

Measuring Hand Hygiene Compliance

Overview

1. Using auditing as a positive change tool
2. Defining how and what to observe
3. Reporting reliable and meaningful data

Measuring Hand Hygiene Compliance

- Auditing hand hygiene compliance by health care providers provides a benchmark for improvement.
- The results of observational audits will help identify the most appropriate interventions for hand hygiene education, training and promotion.
- The results of the observational audits should be shared with front-line health care providers, management and hospital boards.

Method of Observation

- Direct observation of hand hygiene practices is done by trained observers using a standardized and validated audit tool.
- Define what indications are to be observed.
- The observer conducts observations openly, but the identity of the health care provider is kept confidential, no names are attached to the information.

Planning Observation Schedule

Observe:

- Eight 20-minute observations/day
- At least seven different days of eight periods of observation
- At different times of the day (different shifts and different times within the shift)

Therefore, there will be approximately 56 observation sessions for calculating the aggregate data.

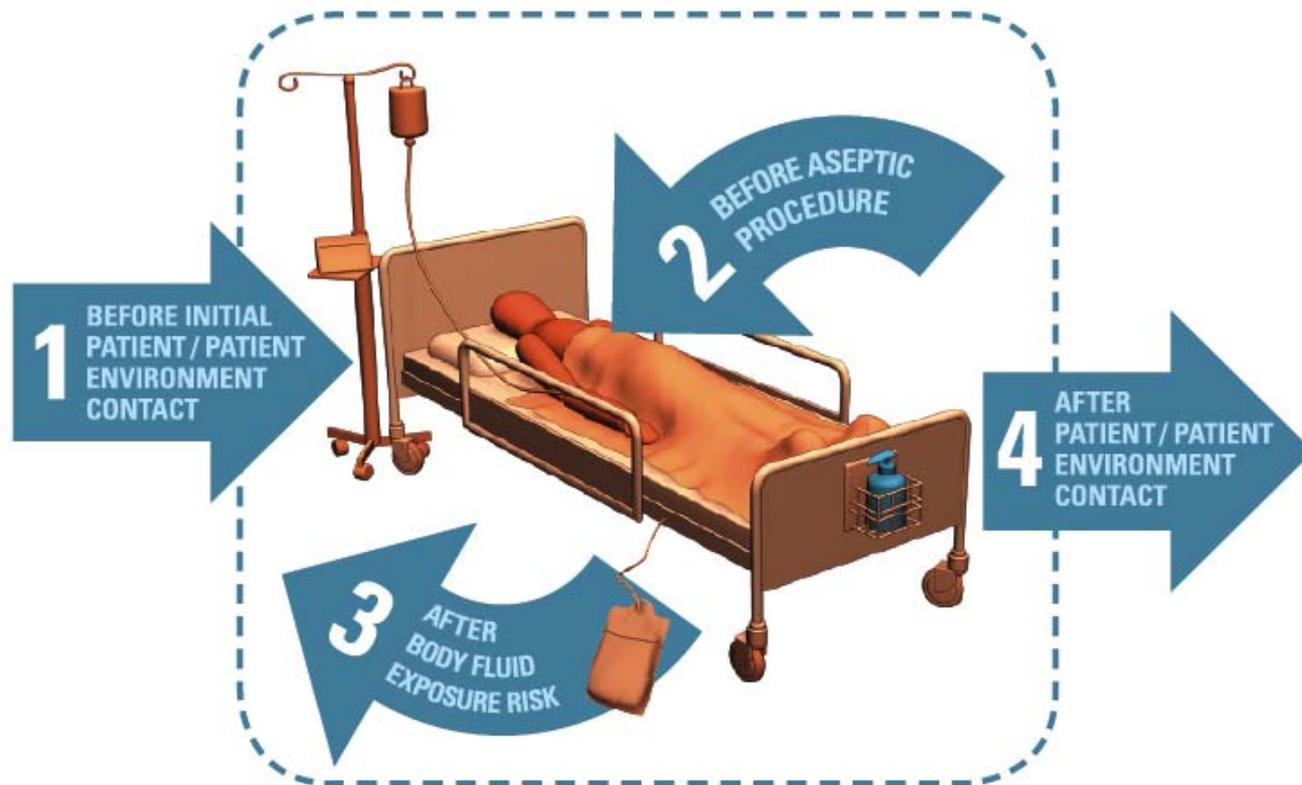
Sample Hand Hygiene Observation Schedule

- Friday, January 19, 2008 - 8:00 a.m. (eight 20-minute observations)
- Sunday, January 21, 2008 - 12:00 p.m. (eight 20-minute observations)
- Tuesday, January 23, 2008 - 4:00 p.m. (eight 20-minute observations)
- Thursday, January 25, 2008 - 8:00 p.m. (eight 20-minute observations)
- Saturday, January 27, 2008 - 12:00 a.m. (eight 20-minute observations)
- Monday, January 29, 2008 - 4:00 a.m. (eight 20-minute observations)
- Wednesday, January 31, 2008 - 8:00 a.m. (eight 20-minute observations)

Who is Observed?

