.5%	80.3%
Hauora Tairāwhiti	586	853	68.7%	65.5%	71.7%

**Table 3: Hand hygiene compliance by geographic region, 1 July 2016 to 31 October 2016**

Name	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern Region	32,037	37,996	84.3%	83.9%	84.7%
Midland Region	5,815	7,240	80.3%	79.4%	81.2%
Central Region	7,917	9,580	82.6%	81.9%	83.4%
South Island Region	6,793	8,298	81.9%	81.0%	82.7%

**National compliance rates by each of the WHO '5 moments for hand hygiene'**

**Table 4: Compliance by moment, 1 July 2016 to 31 October 2016**

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
1 - Before touching a patient	14,909	18,676	79.8%	79.2%	80.4%
2 - Before procedure	5,116	6,144	83.3%	82.3%	84.2%
3 - After a procedure or body fluid exposure risk	7,452	8,284	90.0%	89.3%	90.6%
4 - After touching a patient	16,324	18,625	87.6%	87.2%	88.1%
5 - After touching a patient's surroundings	8,761	11,385	77.0%	76.2%	77.7%

## National compliance rates by health care worker category

**Table 5: Health care worker compliance rates, 1 July 2016 to 31 October 2016**

Name	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Phlebotomy invasive technician	1,839	2,073	88.7%	87.3%	90.0%
Nurse/midwife	31,420	36,273	86.6%	86.3%	87.0%
Student allied health	266	314	84.7%	80.3%	88.3%
Student nurse/midwife	2,098	2,571	81.6%	80.1%	83.1%
Allied health care worker	2,551	3,129	81.5%	80.1%	82.8%
Health care assistant	4,132	5,127	80.6%	79.5%	81.7%
Administrative and clerical staff	184	230	80.0%	74.4%	84.7%
Student doctor	389	493	78.9%	75.1%	82.3%
Medical practitioner	8,292	10,865	76.3%	75.5%	77.1%
Cleaner and meal staff	767	1,062	72.2%	69.5%	74.8%
Other (orderly and not categorised elsewhere)	624	977	63.9%	60.8%	66.8%

### Hand hygiene compliance in glove use

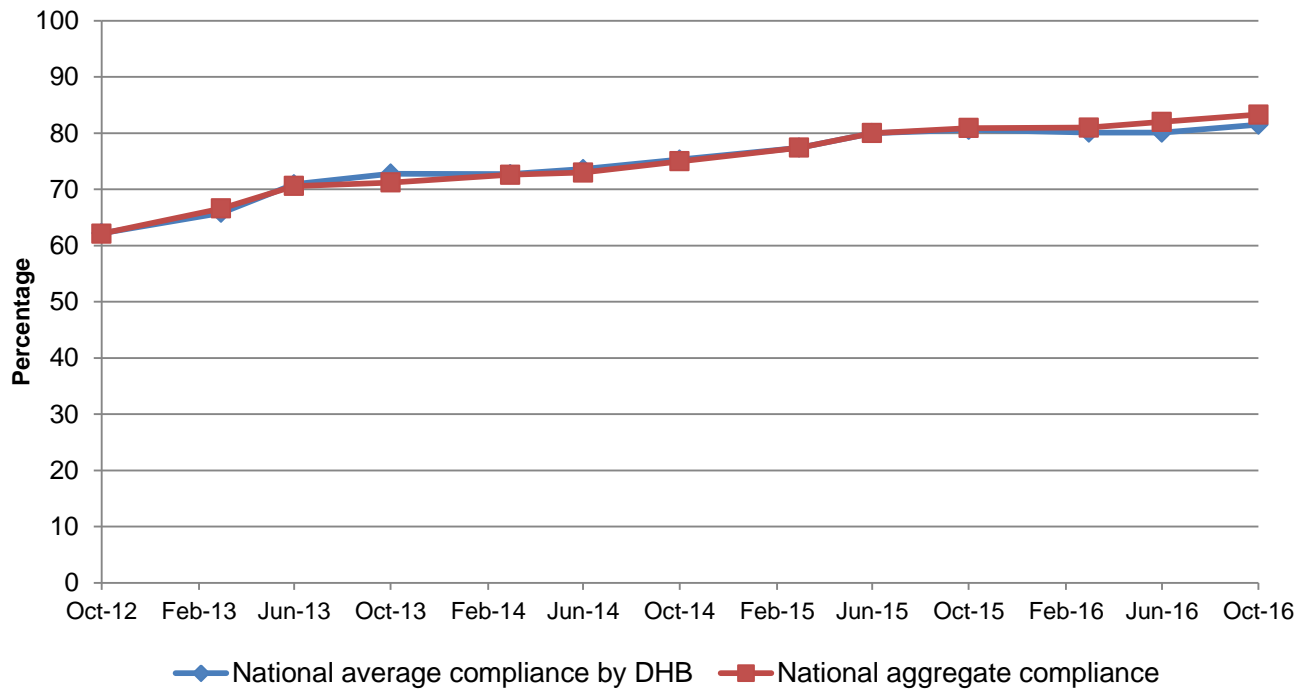
Inappropriate use of non-sterile gloves remains a barrier to excellent hand hygiene practice.

