



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

## **National hand hygiene compliance report: 1 April 2016 to 30 June 2016**

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## Introduction

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 April 2016 to 30 June 2016<sup>1</sup>.

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 fourth 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.
- Fourteen DHBs achieved at or above the national target of 80 percent compared with 12 during the previous audit period.

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<sup>1</sup> The data for the April–June 2016 period includes 38 moments that were collected as part of a local audit. The number of moments is so small in relation to the total number of moments collected that it does not affect the rate of compliance.

## Continuing to drive improvement

District health boards (DHBs) across the country celebrated World Hand Hygiene Day on May 5 2016 in a range of ways. You can [read more about these initiatives](#) on the Commission website, or more detailed information can be accessed in the latest [hand hygiene e-bulletin](#).

'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](http://www.handhygiene.org.nz)).

Dr Gardam also led a workshop in Napier in September 2015 on tips and techniques for engaging health care teams in hand hygiene improvement. The session was recorded and the [video is on the Commission website](#).

Recently Dr Gardam spoke with staff from Waikato, Bay of Plenty and Southern DHBs who were keen to update him on their achievements following the workshop and a [news item was published](#) on the Commission website.

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.

As reported previously, Table 2 shows that several DHBs are spreading improvement efforts beyond the national reporting wards and are submitting all data collected across the organisation for each audit period. The data is collected by trained gold auditors, and is expected to help drive and sustain improvements more broadly throughout the DHB. This is consistent with the FLO approach. This approach has been shared at the regional networks.

## National hand hygiene compliance data: 1 April 2016 to 30 June 2016

The nationally aggregated hand hygiene performance rate for this measurement period is 82.5 percent. The national average performance by district health board (DHB) is similar at 80.1 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 April 2016 to 30 June 2016**

Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
44,161	53,559	82.5%	82.1%	82.8%

**Table 2: National compliance rates by DHB, 1 April 2016 to 30 June 2016**

District health board	1 April 2016 to 30 June 2016			Lower 95% confidence interval	Upper 95% confidence interval
	Correct moments	Total moments	Compliance rate		
Hawke's Bay DHB	1,367	1,563	87.5%	85.7%	89.0%
Northland DHB	2,324	2,664	87.2%	85.9%	88.5%
Wairarapa DHB	247	285	86.7%	82.2%	90.1%
Waikato DHB	2,139	2,474	86.5%	85.1%	87.8%
Auckland DHB	7,728	9,202	84.0%	83.2%	84.7%
Whanganui DHB	723	861	84.0%	81.4%	86.3%
Waitemata DHB	12,365	14,845	83.3%	82.7%	83.9%
Southern DHB	2,318	2,792	83.0%	81.6%	84.4%
Counties Manukau Health	2,166	2,624	82.5%	81.0%	84.0%
Bay of Plenty DHB	1,753	2,138	82.0%	80.3%	83.6%
Lakes DHB	714	874	81.7%	79.0%	84.1%
MidCentral DHB	1,421	1,753	81.1%	79.2%	82.8%
West Coast DHB	451	560	80.5%	77.1%	83.6%
Hutt Valley DHB	1,444	1,797	80.4%	78.5%	82.1%
Canterbury DHB	2,168	2,763	78.5%	76.9%	80.0%
Capital & Coast DHB	1,920	2,450	78.4%	76.7%	80.0%
Taranaki DHB	623	802	77.7%	74.7%	80.4%
Nelson Marlborough DHB	1,255	1,642	76.4%	74.3%	78.4%
Hauora Tairāwhiti	629	867	72.5%	69.5%	75.4%
South Canterbury DHB	406	603	67.3%	63.5%	71.0%

**Table 3: Hand hygiene compliance by geographic region, 1 April 2016 to 30 June 2016**

Name	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern DHB network	24,583	29,335	83.8%	83.4%	84.2%
Midland DHB network	5,858	7,155	81.9%	81.0%	82.7%
Central DHB network	7,122	8,709	81.8%	81.0%	82.6%
South Island DHB network	6,598	8,360	78.9%	78.0%	79.8%

