

Hand Hygiene Auditing Process



Each year an estimated 2 million patients acquire a healthcare related illness. Of these, an estimated 90,000 die. Thus, as Bronson is committed to excellence in quality patient care, a hand hygiene auditing process was implemented.

Purpose

In 2003, the Centers for Disease Control and Prevention (CDC) hand hygiene guidelines were put into action. Bronson measured compliance with the guidelines in each patient care unit in 2004. Studies on improving hand hygiene compliance indicate that frequent feedback to staff on their performance can raise awareness of the need for improvement and establish a culture of safety in the unit that includes good hand hygiene. Bronson encouraged clinical departments to adopt hand hygiene as a quality improvement project for 2006. The method of auditing for hand hygiene compliance is not specified in the CDC guidelines, The Joint Commission recommendations, or the Bronson policy. These audit guidelines provide managers with a consistent and uniform way to measure compliance and calculate compliance rates for their departments.

Auditors

Bronson recruits auditors that are independent of Bronson. That is, they are not employed by Bronson and are not influenced by bias. Bronson works closely with Western Michigan University to utilize undergraduate student volunteers as auditors. See Appendix A.

Process

The auditors follow the simple process of "Wash In," "Wash Out." Employees should wash their hands before entering a room and again when leaving the room. Furthermore, employees should wash hands before gloving and after removing gloves. See Appendix B.

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Auditing Tool

Auditors note the day and time they are on a unit, in addition to the category (e.g. RN, MD, PCA, etc.) of the employee they are auditing. They record whether the observation takes place when entering or leaving the patient environment, as well as compliance or non-compliance. If the employee is non-compliant, every effort is made to acquire a name. Furthermore, the auditor should document what was touched (patient, bed, gloves, etc.). This promotes mindfulness of the auditors and also shows where increased education and/or accountability may be needed. See Appendix C.

Posted feedback

Monthly, quarterly and year-to-date graphical feedback on hand hygiene compliance is posted in employee break rooms, is sent out in the monthly newsletter, and is also available on the Bronson intranet.

Appendix A

Hand Hygiene Task Analysis



Hand Hygiene Task Analysis 2008

Setting

Bronson is a community hospital employing almost 5,000 full- and part-time employees and is recognized for delivering innovative, state of the art services to its patients. Because the methods of delivering these services are an essential component to excellence, Bronson also strives to achieve superiority in patient care while employing continuous means to improve it. To continue their plan for excellence, a hand hygiene practicum was implemented through Western Michigan University in 2006 to audit hand hygiene compliance among healthcare workers. The practicum encompasses a dual advantage in that it collects data on employee delivery of safe healthcare, and it also offers students at Western Michigan University the experience of collecting data in an applied setting.

Compliance/Non-compliance

Every time an employee enters a room, exits a room, puts on gloves, or removes gloves is one opportunity to audit. While employees are encouraged to “wash-in” and “wash-out,” if the employee enters and leaves the patient room without touching the patient or anything in the patient environment such as the bed, overbed table, IV pump, etc., the event is not recorded.

Task List

Observe healthcare workers as they enter and leave patient rooms.

1. Enter hospital
2. Fill out data sheet with name, time and date
3. Go to assigned units
4. Observe employees

Document compliance

Record date and time of observation period. Upon observing target behavior:

1. If employee is compliant, mark unit name, employee type, whether the audit was taken before entering or leaving the patient environment, and compliance.
2. If employee is non-compliant, mark unit name, employee type, whether the audit was taken before entering or leaving the patient environment, and non-compliance.

Interobserver agreement (IOA) is employed in our observational process to ensure that our measures are reliable and valid. Documentation of IOA is initiated upon request of the practicum supervisor.

1. Number a blank auditing tool marked IOA in bold letters
2. Observe same instances of behavior independent of each other
3. Compare audits
4. If in agreement, no action
5. If disagreement, discuss
6. Calculate percentage = $\frac{\text{number of agreements}}{\text{agreements} + \text{disagreements}}$ Multiply by 100 = % IOA

Summary and Next Steps

The hand hygiene program has been successful at Bronson. Graphical feedback is posted in the patient care units, in the monthly newsletter, on the Bronson intranet and are also reported to **Keystone, a patient-safety program initiated by Michigan hospitals**. Starting in March 2009, the graphs on Bronson's intranet will be automatically updated as soon as the data is entered allowing Bronson to view the data day-to-day.

Appendix B

Guidelines For Auditing Hand Hygiene Compliance



Healthcare setting. The healthcare setting for which we will measure hand hygiene does not include surgical procedures when staff perform a surgical scrub and observe sterile technique during the procedure. The hand hygiene audit process applies the routine care of patients in all settings.