However, it is good to see that ongoing improvement in better glove use and hand hygiene performance has continued during this measurement period: before gloves are put on, when they are taken off and at the appropriate times during patient care.

The latest glove statistics are:

- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 6.9 percent compared with 9.4 percent in the June 2015 audit
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 18.0 percent compared with 22.6 percent in the June 2015 audit
- of all moments where glove use is recorded, health care workers failed to complete hand hygiene 12.5 percent of the time, compared to 20.8 percent in the June 2015 audit.

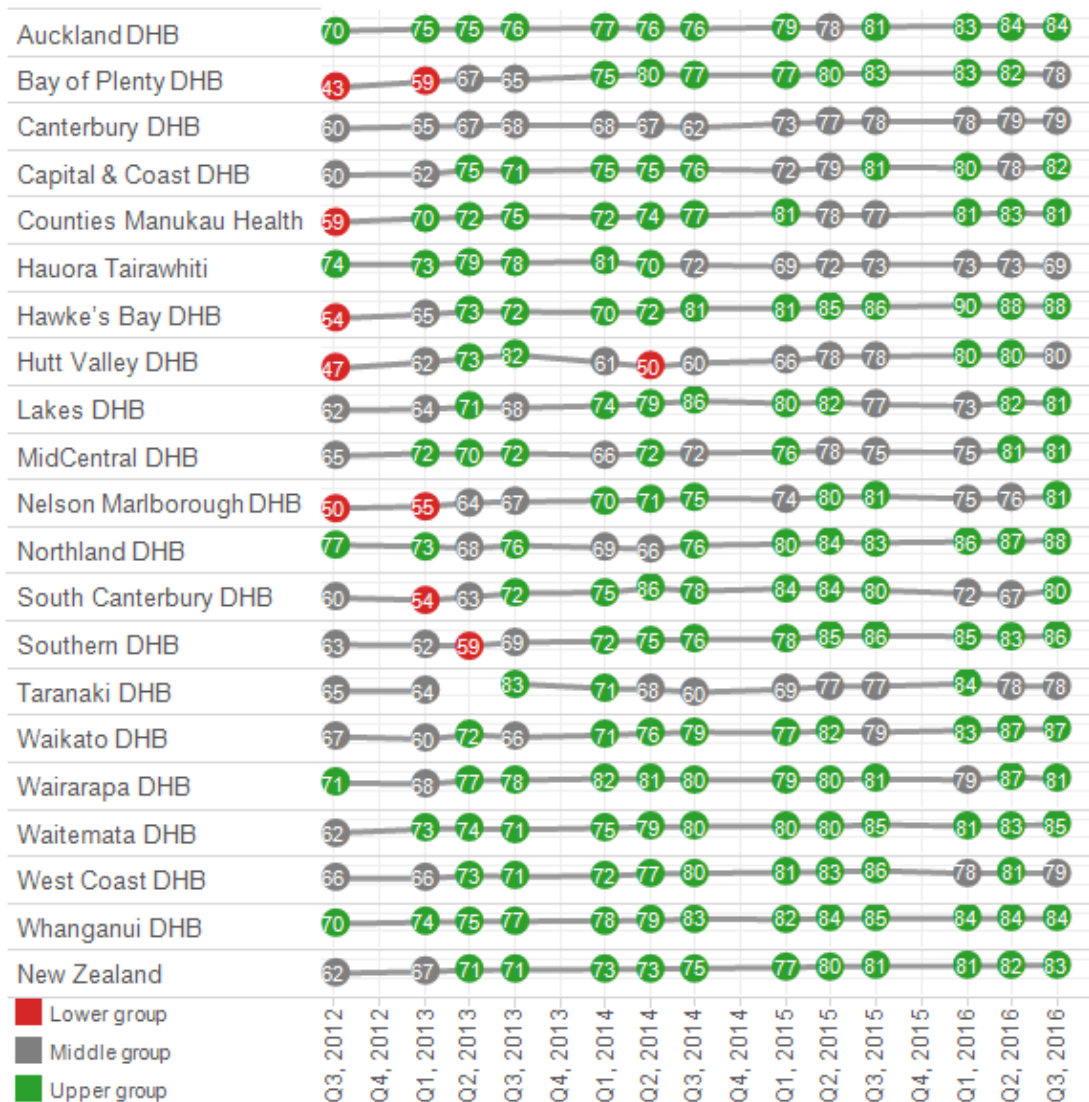
**Figure 1: Trends in national aggregate and average hand hygiene compliance, October 2012 to October 2016**