- All health care providers working with patients or in the patient care area may be observed.
- Observers will only record what they see.

Your 4 Moments for Hand Hygiene



Observation Tool



Observer-ID: [][][][]	Form-No.: [][]	Facility-ID: [][][]
Date: [m m].[d d].[y y y y y]		Patient Care Unit: _____
Day of Week: _____		
Start Time: [h h].[m m].[AM/PM]		
End Time: [h h].[m m]		

Health care provider (HCP) category:

- | | | | |
|---------------------|------------------------------|-----------------------------------|--------------------|
| 1 = Physician | 5 = Social Worker | 9 = Environmental Services Worker | 13 = Dietician |
| 2 = Nurse | 6 = Pastoral Care | 10 = Patient Transporter | 14 = PSA, PSW, PCA |
| 3 = Medical Student | 7 = IV Team/Blood Collection | 11 = Radiology Tech | 15 = Other |
| 4 = Nursing Student | 8 = Physiotherapist | 12 = Respiratory Therapist | |

HCP: _____	HCP: _____	HCP: _____	HCP: _____
1 <input type="checkbox"/> BEF-PAT/ENV <input type="checkbox"/> AFT-PAT/ENV T: <input type="checkbox"/> BEF-ASP <input type="checkbox"/> AFT-BFL <input type="checkbox"/> Rub <input type="radio"/> Missed <input type="checkbox"/> Wash <input type="checkbox"/> Gloves <input type="checkbox"/> Nails <input type="checkbox"/> Bracelets <input type="checkbox"/> Rings	1 <input type="checkbox"/> BEF-PAT/ENV <input type="checkbox"/> AFT-PAT/ENV T: <input type="checkbox"/> BEF-ASP <input type="checkbox"/> AFT-BFL <input type="checkbox"/> Rub <input type="radio"/> Missed <input type="checkbox"/> Wash <input type="checkbox"/> Gloves <input type="checkbox"/> Nails <input type="checkbox"/> Bracelets <input type="checkbox"/> Rings	1 <input type="checkbox"/> BEF-PAT/ENV <input type="checkbox"/> AFT-PAT/ENV T: <input type="checkbox"/> BEF-ASP <input type="checkbox"/> AFT-BFL <input type="checkbox"/> Rub <input type="radio"/> Missed <input type="checkbox"/> Wash <input type="checkbox"/> Gloves <input type="checkbox"/> Nails <input type="checkbox"/> Bracelets <input type="checkbox"/> Rings	1 <input type="checkbox"/> BEF-PAT/ENV <input type="checkbox"/> AFT-PAT/ENV T: <input type="checkbox"/> BEF-ASP <input type="checkbox"/> AFT-BFL <input type="checkbox"/> Rub <input type="radio"/> Missed <input type="checkbox"/> Wash <input type="checkbox"/> Gloves <input type="checkbox"/> Nails <input type="checkbox"/> Bracelets <input type="checkbox"/> Rings
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4 <input type="checkbox"/> BEF-PAT/ENV <input type="checkbox"/> AFT-PAT/ENV T: <input type="checkbox"/> BEF-ASP <input type="checkbox"/> AFT-BFL <input type="checkbox"/> Rub <input type="radio"/> Missed <input type="checkbox"/> Wash <input type="checkbox"/> Gloves	4 <input type="checkbox"/> BEF-PAT/ENV <input type="checkbox"/> AFT-PAT/ENV T: <input type="checkbox"/> BEF-ASP <input type="checkbox"/> AFT-BFL <input type="checkbox"/> Rub <input type="radio"/> Missed <input type="checkbox"/> Wash <input type="checkbox"/> Gloves	4 <input type="checkbox"/> BEF-PAT/ENV <input type="checkbox"/> AFT-PAT/ENV T: <input type="checkbox"/> BEF-ASP <input type="checkbox"/> AFT-BFL <input type="checkbox"/> Rub <input type="radio"/> Missed <input type="checkbox"/> Wash <input type="checkbox"/> Gloves	4 <input type="checkbox"/> BEF-PAT/ENV <input type="checkbox"/> AFT-PAT/ENV T: <input type="checkbox"/> BEF-ASP <input type="checkbox"/> AFT-BFL <input type="checkbox"/> Rub <input type="radio"/> Missed <input type="checkbox"/> Wash <input type="checkbox"/> Gloves

Comments:

Note: If patient is on additional precautions/isolated indicate "HCP category number" and "Opportunity number" in the "Comments."