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

**Table 4: Compliance by moment, 1 April 2016 to 30 June 2016**

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
1 - Before touching a patient	12,306	15,689	78.4%	77.8%	79.1%
2 - Before procedure	4,099	5,000	82.0%	80.9%	83.0%
3 - After a procedure or body fluid exposure risk	6,036	6,883	87.7%	86.9%	88.4%
4 - After touching a patient	14,065	16,097	87.4%	86.9%	87.9%
5 - After touching a patient's surroundings	7,655	9,890	77.4%	76.6%	78.2%

## National compliance rates by health care worker category

**Table 5: Health care worker compliance rates, 1 April 2016 to 30 June 2016**

Name	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Phlebotomy invasive technician	1,508	1,740	87%	85%	88%
Nurse/midwife	26,964	31,531	86%	85%	86%
Administrative and clerical staff	97	116	84%	76%	89%
Student allied health	209	248	84%	79%	88%
Student nurse/midwife	1,648	2,021	82%	80%	83%
Allied health care worker	2,052	2,546	81%	79%	82%
Health care assistant	3,364	4,223	80%	78%	81%
Student doctor	292	375	78%	73%	82%
Medical practitioner	6,734	8,874	76%	75%	77%
Cleaner and meal staff	617	834	74%	71%	77%
Other (orderly and not categorised elsewhere)	500	829	60%	57%	64%

### Hand hygiene compliance in glove use

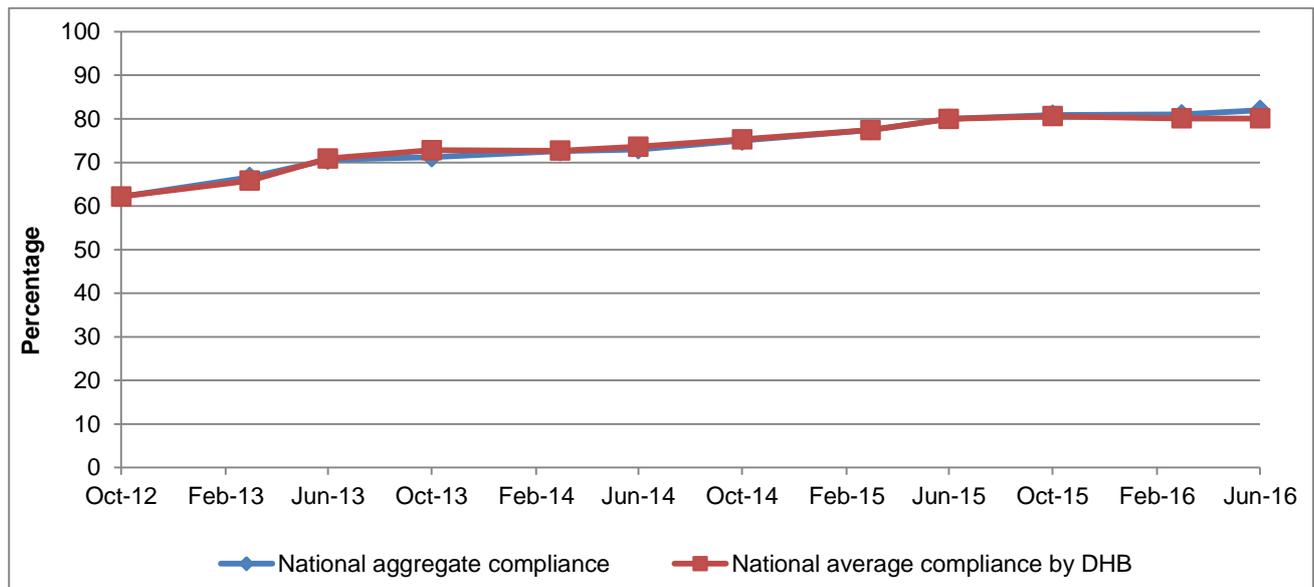
Inappropriate use of non-sterile gloves remains a barrier to excellent hand hygiene practice.