Patient encounter. A patient encounter occurs when a healthcare worker (HCW) enters and touches anything in the room with their hands. The worker does not necessarily need to touch the patient directly because objects and equipment in the room represent an infection risk to both the patient and the HCW. A patient encounter is not counted if a HCW enters a patient room but does not touch the patient or any object or surface in the patient's environment.

Hand hygiene opportunity. Bronson's nursing policy clearly specifies each time a HCW should use hand hygiene during a patient encounter. At a minimum, hand hygiene should be done as the **HCW enters the room**, before they touch the patient and after they finish the encounter **as they leave the room**, or twice per encounter. Hand hygiene audits count single events of compliance. For example, if a HCW walks into the room and performs hand hygiene prior to touching the patient or the patient's environment that would be counted as one positive compliance.

Hand hygiene should be exercised if gloves are changed. Hand hygiene is expected before gloves are applied and after they are removed. Healthcare workers are expected to work from "clean to dirty." Healthcare workers must use hand hygiene and change gloves after hands have been contaminated.

Observation. A knowledgeable observer must make the determination whether a HCW used hand hygiene appropriately during a patient encounter. The audit should be done by direct observation. Asking personnel whether they washed their hands is an unreliable audit method because HCWs overestimate their performance. The best and most accurate observations occur when the person being observed is unaware. People naturally improve their performance when they know they are being observed.

HCW population. The HCW population being observed should include everyone who enters the patient room, excluding family, visitors and other patients. Visitors should be educated and encouraged to use good hand hygiene, but they are not part of our audit process. At this time all healthcare personnel working at Bronson are included in the auditing process. Infections can be transmitted by anyone, and hand hygiene is a patient safety issue for

everyone, including physicians and other personnel who may not be employees of the hospital.

Intervention. It will be the decision of the manager how to intervene in staff behavior to improve performance. The auditor should not intervene immediately at the time of a missed opportunity, but other colleagues should. Auditors may present data to the unit's manager at the completion of the day's audits so that timely feedback may be given to employees

Sample size. Studies show that the average non-critical care nurse has eight hand hygiene opportunities per hour and the average critical care nurse has 30 opportunities per hour, so it does not take long to observe a large number of opportunities. Statistical theory shows that up to a point, the larger the sample size the more accurate the conclusions that can be derived from the sampling. Managers should balance the accuracy of the sampling with the time it takes to perform the audits. The Joint Commission provides guidelines for sampling quality indicators in the healthcare setting. A sample size of 30 is the minimum for procedures that occur frequently throughout the day.

- For units with between 30 and 100 opportunities, sample 30
- For units with between 100 and 500 opportunities, sample 50
- For units with greater than 500 opportunities, sample 70

Most of Bronson's patient care units have more than 500 opportunities for audit per month. As managers begin the audit program, it might be wise to begin with weekly audits of 30 opportunities each with rapid feedback to staff each week. If compliance is achieving the desired target, sampling 70 opportunities per month will tell if the unit is slipping back to noncompliance.

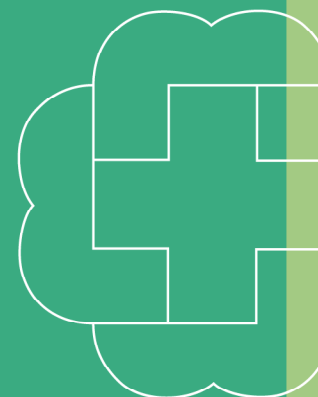
Sample schedule. Patient safety is important every hour of every day. It is important that samples are taken on all shifts, as well as all days. This includes weekends.

Reporting data. Audit data is reported as percent compliance, with the total number of opportunities for hand hygiene as the denominator and the number of hand hygiene occurrences as the numerator. The audit tool includes the department or job class of the HCW being observed (e.g., physician, RN, PCA) to allow managers to target groups for improvement efforts if needed.

Improving performance. The CDC guidelines describe a number of techniques that work in improving HCW hand hygiene compliance. Program elements include educational, motivational and system approaches. Managers should together determine what barriers or needs are preventing their unit from achieving their 90 percent compliance.

Appendix C

Example of Auditing Tool



HAND HYGIENE AUDIT TOOL 2009



AUDITOR NAME: _____

DATE: _____ START TIME _____ AM PM

UNIT	CATEGORY	*OBSERVATION (CHECK ONE)		COMPLIANCE (CHECK ONE)		WHAT WAS TOUCHED IN PATIENT ROOM?	**EMPLOYEE NAME OR COMMENT
		<input type="checkbox"/> BEFORE	<input type="checkbox"/> AFTER	<input type="checkbox"/> YES	<input type="checkbox"/> NO		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

END TIME _____ AM PM

PLEASE RETURN TO BOX 86 AT END OF DAY

* Each audit consists of one opportunity for hand hygiene.

** If you notice an employee who is consistently non-compliant, please note their name under each occurrence. If name badge is flipped, record room number and time.