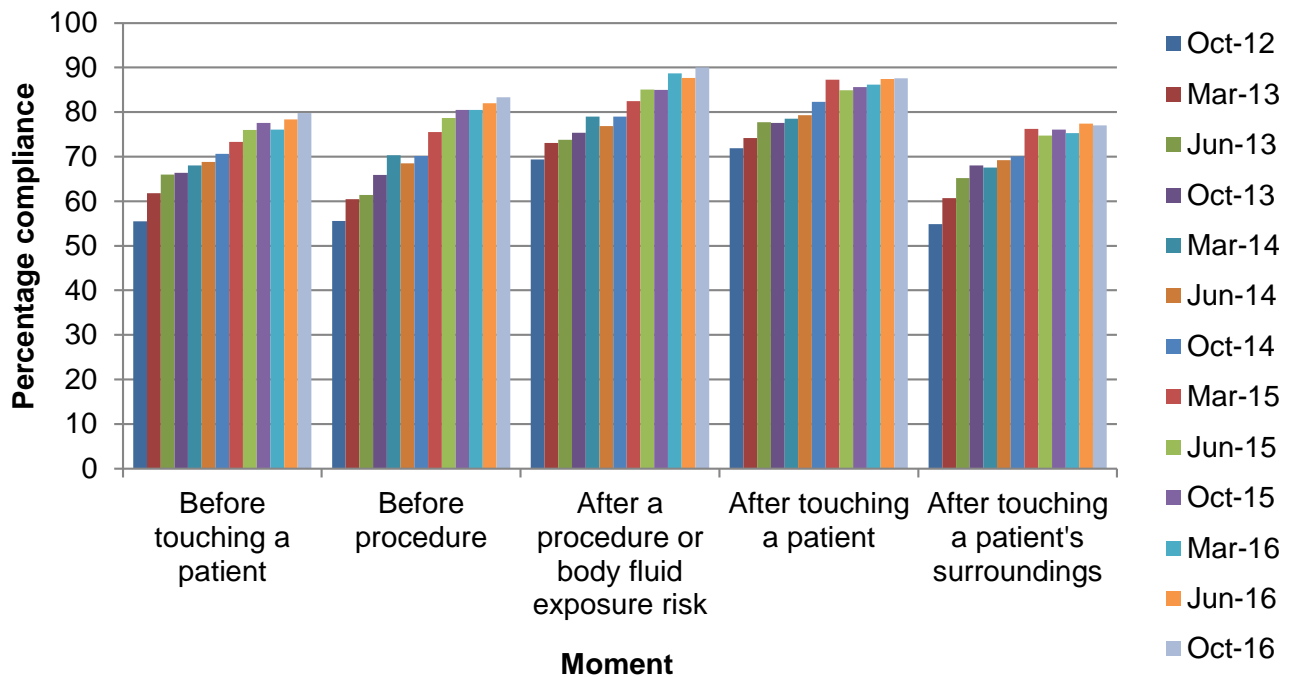
**Figure 2: Compliance over time by DHB, October 2012 to October 2016**

