



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

**National hand hygiene compliance report:
1 November 2015 to 31 March 2016**

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Introduction

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 November 2015 to 31 March 2016.

Compliance is measured as part of the Hand Hygiene New Zealand (HHNZ) programme.

The HHNZ programme is one of two programmes that are part of the Health Quality & Safety Commission's (the Commission) 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 '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

- National hand hygiene compliance stayed at or above 80 percent for the third consecutive audit period.
- Compliance among many health care worker categories continued to improve. Particularly pleasing is the continued improvement among medical practitioners and allied health care workers.
- Hand hygiene compliance and glove use improved in all three situations: before gloves are put on, when gloves are taken off, and at the appropriate times during patient care.
- Once again, all 20 DHBs submitted 100 percent or more of the required hand hygiene data (WHO 5 moments) for this audit period.
- Nine DHBs improved on their last audit.
- For the third consecutive audit period, 19 DHBs achieved at or above 75 percent. Of the 19, 12 achieved at 80 percent or greater (Swedish rounding).

Changes to the national report

In this report we have included for the first time a breakdown of results for high-risk wards over time. The results show improvements across all clinical settings, ranging from neonatal intensive care through to emergency departments (Figure 5).

Continuing to drive improvement

'Frontline ownership' (FLO) is a quality improvement method that encourages frontline staff to come up with solutions to improve hand hygiene compliance for their unique work area, which can lead to more successful and sustainable hand hygiene improvements.

Many DHBs have started to use the FLO method to improve their hand hygiene compliance.

More information about FLO is available in a presentation delivered by Dr Michael Gardam at the HHNZ Quality Improvement Workshop in June 2014. The presentation is in the guidance documents on the HHNZ website (www.handhygiene.org.nz) or [here](#).

Dr Gardam also led a workshop in Napier in September 2015 on tips and techniques for engaging health care teams in hand hygiene improvement. You can view the video [here](#).

An ongoing priority is glove use and hand hygiene. While the compliance rates for hand hygiene before, during and after glove use are improving, we recommend DHBs use FLO to find new solutions and increase awareness in this area.

Over the last three audit periods, as part of its approach to spread improvement efforts to all wards and departments, Auckland DHB submitted all audit data collected throughout the organisation (Options B and/or C p.16–17 of the [HHNZ Auditing Manual](#)). The data was collected by appropriately trained gold auditors, and is expected to help drive and sustain improvements more broadly throughout the DHB. In this audit period, two other DHBs adopted a similar approach – Waitemata and West Coast. The approach has been shared with the regional networks and is also being implemented in some other DHBs.

National hand hygiene compliance data: 1 November 2015 to 31 March 2016

The nationally aggregated hand hygiene compliance rate for this audit period is **81 percent**. The national average compliance by DHB is also 81 percent. The average rate gives equal weighting to each DHB result, regardless of size, while the aggregate rate is more affected by the compliance of large DHBs. The fact that the national average and aggregate are the same indicates compliance of large and small DHBs is similar.

Table 1: Aggregated hand hygiene compliance, 1 November 2015 to 31 March 2016

| Correct hand hygiene actions | Total moments | Compliance rate | Lower 95% confidence interval | Upper 95% confidence interval |
|------------------------------|---------------|-----------------|-------------------------------|-------------------------------|
| 51,449 | 63,483 | 81% | 80.7% | 81.3% |

