

Improving Hand Hygiene Compliance for Direct Care Staff At Chandler Hall Health Services 2018



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Improving Hand Hygiene Compliance for Direct Care Staff At Chandler Hall Health Services 2018

Presented to
Lynette Aarons
Chief Executive Officer
Chandler Health Services, Inc.

Prepared by
Jennifer Smith
Student
The Pennsylvania State University

August 8th, 2018

Memorandum of Transmittal

TO: Lynette Aarons, CEO Chandler Health Services, Inc.

FROM: Jennifer Smith

DATE: August 8th, 2018

SUBJECT: Recommendation Report To Improve Direct Care Staff Hand Hygiene Compliance

Dear Ms. Aarons,

This following report analyzes a current problem that direct care employees, including certified nursing assistants and nurses, are not following the current required hand hygiene policies in the nursing home at Chandler Hall Health Services.

In order to insure compliance with state and federal regulations, and Joint Commission: Accreditation, Health Care, Certification (JCACHO) standards, Chandler Hall has a mandatory Infection Control policy. This policy is in place to provide preventative measures workers can take in order to prevent the spread of infection. However, I have observed that workers fail to adhere to this policy after observing five certified nursing assistants and conducting a survey of the direct care staff.

In order to motivate all workers to follow the required hand hygiene policy, certain changes need to take place within the nursing home. I believe that there are feasible solutions to improve hand hygiene performance by adapting the current education that is a part of the Infection Control Program. Simple additions in the nursing home, including sanitizer dispensers, will remind workers to clean their hands. Lastly, the involvement of patients can help encourage workers to wash their hands in accordance with this required policy.

These improvements to help workers better adhere to the policy will help to insure compliance with state and federal regulations and JCACHO standards. More importantly, there will be an overall safer environment for patients and workers in the nursing home unit.

I would like to acknowledge the assistance of Nora, the Personal Care Administrator, for providing access to staff and resources for the completion of this project.

Thank you for the opportunity to present this report. I look forward to discussing the possibility of implementing these proposed ideas in the near future. If you have any further questions, please do not hesitate to contact me at jenna.demuth@gmail.com.

Sincerely,
Jennifer Smith

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Executive Summary

This report outlines evidence that direct care employees in the nursing home unit at Chandler Hall Health Services are failing to follow the recommended hand hygiene requirements stated within the Infection Control policy. In addition, this report presents recommendations to improve worker's hand hygiene performance.

Problem: Lack of Recommended Hand Hygiene Performance

A majority of the direct caregiving staff employees fail to follow the recommendation guidelines for hand hygiene when providing care to residents. As hand washing is the primary prevention for the spreading of infections, all workers must comply with this required policy.

Chandler Hall Health Services Can Improve Direct Care Staff Hand Hygiene Compliance

Fortunately, there are recommended ways to increase worker's hand hygiene performance in a healthcare setting. In order to create a safer environment for patients and workers in the nursing home, these changes need to be implemented in the near future. Four steps will help to improve direct care staff's hand hygiene compliance:

1. Implement in person and interactive education workshops for direct care staff to attend four times a year.
2. Allow for the direct observation by a professional to assess whether workers utilize hand hygiene skills taught in the education workshops.
3. Install hand dispensers outside of each patient's room so that workers remember to perform hand hygiene prior to and after direct patient contact.
4. Start a monthly contest to motivate workers to perform the required hand hygiene.

Benefits: Fewer Threats to Failing State Inspections and Overall Safer Environment

As the Department of Health Services currently inspects Chandler Hall Health Services once a year, it is important that workers adhere to the Infection Control policies. Failure to practice safe hygiene techniques could lead to failing state inspections. Additionally, worker compliance with hand hygiene will create an overall safer environment for both the residents and workers.

Introduction

Many direct care employees fail to wash their hands in accordance with Chandler Hall's Infection Control hand hygiene policies. This lack of adherence creates a potential increased risk for the spread of healthcare-associated infections, especially in a population where patients are vulnerable to certain diseases. A majority of workers will continue to practice unsafe hand hygiene unless changes occur in the near future. If a resident contracts an infection due to an employee's failure to adhere to hand hygiene, then the employee or Chandler Hall could face potential litigation. In addition, if Chandler Hall fails to comply with state and federal regulations and JCACHO standards, the facility will fail to pass inspections.