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:

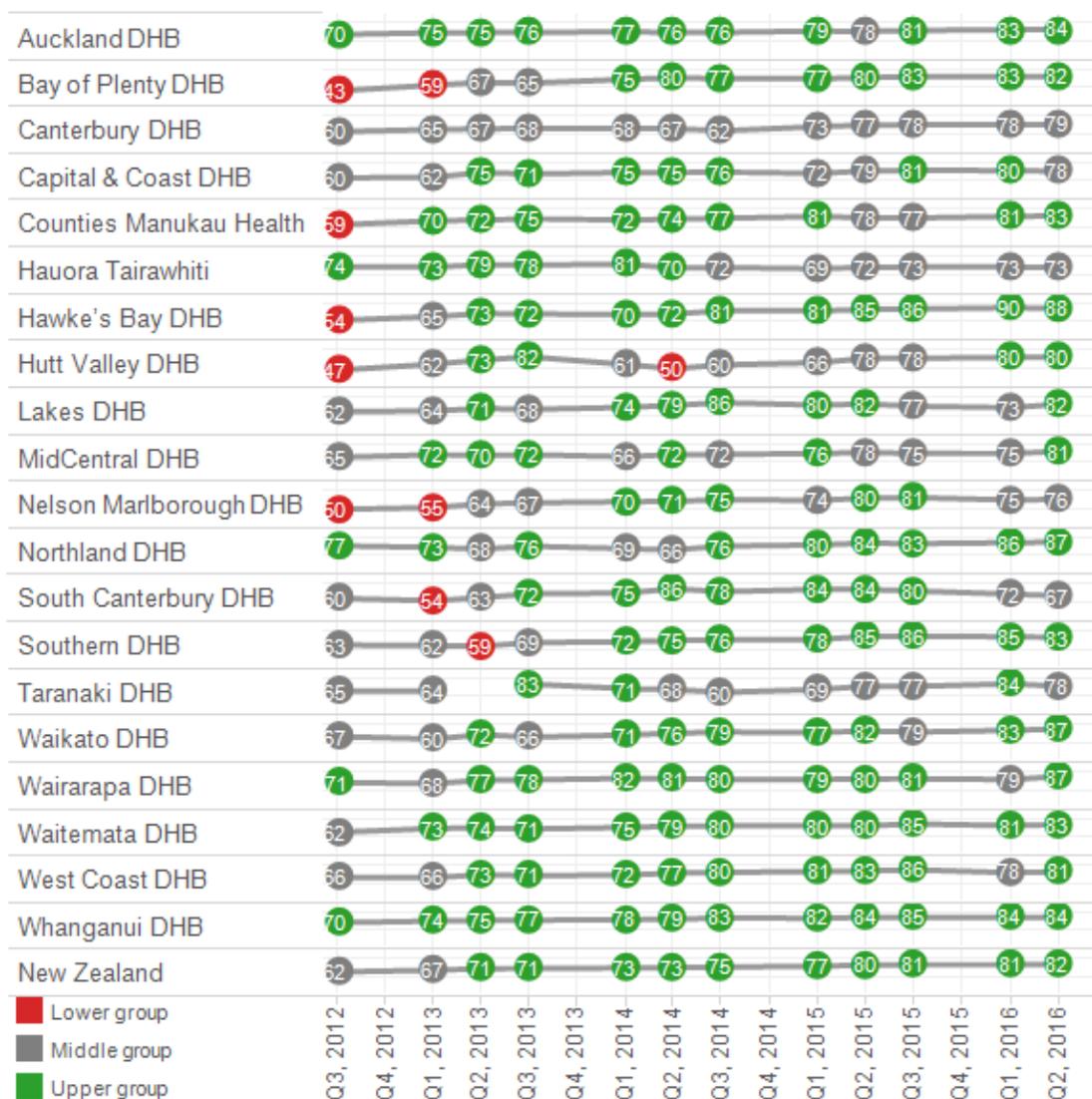
- When gloves are taken OFF, the proportion of hand hygiene opportunities missed was 7.6 percent compared with 9.4 percent in the June 2015 audit.
- When gloves are put ON, the proportion of hand hygiene opportunities missed was 18.1 percent compared with 22.6 percent in the June 2015 audit.
- Of all moments where glove use is recorded, health care workers failed to complete hand hygiene 16.8 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 June 2016**