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.



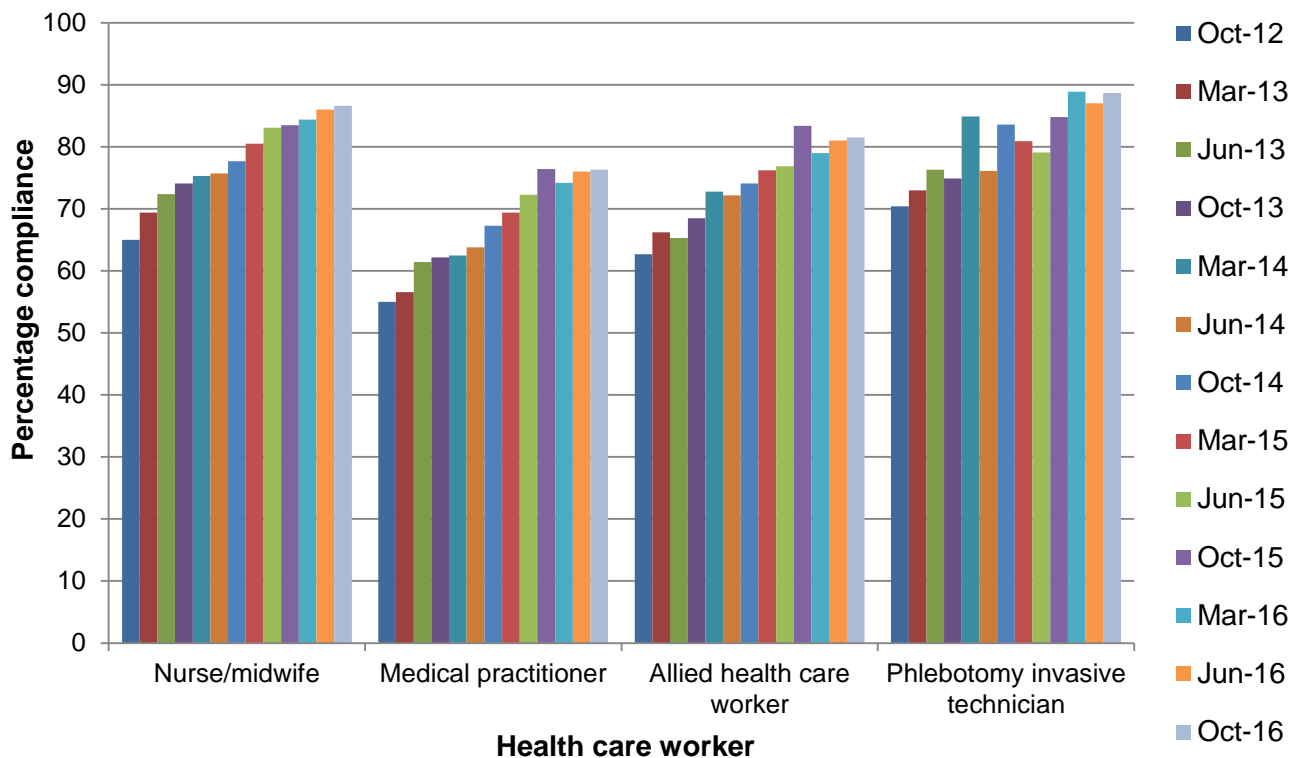
- Upper group: ≥70 percent before Q3 2014, ≥ 75 percent before Q3 2015 and ≥ 80 percent from Q3 2015.
- Middle group: percentage is 60 percent to target.
- Lower group: percentage <60 percent.
- Hand hygiene national compliance data is reported on three times per annum, therefore no data point is shown specifically for Q4 in any year.