Table 2: National compliance rates by DHB, 1 November 2015 to 31 March 2016

| DHB | 1 November 2015 to 31 March 2016 | | | | |
|-------------------------|----------------------------------|---------------|-------------------|-------------------------------|-------------------------------|
| | Correct moments | Total moments | % correct moments | Lower 95% confidence interval | Upper 95% confidence interval |
| Hawke's Bay DHB | 1,469 | 1,641 | 89.5% | 87.9% | 90.9% |
| Northland DHB | 1,515 | 1,767 | 85.7% | 84.0% | 87.3% |
| Southern DHB | 2,223 | 2,621 | 84.8% | 83.4% | 86.1% |
| Whanganui DHB | 706 | 838 | 84.2% | 81.6% | 86.6% |
| Taranaki DHB | 307 | 365 | 84.1% | 80.0% | 87.5% |
| Waikato DHB | 2,088 | 2,508 | 83.3% | 81.7% | 84.7% |
| Bay of Plenty DHB | 1,757 | 2,116 | 83.0% | 81.4% | 84.6% |
| Auckland DHB | 12,004 | 14,521 | 82.7% | 82.0% | 83.3% |
| Counties Manukau Health | 2,218 | 2,724 | 81.4% | 79.9% | 82.8% |
| Waitemata DHB | 15,231 | 18,877 | 80.7% | 80.1% | 81.2% |
| Hutt Valley DHB | 1,450 | 1,807 | 80.2% | 78.3% | 82.0% |
| Capital & Coast DHB | 1,959 | 2,450 | 80.0% | 78.3% | 81.5% |
| Wairarapa DHB | 224 | 284 | 78.9% | 73.8% | 83.2% |
| West Coast DHB | 1,411 | 1,798 | 78.5% | 76.5% | 80.3% |
| Canterbury DHB | 2,229 | 2,870 | 77.7% | 76.1% | 79.2% |
| Mid Central DHB | 1,828 | 2,440 | 74.9% | 73.2% | 76.6% |
| Nelson Marlborough DHB | 1,118 | 1,497 | 74.7% | 72.4% | 76.8% |
| Hauora Tairāwhiti | 628 | 862 | 72.9% | 69.8% | 75.7% |
| Lakes DHB | 652 | 896 | 72.8% | 69.8% | 75.6% |
| South Canterbury DHB | 432 | 601 | 71.9% | 68.2% | 75.3% |

Table 3: Hand hygiene compliance by geographic region, 1 November 2015 to 31 March 2016

| Region | Correct moments | Total moments | Compliance rate | Lower 95% confidence interval | Upper 95% confidence interval |
|--------------------------|-----------------|---------------|-----------------|-------------------------------|-------------------------------|
| Northern DHB network | 30,968 | 37,889 | 81.7% | 81.3% | 82.1% |
| Midland DHB network | 5,125 | 6,382 | 80.3% | 79.3% | 81.3% |
| Central DHB network | 7,943 | 9,825 | 80.8% | 80.1% | 81.6% |
| South Island DHB network | 7,413 | 9,387 | 79.0% | 78.1% | 79.8% |

National compliance rates by each of the World Health Organization 5 moments for hand hygiene

Table 4: Compliance by moment, 1 November 2015 to 31 March 2016

| Moment | Correct hand hygiene actions | Total moments | Compliance rate | Lower 95% confidence interval | Upper 95% confidence interval |
|--------------------------------------------------|------------------------------|---------------|-----------------|-------------------------------|-------------------------------|
| 1. Before touching a patient | 14,603 | 19,192 | 76.1% | 75.5% | 76.7% |
| 2. Before procedure | 4,772 | 5,925 | 80.5% | 79.5% | 81.5% |
| 3. After a procedure or body fluid exposure risk | 7,020 | 7,909 | 88.8% | 88.0% | 89.4% |
| 4. After touching a patient | 16,774 | 19,464 | 86.2% | 85.7% | 86.7% |
| 5. After touching a patient's surroundings | 8,280 | 10,993 | 75.3% | 74.5% | 76.1% |

National compliance rates by health care worker category

Table 5: Health care worker compliance rates, 1 November 2015 to 31 March 2016

| Worker category | Correct moments | Total moments | Compliance rate | Lower 95% confidence interval | Upper 95% confidence interval |
|-----------------------------------------------|-----------------|---------------|-----------------|-------------------------------|-------------------------------|
| Phlebotomy invasive technician | 1,916 | 2,155 | 88.9% | 87.5% | 90.2% |
| Administrative and clerical staff | 143 | 165 | 86.7% | 80.6% | 91.0% |
| Nurse/midwife | 30,942 | 36,651 | 84.4% | 84.0% | 84.8% |
| Student nurse/midwife | 1,191 | 1,442 | 82.6% | 80.6% | 84.5% |
| Student allied health | 113 | 140 | 80.7% | 73.4% | 86.4% |
| Allied health care worker | 2,639 | 3,342 | 79.0% | 77.6% | 80.3% |
| Health care assistant | 4,092 | 5,321 | 76.9% | 75.8% | 78.0% |
| Student doctor | 213 | 281 | 75.8% | 70.5% | 80.4% |
| Medical practitioner | 8,798 | 11,853 | 74.2% | 73.4% | 75.0% |
| Cleaner and meal staff | 704 | 984 | 71.5% | 68.6% | 74.3% |
| Other (orderly and not categorised elsewhere) | 698 | 1,149 | 60.7% | 57.9% | 63.5% |

