

Hand Hygiene

Hand Hygiene 1. Percent of appropriate (or compliant) hand hygiene practices	
<i>Indicator Short Name</i>	Hand hygiene compliance
<i>Process or Outcome</i>	Process
<i>Interpretation and Improvement Direction</i>	Higher percentages indicate improvement
<i>Numerator</i>	Number of compliant (ie. appropriate) hand hygiene events before and after patient contact
<i>Denominator</i>	Number of total hand hygiene opportunities before and after patient contact.
<i>Excluded from Denominator</i>	Hand hygiene observations are only to be included for routine care, not during urgent/emergent situations (ie. Code blue, patient falling).
<i>Calculations/Formula/Algorithm</i>	Observation is included in the numerator if it was documented by the auditor that hand hygiene was done. All observations of hygiene opportunities made by the auditor are included in the denominator.
<i>Coverage/Scope</i>	All acute care facilities
<i>Data Source</i>	Provincial Hand Hygiene Compliance Audit Database
<i>Sampling Strategy</i>	<ol style="list-style-type: none"> 1. Convenience sample 2. Minimum of 200 observations must be completed in total for each quarterly audit cycle. Larger facilities are encouraged to perform more observations and/or to perform these observations more frequently than quarterly. 3. An individual health care provider should be observed no more than 6 times during any one observational period. 4. Sites should attempt to achieve as representative as possible in each care area and each audit session.
<i>Reporting/Stratification</i>	By site ⁴³ By healthcare provider category code Large vs. small sites Local reporting will be stratified dependent on Health Authority requirements. (Examples include before and after results, type of healthcare provider within facilities, unit-level results, etc.)

⁴³ Data is reported by facility when there are more than 25 beds. Facilities with less than 25 beds will aggregate their results for purposes of provincial reporting but are encouraged to report the facility specific results within their Health Authority. Sites with less than 10 beds will be assessed on a site by site basis for the frequency of the auditing and reporting process.

	Confidence intervals and total observations collected will be included.					
<i>Frequency</i>	Submit quarterly					
<i>Method of transmitting data or results to CCM Steering Committee</i>	TBD					
<i>Target</i>	TBD					
RAW DATA FIELDS – Data Dictionary						
The data fields required to calculate this indicator are below. (Note: these fields will not be submitted to CCM Steering Committee; they are listed here to assist organizations in their calculations and to standardize calculations across organizations).						
<u>Data Required to Calculate Numerator</u>						
<ul style="list-style-type: none"> - Facility - Date - Health Care Provider category - Hand Hygiene: Before Contact (done) - Hand Hygiene: After Contact (done) 						
<u>Data Required to Calculate Denominator</u>						
<ul style="list-style-type: none"> - Facility - Date - Health Care Provider category - Hand Hygiene: Before Contact (done, not done) - Hand Hygiene: After Contact (done, not done) 						
DATA ELEMENTS TO BE SUBMITTED						
The data fields to be input/transmitted to CCM Steering Committee include:						
<ol style="list-style-type: none"> 1. Fiscal Quarter 2. Start date of data collection period (default = start date of fiscal period) 3. End date of data collection period (default= end date of fiscal period) 4. Name of Hospital 5. Numerator 6. Denominator 						
Example:						
Fiscal Quarter	Fiscal Period	Start Date	End Date	Hospital	Numerator	Denominator
3	8	Oct 14, 1999	Nov 10, 1999	Hospital X	141	213
3	9	Nov 11, 1999	Dec 8, 1999	Hospital X	165	210

THE PROVINCIAL HAND HYGIENE COMPLIANCE AUDIT⁴⁴

May 16, 2011

Intended Use of this Document

This document provides methodology and guidance on the collection of hand hygiene compliance observations for the purpose of provincial reporting using a standardized Minimal Dataset.

Purpose of the Audit

The purpose of the audit is to demonstrate and document healthcare provider (HCP) compliance with hand hygiene guidelines or policies. In addition, hand hygiene compliance results will assist Health Authorities (HAs) to evaluate the effectiveness of interventions for hand hygiene promotion, education and training. Hand hygiene compliance results may also be correlated with trends of healthcare acquired infection rates (e.g. Methicillin resistant *Staphylococcus aureus*) as an indirect outcome measure for evaluating the hand hygiene program.

Strengths and Limitations of the Hand Hygiene Audit:

Direct observation of HCPs while delivering patient care is the method that will be used in this audit. According to the World Health Organization, direct observation is considered the gold standard method in determining hand hygiene compliance. Clear and consistent methodology, observer training and periodic inter-rater reliability testing will ensure that the data collected minimizes observational limitations. These limitations include:

- the potential influence an observer may have on HCP behavior, known as the Hawthorne Effect;
- variation in an observer's classification over time (intra-observer variability); or
- variation between observer classification (inter-observer variability)

Hand hygiene audits are completed by a variety of auditors including dedicated externally hired auditors, Infection Prevention and Control Practitioners, Managers and HCPs on their own or other units. All auditors are instructed to follow the Provincial guidelines for observation and reporting to facilitate standardization of audit results across all HAs.

Guidelines of Observation and Reporting:

Please note that the audit methodology outlined defines the Minimal Dataset that must be obtained for the provincial reporting. Additional data may be collected within each HA, but must be aggregated to the Minimal Dataset for provincial reporting.