**Figure 3: Change in national hand hygiene compliance over time by moment, October 2012 to October 2016**

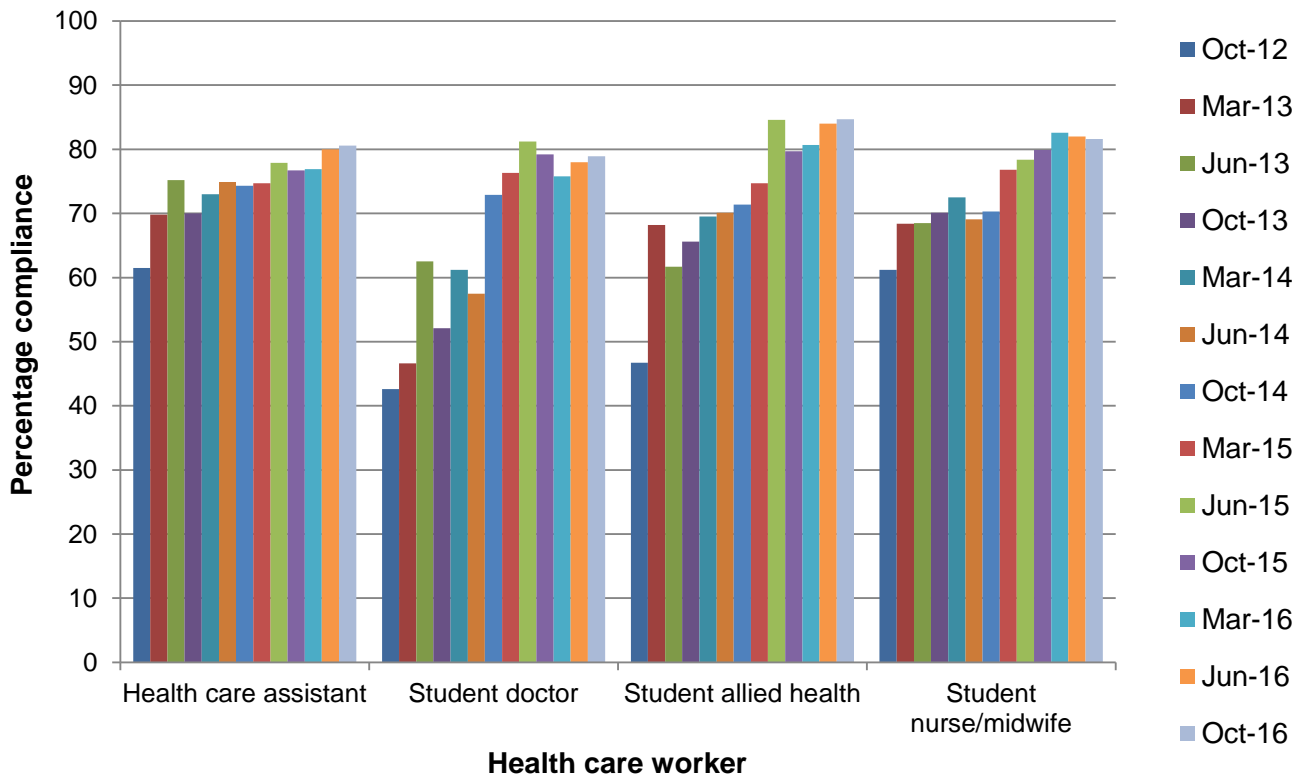


**Figure 4: Change in national hand hygiene compliance over time for health care workers, October 2012 to October 2016**

**A. Nurse/midwife, medical practitioner, allied health care worker and phlebotomy invasive technician**



**B. Health care assistant, student doctor, student allied health worker and student nurse/midwife**



**Figure 5: Changes in national hand hygiene compliance by high-risk ward type, October 2012 to October 2016**