The purpose of this report is to review Chandler Hall's current hand hygiene policies, analyze the direct care staff's hand hygiene performance, and provide feasible solutions to improve compliance rates. This report outlines several steps that could improve worker's hand hygiene performance in accordance with the current policies. Introducing interactive education and unique strategies into the nursing home unit may be beneficial to patients, workers, and the administration at Chandler Hall Health Services. The financial costs of these steps are not included within this report, but the financial department may conduct further research.

In preparing this report, primary and secondary research was conducted. Articles providing evidence of hand hygiene and its role in infection prevention were analyzed. In addition, a recent inspection report of the nursing home at Chandler Hall from the Department of Health and Human Services was reviewed. Lastly, a personal investigation, consisting of observations and a survey, was conducted.

This report will include an overview of hand hygiene and its recommended safe practices for healthcare workers. The analysis of a recent inspection report is also included. Additionally, this report provides observations and surveys of direct care staff at Chandler Hall's nursing home. Lastly, proposed solutions to improve worker hand hygiene compliance are provided.

Hand Hygiene and Healthcare-Associated Infections

Hand hygiene is the most important, easiest, and least expensive way to reduce the prevalence of healthcare-associated infections and the spread of antimicrobial resistance. Although it is a simple action, the lack of compliance among health-care providers has become problematic worldwide.

Greater measures needed to be taken to insure that healthcare workers wash their hands according to the required policies. Over 1.5 million people live in 16,000 nursing homes in the U.S, and an average of 2 million infections occur each year (Montoya & Mody, 2011). As direct care staff touches patients' skin and other objects close in proximity, there is great potential for workers' hands to become contaminated and carry infection (Mathur, 2011). In a nursing home, where individuals are prone to diseases, an infection can easily be spread.

Chandler Hall Hand Hygiene Practices

Currently, Chandler Hall has a mandatory Infection Control Policy for all workers to follow. In an inspection report from 2017, it was found that workers were not adhering to the required hand hygiene regulations listed within the Infection Control Policy.

Infection Control Program Policy

Chandler Hall Health Services, Inc. devised an infection control plan that was effective in September 2004. This policy currently states:

“Chandler Hall Health Services Infection Control Program is designed to decrease the risk of infection, monitor occurrence, implement appropriate control measures, insure compliance with the state and federal regulations and the JCAHO standards.”

The procedure for prevention of infection control includes education at orientation for a recently hired worker, the completion of required vaccinations, and a list of all personal protective equipment available to use when working.

The current hand hygiene policy includes that hand washing should be done after contact with bodily fluids, or excretions, mucous membranes, non-intact skin wound dressing, and before and after use of gloves. Indicators for washing hands with alcohol-based sanitizer should be used before and after direct contact with patients, and after removing gloves.

Although this policy provides ways that workers can prevent the spread of infection, many workers fail to follow these guidelines. As a result of the direct care staff's lack of adherence to these mandatory policies, Chandler Hall could fail inspection or face possible litigations if a patient contracted an illness that could easily have been prevented by hand washing or usage of an alcohol-based sanitizer.

Recent Inspection Report Presents a Problem

The Department of Health and Human Services completed a recent inspection of Chandler Hall in November of 2017. This report found that 2 employees did not wash their hands according to the facility's policies and procedures. Appendix A includes a screenshot of the report.

The report focused on observations of nurses administering medications and treating wounds. In addition, staff interviews were conducted. Finally, the facility's hand washing policy was reviewed. From these methods, the Department of Health and Humans Services recorded that hand washing was not performed properly by 2 workers for 3 patients.

The specific observations included in this 2017 report analyzed a nurse and another employee. The nurse was observed not washing her hands prior to and after administering medication to one resident, and then the same for providing medication immediately after to another resident.

The second employee was found not washing their hands before and after treating a resident's wound.

As a result of this inspection, the Director of Nursing confirmed that hand hygiene should have been performed in both instances. In addition, this report stated the need for a program that investigates, controls, and keeps infection from spreading.

Although this inspection only reported 2 employee's failure to comply with hand hygiene policies, there still presents an increased potential risk of contamination and spread of infection of patients residing in the nursing home facility.

Additional Observations Support Lack of Hand Hygiene Compliance

A personal investigation was conducted on this matter. Results from this observation support the 2017 Department of Health and Human Services report of workers failing to perform hand hygiene and follow the required policies.