Ideally, data should be collected anonymously and, objectively by a well-trained observer, and kept confidential until reviewed by the local hand hygiene team.

Before the audit:

1. Familiarize yourself with the indications for hand hygiene (HH) and the methodology and instructions below.
2. Understand the HH policy within your facility and the elements of any promotional campaign.

Performing the audit:

⁴⁴ Clinical Care Management process measure for hand hygiene compliance

1. Record only those observations done during routine care, not during urgent/emergent situations (e.g. code blue, patient falling).
2. Stand near the point of care when making an observation in a way that you will not disturb care activities. You may move to follow a HCP, but be sure to respect patient privacy (e.g., do not look inside a drawn curtain).
3. Ensure you time the audit session. The time for the audit session should be a minimum of 20 minutes (+ 10 minutes) depending upon the level of activity in the care area.
4. You may observe several HCPs simultaneously provided you are confident you can observe the complete sequence of events.
5. An individual HCP should be observed no more than 6 times during any one audit session.
6. You should attempt to achieve as representative a HCP sample as possible in each care area and each audit session.

How to use the audit form:

1. Complete the top of the form by indicating ALL of the following: facility, care area/Location, your name as auditor, and date.
2. The type of HCP being observed is identified by the number that corresponds with the categories listed at the top of the form.
3. Each opportunity line is for recording *one observation of one opportunity for one individual*. Subsequent observations should be recorded in the other opportunity lines, being careful to identify the HCP codes. As soon as you observe an indication for a HH opportunity, indicate the type of HCP being observed, and then the results of your observation.
4. For each HH opportunity, indicate one of the following opportunities for hand hygiene:
 - Before Patient Contact = before contact with the patient or the patient's immediate environment (i.e. around their bedside)
 - After Patient Contact = after contact with the patient or the patient's immediate environment (i.e. around their bedside)
5. For each HH opportunity, tick whether hand hygiene was done or not.
 - If HH is done with gloves on, it is marked as a Not Done
 - If gloves are worn between patients or between care activities and HH is not done, mark as Not Done
 - If hand washing is performed without soap or without visible rubbing of hands, it is marked as a Not Done
 - If hand washing is performed and clean hands are used to turn off the taps, it is marked as a Not Done
 - If alcohol-based hand rub (ABHR) is used without visible rubbing of hands, it is marked as Not Done
6. End the observation if the privacy curtain is drawn around the patient's bed or the door is closed.
7. Record any additional information in the applicable "comments" section.

PROVINCIAL REPORTING OF HAND HYGIENE COMPLIANCE

1. Compliance with hand hygiene is defined as a percentage of the number of compliant HH events over the total number of HH opportunities and is expressed by the following formula:

$$\text{Compliance (\%)} = \frac{\text{compliant HH events}}{\text{total HH opportunities}} \times 100$$

2. As a minimum, for provincial reporting, the following must be provided:
 - the total number of compliant HH events before and after patient contact
 - the total number of compliant HH events by HCP category
 - the total number of HH opportunities before and after patient contact
 - the total number of HH opportunities by HCP category
3. This data is reported by facility when there are more than 25 beds. Facilities with less than 25 beds will report this information as an aggregate of their observations.⁴⁵
4. The observation period is defined as the time period during which compliance is measured in a certain setting. The minimum provincial requirement is 200 observations per quarterly cycle audit cycle. Facilities with less than 25 beds will aggregate their results for purposes of provincial reporting but are encouraged to report the facility specific results within their Health Authority. Larger facilities are encouraged to perform sufficient observations to permit reporting by clinical area.

⁴⁵ Sites with less than 10 beds will be assessed on a site by site basis for the frequency of the auditing and reporting process.

PROVINCIAL HAND HYGIENE AUDIT

FACILITY: _____ UNIT: _____ AUDITOR: _____ DATE: _____

Health Care Provider Category

1. Nursing Staff	<ul style="list-style-type: none"> • Registered Nurse • Midwife 	<ul style="list-style-type: none"> • Licensed Practical Nurse 	<ul style="list-style-type: none"> • Care Aide 	<ul style="list-style-type: none"> • Nursing/Midwife Student
2. Physicians	<ul style="list-style-type: none"> • Medical Doctor 	<ul style="list-style-type: none"> • Resident 	<ul style="list-style-type: none"> • Fellow 	<ul style="list-style-type: none"> • Medical Student
3. Clinical Support Services	<ul style="list-style-type: none"> • Occupational Therapist • Physiotherapist • Respiratory Therapist • Speech Therapy 	<ul style="list-style-type: none"> • Social Work • Dietician • Psychologist • Audiologist 	<ul style="list-style-type: none"> • Porter • Pastoral Care • Radiology 	<ul style="list-style-type: none"> • Technicians (e.g. EKG, EEG, etc) • Lab: Phlebotomy
4. Other	<ul style="list-style-type: none"> • Housekeeping • Food Services 	<ul style="list-style-type: none"> • Clerk 	<ul style="list-style-type: none"> • Volunteer 	<ul style="list-style-type: none"> • Security

Observations of Hand Hygiene Opportunities

	HCP	Before Contact	After Contact	Hand Hygiene D = Done N = Not Done
1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
12		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
16		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
17		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
18		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
19		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D
20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/> D

PHHWG-EC Audit Tool FINAL January 30, 2011