

Guidelines for selecting the method of Hand Hygiene Auditing for Data Submission to Hand Hygiene Australia

Background

Auditing hand hygiene compliance serves multiple functions, including quality of care assessment, incentive for performance improvement, outbreak investigation and infrastructure design.¹

To appropriately measure hand hygiene compliance, the Hand Hygiene Australia (HHA) 5 Moments approach allows a comparison of hand hygiene performance across a broad range of health care settings and within a facility across both high versus lower risk clinical environments.

Clinical Area Selection

Several factors need to be considered when determining which wards should be audited. As hand hygiene is the single most important element of strategies to prevent healthcare associated infection, wards known to have greater potential for high infection rates should be targeted. Improvements in hand hygiene compliance rates in these wards will have the greatest impact on the prevention of infection and provide a safer environment for patients.

Generally, these wards also have the greatest staff/patient activity and interaction, which results in higher numbers of 'Moments' being audited in shorter time periods.

Auditing wards where there is little staff/patient activity and interaction will result in a small number of moments being observed (i.e. non-acute settings) and resources required to undertake auditing may be better utilised measuring other aspects of a hand hygiene program (e.g product placement, education etc).

The selection of wards should be made in conjunction with the appropriate committee at the hospital (e.g. Infection Control Committee, Hand Hygiene Committee, Quality Improvement Committee) and with Executive approval.

Numbers of Moments

Inevitably compliance data will be used for comparison, be it at a ward, hospital, jurisdictional or national level.

When data is used for comparison, it is important to remember that generally a higher number of Moments audited will generate a more reliable compliance rate, as demonstrated in Chart 1

HHA recommend 95% confidence intervals are included when reporting compliance rates.

Selection

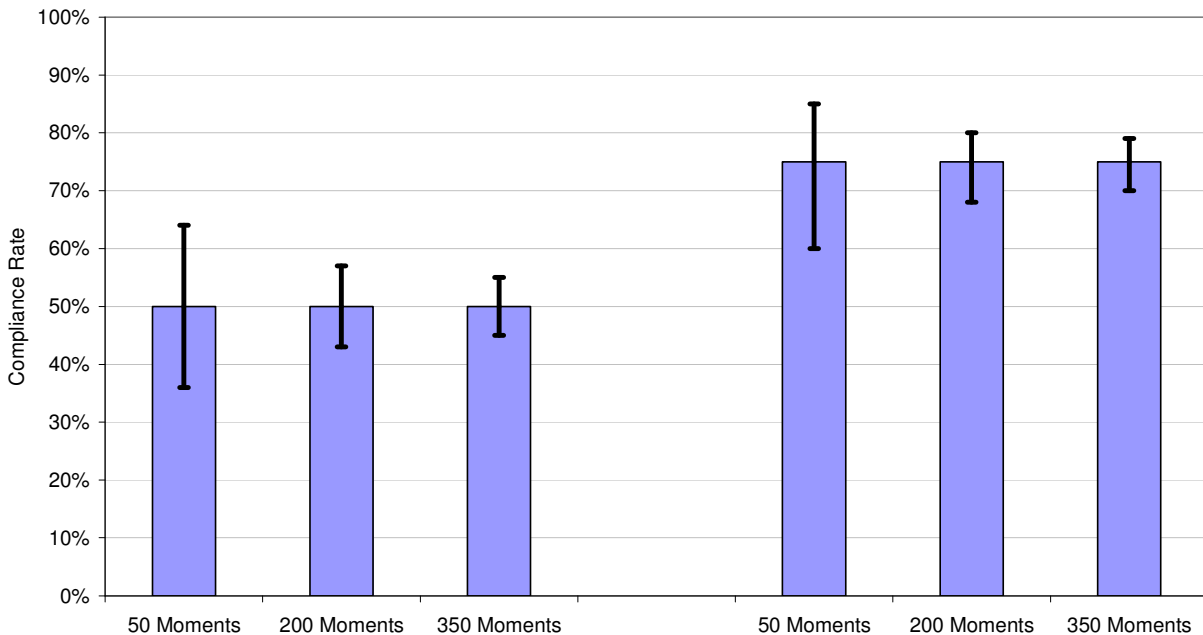
- Highest risk clinical areas
 - Patient
 - Procedure
 - Infection rates
- Highest activity / interaction
- Increased utilisation of HHA auditing resources and greatest potential for decrease in SSI / HAIs
- Lower activity areas

¹ Sax H, Allegranzi B, Chraiti MN, Boyce J, Larson E, D P. The World Health Organization hand hygiene observation method. Am J Infect Control. 2009;37:827-34.

- Increase in resources needed to complete requirements
- Less opportunity to show decrease in SSI / HAIs
- Less risk of SSI / HAIs

CHART 1

Comparison of 95% Confidence Intervals for different numbers of Moments at 50% Compliance and 75% Compliance



Options for selecting method (Refer to Appendix 1 for detailed explanation)

OPTION A. High Risk Wards with rotation of other clinical areas

Moments for each audit period to at least total number of wards / bed size as identified in Table 1.