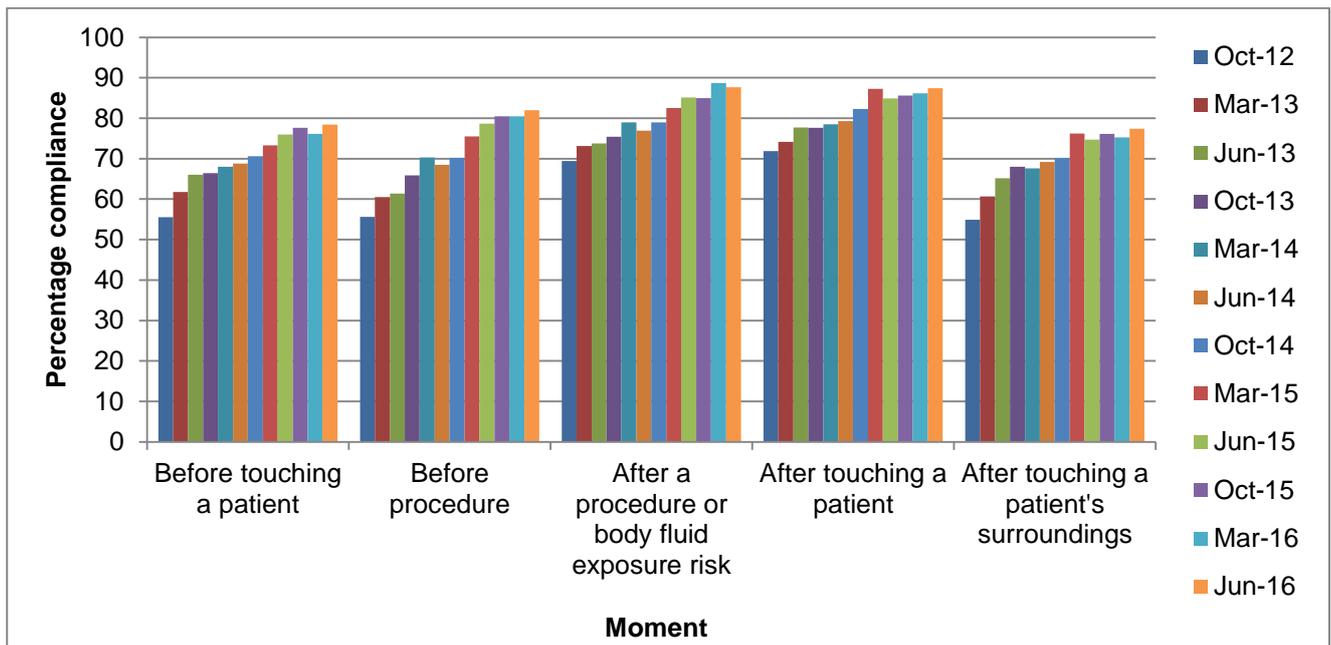
**Figure 2: Compliance over time by DHB, 1 November 2015 to 30 June 2016**

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.



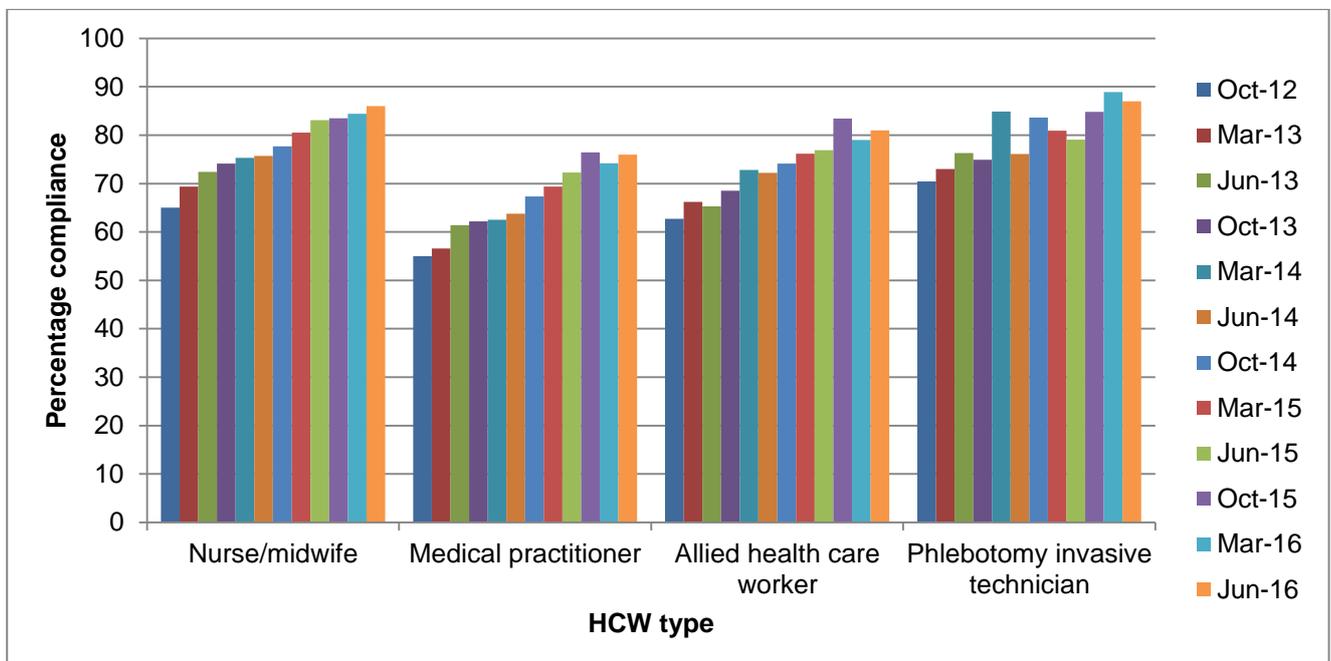
- Upper group: ≥70 percent before Q3 2014, ≥ 75 percent before Q3 2015 and ≥ 80 percent from Q3 2015.
- Middle group: percentage is 60 percent to target.
- Lower group: percentage <60 percent.
- Hand hygiene national compliance data is reported on three times per annum, therefore no data point is shown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