Hand hygiene compliance in glove use

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

However, in this measurement period, the trend towards better glove use and hand hygiene compliance has continued: before gloves are put on, when they are taken off and at the appropriate times during patient care.

The latest glove statistics are as follows:

- When gloves are taken OFF, the proportion of hand hygiene opportunities missed was 8.0 percent compared with 9.1 percent in the last audit period.
- When gloves are put ON, the proportion of hand hygiene opportunities missed was 19.4 percent compared with 19.8 percent in the last audit period.
- Of all moments where glove use is recorded, health care workers failed to complete hand hygiene 17.8 percent of the time, compared with 19.2 percent in the last audit period.

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

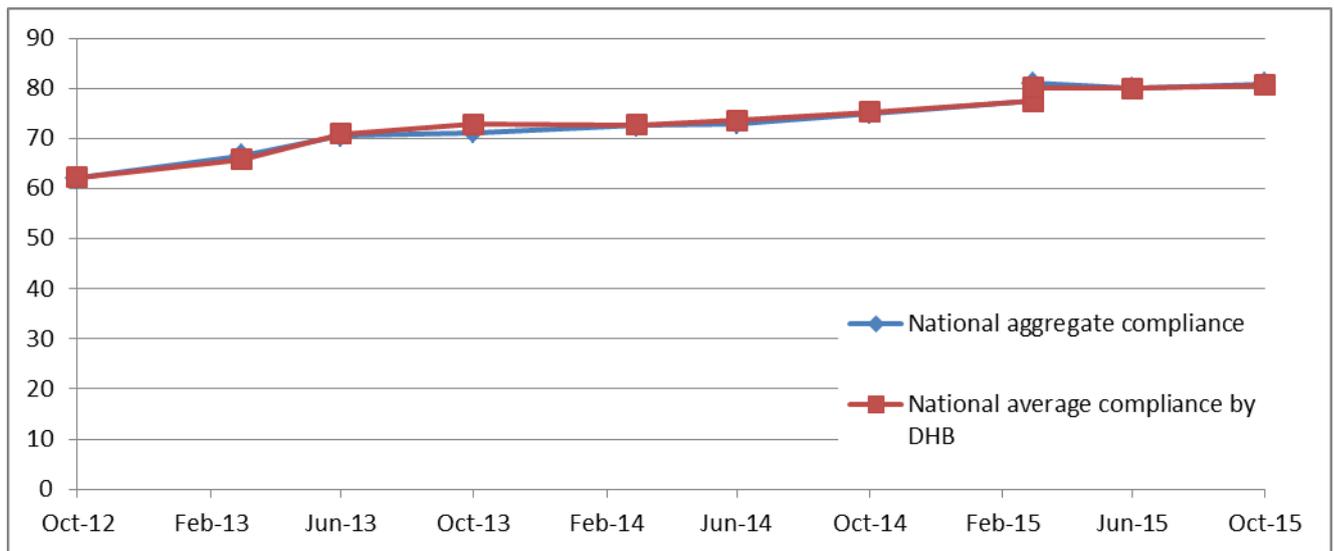


Figure 2: Compliance over time by DHB, 1 November 2015 to 31 March 2016

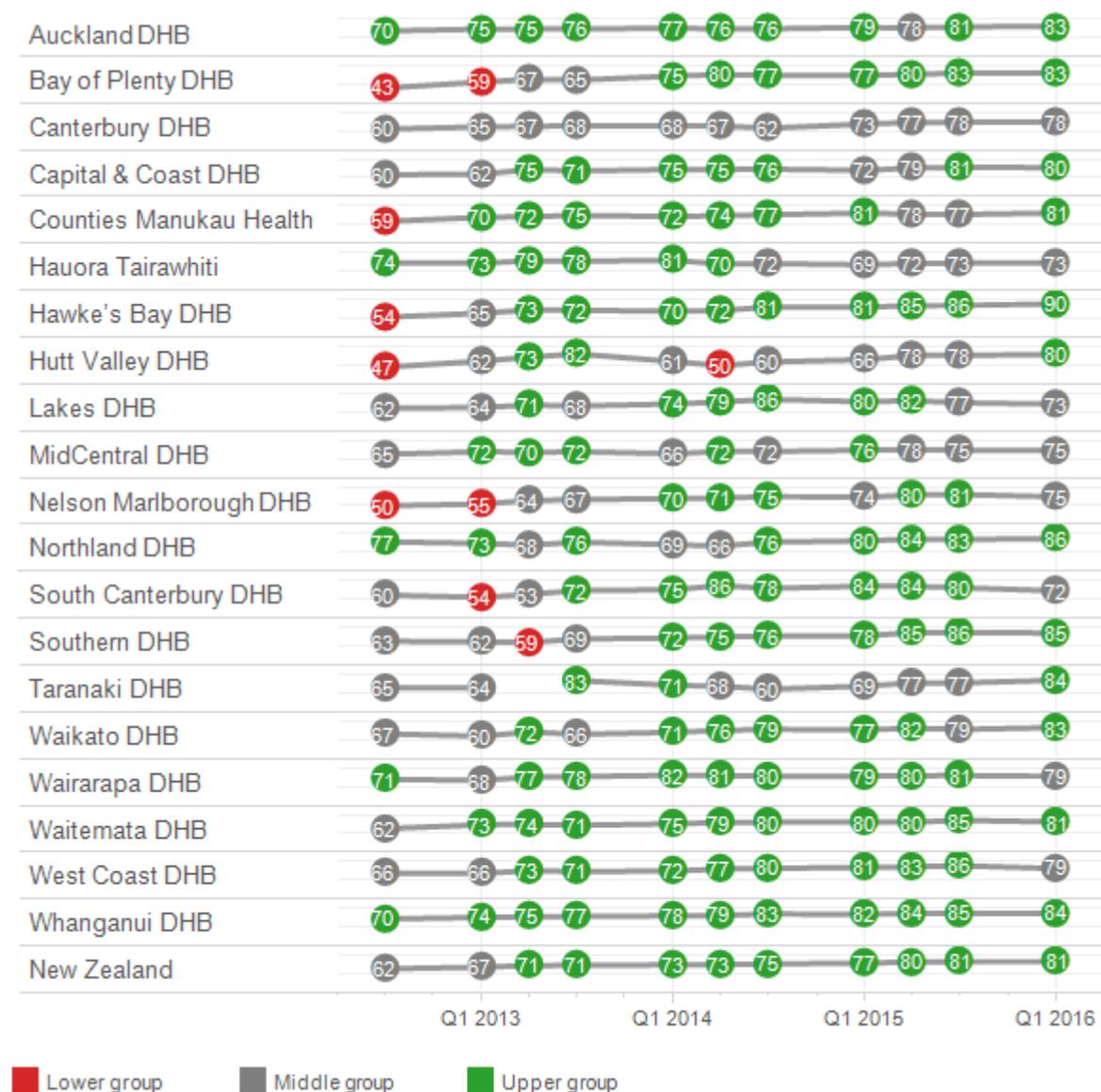


Figure 3: Change in national hand hygiene compliance over time by moment, October 2012 to March 2016