Adapted from the World Health Organization

Methods of feedback

- Data is collected, analyzed and aggregate results are reported back in a timely manner.
- Consider addition of direct feedback to health care providers during the audit process.

“On-the-spot” Feedback Tool

Your 4 Moments for Hand Hygiene



1 BEFORE initial patient / patient environment contact	WHEN? Clean your hands when entering: • before touching patient or • before touching any object or furniture in the patient's environment WHY? To protect the patient/patient environment from harmful germs carried on your hands
2 BEFORE aseptic procedure	WHEN? Clean your hands immediately before any aseptic procedure WHY? To protect the patient against harmful germs, including the patient's own germs, entering his or her body
3 AFTER body fluid exposure risk	WHEN? Clean your hands immediately after an exposure risk to body fluids (and after glove removal) WHY? To protect yourself and the health care environment from harmful patient germs
4 AFTER patient / patient environment contact	WHEN? Clean your hands when leaving: • after touching patient or • after touching any object or furniture in the patient's environment WHY? To protect yourself and the health care environment from harmful patient germs

Adapted from WHO poster "Six Moments for Hand Hygiene" (2008)

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Your 4 Moments for Hand Hygiene *On-the-spot feedback*

A

Moment being observed:

- 1. Before initial patient/patient environment contact
- 2. Before aseptic procedure
- 3. After body fluid exposure risk
- 4. After patient/patient environment contact

Hand hygiene method:

- Rub
- Wash
- Missed

Other considerations:

- Gloves without cleaning
- Incorrect nail length
- Bracelets worn
- Rings worn
- Contact time less than 15 seconds

B

Moment being observed:

- 1. Before initial patient/patient environment contact
- 2. Before aseptic procedure
- 3. After body fluid exposure risk
- 4. After patient/patient environment contact

Hand hygiene method:

- Rub
- Wash
- Missed

Other considerations:

- Gloves without cleaning
- Contact time less than 15 seconds



Calculating reliable hand hygiene compliance rates

- An overall hand hygiene compliance rate does not provide for reliable and comparative rates over time as compliance rates for the different types of health care provider and for the each of the *four indications* are frequently different.
- If a generalized rate is to be provided, reliability will increase if the same number is used for the overall analysis:
 - for each category of health care provider and
 - for the number of observations of each indication

Observation Analysis Tool – Data and Reports

The screenshot shows a Microsoft Excel spreadsheet with a web browser window embedded within it. The browser window displays the 'Hand Hygiene Observation Tool' interface. At the top, it features the Ontario Ministry of Health and Long-Term Care logo and the text 'Ministry of Health and Long-Term Care'. Below this, it shows the date '24-Feb-2008' and 'Version: 1.0 | Updated: February 2008'. The main heading is 'Hand Hygiene Observation Tool'.

The interface is divided into two main sections: 'Observations Input' and 'Reports'.

Observations Input

Welcome to Hand Hygiene Observation Tool !

Our goal is to provide hospitals with an analysis tool that makes it easy for them to enter data from the paper form. The tool will automatically calculate the compliance results and be locked down so that the method for analysis is consistent across hospitals. Please click next to input the observation data.

Reports

Reports Module !

- Report 1 (a)**
Hand Hygiene Compliance Before Initial Patient/Patient Environment Contact by Category of Health Care Provider
- Report 1 (b)**
Hand Hygiene Compliance Before Aseptic Procedure by Category of Health Care Provider
- Report 1 (c)**
Hand Hygiene Compliance After Body Fluid Exposure Risk by Category of Health Care Provider
- Report 1 (d)**
Hand Hygiene Compliance After Patient/Patient Environment Contact by Category of Health Care Provider
- Report 2**
Hand Hygiene Compliance by Type of Indication
- Report 3**
Hand Hygiene Compliance by Category of Health Care Provider
- Report 4**
Hand Hygiene Technique

At the bottom of the 'Observations Input' section is a 'NEXT' button. At the bottom of the 'Reports' section is a 'RUN' button.

The Excel spreadsheet title bar reads 'Microsoft Excel - HH-mnuMain.xls'. The browser window title bar reads 'Ministry of Health and Long-Term Care - HHOT [Welcome]'. The taskbar at the bottom shows the Start button, several icons, and the system tray with the time '10:26 PM'.

Analyzing audit results to effect change

- Good data and analysis will help organizations identify specific interventions required to improve hand hygiene compliance in their setting

Discussion