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

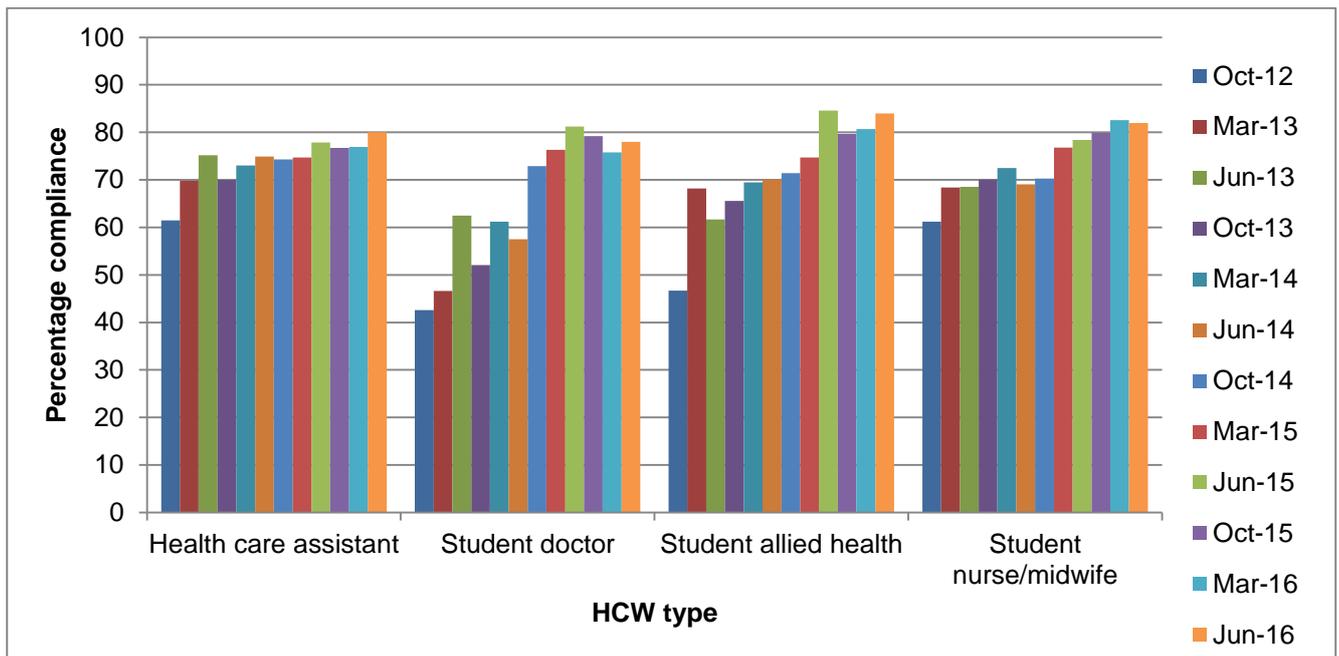


**Figure 4: Change in national hand hygiene compliance over time for health care workers, October 2012 to June 2016**

**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 June 2016**