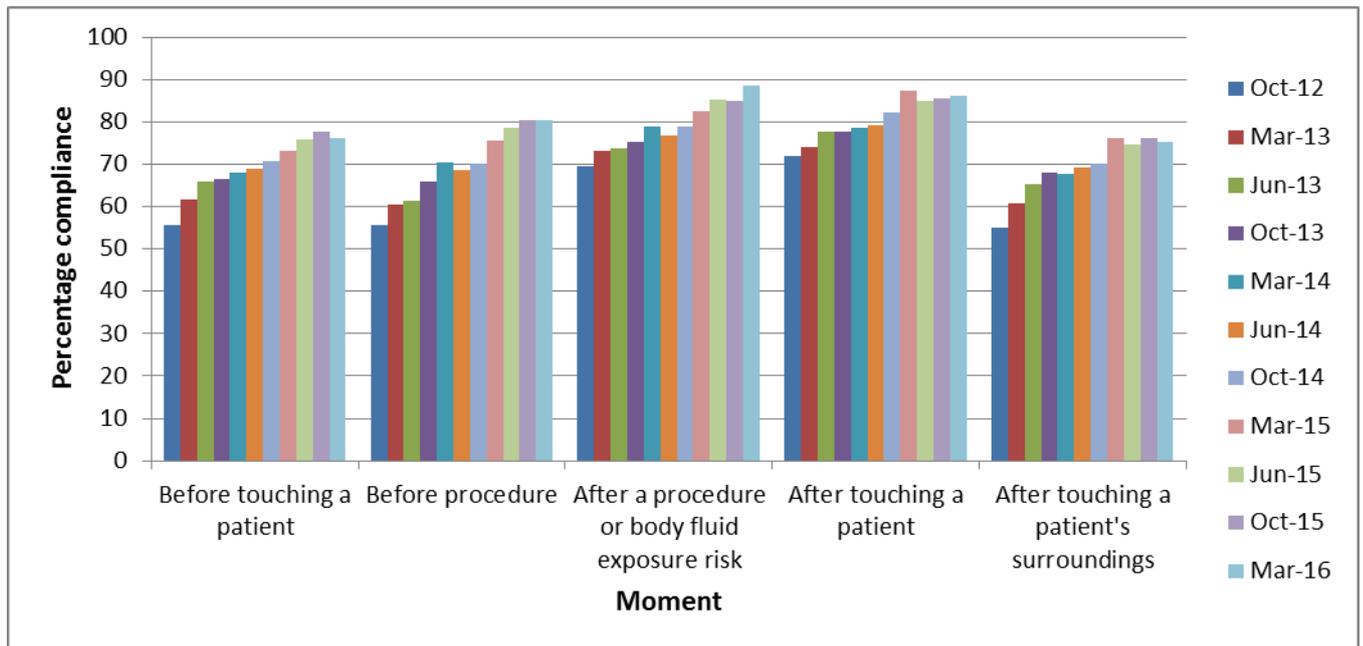
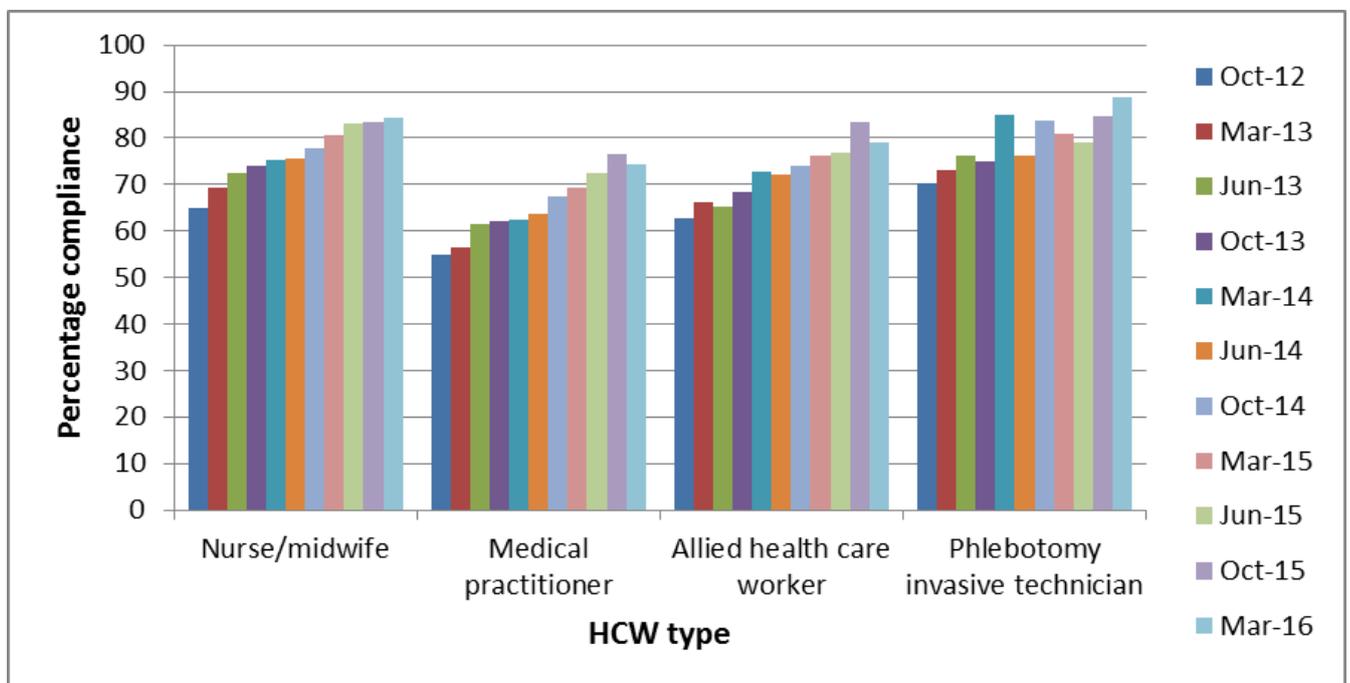