The frequency of hand washing was recorded for nursing assistants working in the nursing home at Chandler Hall Health Services. Each employee was observed five times before and after directly touching a patient.

Results from these observations show that all five employees did not wash their hands with soap or water or apply alcohol-based sanitizer more 50% of the time prior to direct patient contact. Employee 4 did not wash or sanitize hands at all prior to direct patient contact. In general, nursing assistants performed hand hygiene more after touching a patient compared to before contact. However, not one employee always washed or sanitized their hands every time before and after direct patient contact (see Table 1).

Table 1. Hand Hygiene Observations of Five Nursing Assistants

Employee	Number of Times Hands Washed or Sanitized Prior to Direct Patient Contact	Number of Times Hands Washed or Sanitized After Direct Patient Contact	Percentage of Times Before	Percentage of Times After
1	2/5	3/5	40%	60%
2	1/5	3/5	20%	60%
3	2/5	4/5	40%	80%
4	0/5	2/5	0%	40%
5	2/5	3/5	40%	60%

Survey Administered to Direct Care Staff

In addition to the investigation, an anonymous survey was administered to nursing assistants and nurses in the nursing home. 30 responses were received, but 13 of the responses were partially completed. Therefore, only 17 responses were included in this report.

Five questions were chosen from the World Health Organization (WHO) Recommended Perception Survey (Safety & World Health Organization 2009). The survey given to workers is included in Appendix B.

The first two questions from the survey asked if workers always washed hands before and after patient contact. Over half of the responses for both questions were “No”. Workers reported to washing their hands more after contact than before. (see Figures 1 and 2).

Figure 1. Assessment of Hand Washing Prior to Patient Contact

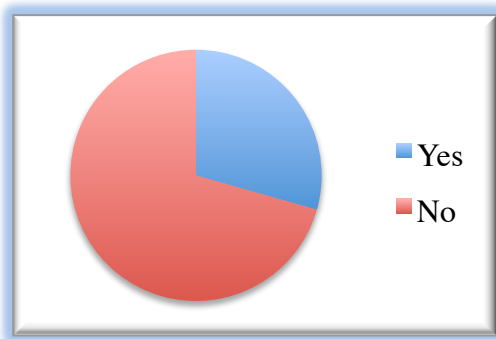
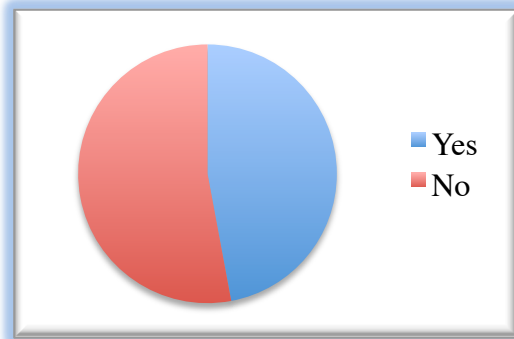
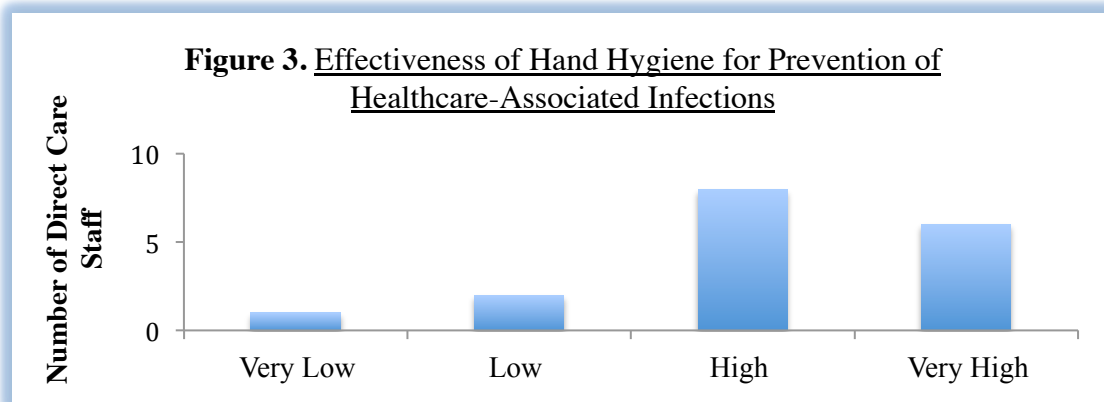


Figure 2. Assessment of Hand Washing After Patient Contact



The third survey question assessed workers' perception on hand hygiene and preventing healthcare-associated infections. Since hand washing is the best prevention of infection, all workers should have answered “very high”. A majority of the workers answered “high” or “very high” effectiveness, so most understand the importance of hand hygiene in prevention of infections. Perhaps, workers need reminders and convenient stations to clean their hands.