High Risk	-	Areas Included	-	Audit all at all audit periods
Standard Risk	-	All other clinical areas	-	Rotate at every audit period

OPTION B. High Risk Wards with auditing of all other clinical areas

High risk areas to gather required moments from the ward with additional moments made up from standardised risk areas.

High Risk	-	Areas Included	-	Audit all at all audit periods
Standard Risk	-	All other clinical areas	-	Audit all required areas at all audit periods

OPTION C. Intensive Care Unit with auditing of all other wards

ICU - 350 moments (minimum) balance of moments required made up from other areas

ICU - Always audit at every audit period with minimum of 350 moments

All other wards / clinical areas - Audit at every audit period

Utilise Table 1 to confirm number of wards and minimum moments in relation to beds.

Table 1 – Number of Moments per hospital size

Number of inpatient beds at the hospital	Required number of HH audits per year	Required number of wards per HH audit *	Required number of HH observations per clinical areas	Total minimum moments for hospital per audit
>400	3	7	350	2450
301-400	3	6	350	2100
201-300	3	5	350	1750
101-200	3	4	200	800
51-100	3	2	100	200
25-50	3	1	100	100
< 25	3	1	50	50

* for Option A only

Summary

Option A

Audit all high risk wards and rotate through standard risk clinical areas

Option B

Audit all high risk wards and all other clinical areas with the number of moments per clinical area determined by the hospital up to the required minimum

Option C

Audit ICU and all other clinical areas with the number of moments per clinical area determined by the hospital up to the required minimum

APPENDIX 1

OPTION A. High Risk Wards with rotation of other clinical areas

HHA recommend that wards be categorised into “High Risk Wards” and “Standard Risk Wards”. It is the responsibility of each facility to identify its own High Risk wards. As a guide HHA suggest:

- High Risk wards include: Intensive Care, haematology/oncology, transplant, renal, dialysis, and wards with immunocompromised patients. High Risk may also include wards with known or suspected high rates of healthcare associated infection, high prevalence of patients with multi-resistant organisms, crowded accommodation etc.
- Standard Risk clinical areas include all other areas not in the High Risk group.

Each facility should have a Hand Hygiene Compliance audit cycle plan endorsed by the appropriate committee at the hospital (e.g. Infection Control Committee, Hand Hygiene Committee, Quality Improvement Committee) and with Executive approval.

The Hand Hygiene Compliance audit cycle plan should clearly identify High Risk wards and Standard Risk clinical areas. HHA recommends:

1. All wards in the High Risk group must ALWAYS be audited every audit period.
2. Standard Risk clinical areas to be rotated every audit. If a Standard Risk clinical areas demonstrates low compliance rates, the hospital should follow up separately to the auditing undertaken as part of their Hand Hygiene Compliance audit cycle plan. The follow up may include education and further auditing.
3. All wards audited should be audited for a minimum number of Moments as per Table 1.
E.g. >400 bed hospital audits 7 wards for a minimum of 350 Moments on each.

OPTION B. High Risk Wards with auditing of all other clinical areas

HHA recommend that wards be categorised into “High Risk” and “Standard Risk” clinical areas. It is the responsibility of each facility to identify its own High Risk wards. As a guide HHA suggest:

- High Risk wards include: Intensive Care, haematology/oncology, transplant, renal, dialysis, and wards with immunocompromised patients. High Risk may also include wards with known or suspected high rates of healthcare associated infection, high prevalence of patients with multi-resistant organisms, crowded accommodation etc.
- Standard Risk Wards include all other clinical areas not in the High Risk group.

Each facility should have a Hand Hygiene Compliance audit plan endorsed by the appropriate committee at the hospital (e.g. Infection Control Committee, Hand Hygiene Committee, Quality Improvement Committee) and with Executive approval.

The Hand Hygiene Compliance audit plan should clearly identify High Risk wards and Standard Risk wards. HHA recommends:

1. All wards in the High Risk group must ALWAYS be audited every audit period for a minimum of number of Moments as per Table 1.
2. All Standard Risk Wards are also audited every audit period. The number of moments to be audited is a hospital decision, keeping in mind issues regarding reliability of compliance rates as mentioned above
3. The minimum hospital total number of Moments audited is dependent on hospital size and is listed in Table 1.

E.G >400 bed hospital. ICU and Haem Onc wards audited for 350 moments each. The remaining 1750 Moments can be audited in any, or all, other wards.

OPTION C. Intensive Care Unit with auditing of all other clinical areas

Each facility should have a Hand Hygiene Compliance audit plan endorsed by the appropriate committee at the hospital (e.g. Infection Control Committee, Hand Hygiene Committee, Quality Improvement Committee) and with Executive approval.

The Hand Hygiene Compliance audit cycle plan should clearly identify High Risk wards and Standard Risk wards. HHA recommends:

1. The Intensive Care Unit must ALWAYS be audited every audit period for a minimum of 350 moments
2. All other Wards are also audited every audit period. The number of moments to be audited is a hospital decision, keeping in mind issues regarding reliability of compliance rates as mentioned above.
3. The minimum hospital total number of Moments audited is dependent on hospital size listed and is listed in Table 1.

e.g. ICU audited for 350 moments. The remaining 2100 Moments can be audited in any, or all, other wards.