Figure 4: Change in national hand hygiene compliance over time for health care workers, October 2012 to March 2016

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

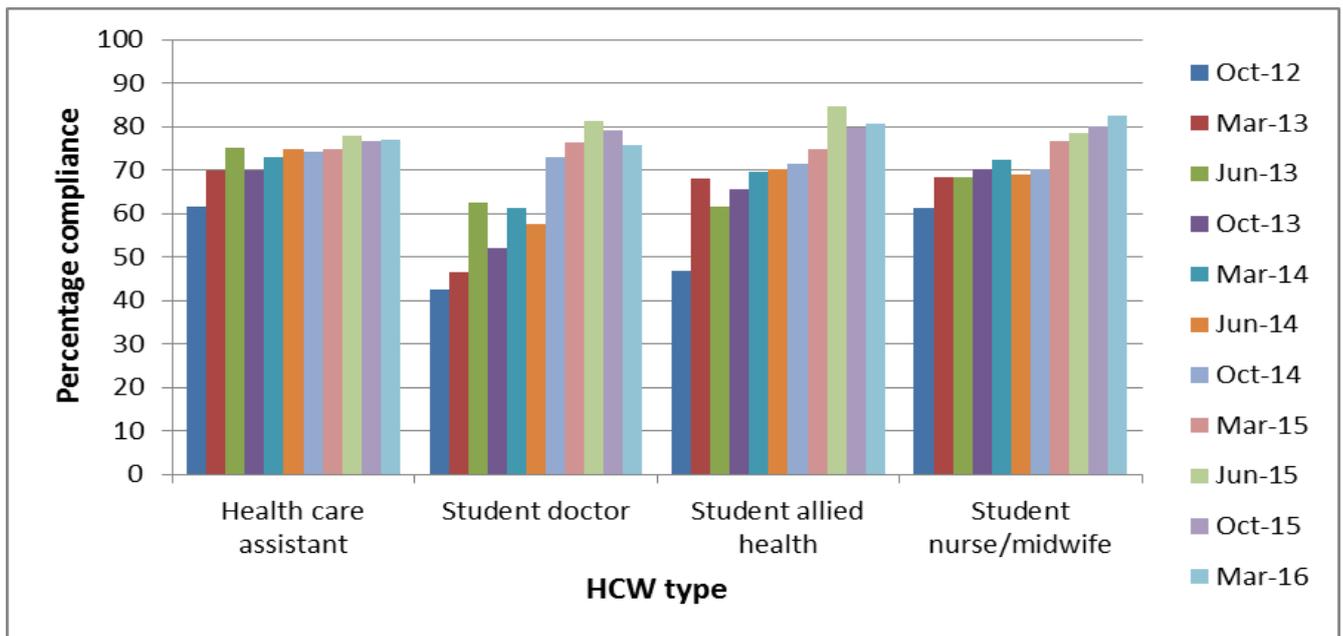


Figure 5: Changes in national hand hygiene compliance by high-risk ward type, October 2012 to March 2016