Question 4 assessed worker's knowledge of appropriateness of hand sanitizers for cleaning hands. Sanitizer can be applied in replacement of soap and water when hands are not visibly soiled. All workers should have answered "true" but there were 4 "false" responses. Appropriate education on this topic will be included in future workshops.

Lastly, Question 5 assessed the direct care staff's opinions on whether feedback on hand hygiene performance is an effective action to improve compliance permanently in the institution. Of the 17 direct care employees, 13 responded that feedback on performance would be effective. Potential future education on hand hygiene could include monitoring workers to assess their compliance.

Methods for Improving Direct Care Staff Hand Hygiene Compliance Rates

By implementing a number of reforms, Chandler Hall Health Services can improve the direct care staff's hand hygiene performances. According to multiple studies, the WHO's intervention strategies showed improvements for worker hand hygiene compliance (Gould, Moralejo, Drey, & Chudleigh, 2010). The main components of the WHO's strategies incorporate education, performance feedback, alcohol-based hand hygiene products, and verbal reminders.

Some of these recommended strategies listed can be implemented at the nursing home in Chandler Hall to improve worker hand hygiene compliance:

1. Implement Interactive Education Workshops

The most feasible solution to improving worker's hand hygiene performance involves updating the current training system under the Infection Control Program.

Currently, Chandler Hall direct care staff must complete an online Relias Learning module during orientation. Then, staff completes additional online Relias training on this topic annually. Since this education is mandatory for workers to complete once a year, it is often easy for workers to forget the essentials for hand hygiene performance and its benefits for preventing healthcare-associated infections.

When asked whether direct care employees regarded hand hygiene as an effective measure to prevention the spread of infection, some workers answered that it was not very effective. In order to enhance the worker's knowledge on the importance of hand hygiene, future education should be in person and more frequent.

Quarterly mandatory hand hygiene education workshops taught by a health professional will include education regarding:

- Strategies for creating changes in worker's behaviors towards hand hygiene performance
- Background information on healthcare-associated infections
- Techniques for improving hand hygiene performance
- Modules emphasizing importance of alcohol-based sanitizer solutions

The implementation of in person education workshops that are more interesting and frequent will hopefully encourage direct care staff to wash practice proper hand hygiene in accordance with Chandler Hall's Infection Control Policy.

2. Institute The Direct Observation of Employees

By directly assessing employees and their hand hygiene behavior, observers can determine when and why workers fail to wash their hands. Currently, Chandler Hall does not have a designated employee to monitor worker's hand hygiene compliance.

Almost half of the direct care employees surveyed agreed that feedback on hand hygiene performance would improve hand hygiene permanently in the institution. In order to enhance the validity and reliability of direct observations, trained and covert observers should be hired (Ellingson et al., 2014). Therefore, workers will be unaware that they are being observed.

3. Add Hand Sanitizer Dispensers

Currently, there are no hand sanitizer dispensers located outside of each patient's room in the nursing home. Sinks are located in the bathrooms within each patient's room, but patients use these sinks frequently. Hand sanitizer dispensers should be located outside of each patient's room visible to the healthcare worker to remind them to apply the alcohol-based sanitizer before and after touching a patient.

In an interview with the personal care coordinator, Nora, she mentioned that this may be a feasible solution. However, financial costs would need to be discussed with the finance department if this idea were to be considered.

4. Engage Patients in a Monthly Contest

In order to insure that workers are practicing what they learned in their training about proper hand hygiene, Chandler Hall could potentially start a contest that could benefit direct care staff and patients.

When a direct care worker comes to provide care to the resident, the resident can record each time that the direct care worker performs proper hand hygiene in accordance with Chandler Hall's policies. At the end of each month, the worker who accumulates the most points could receive some sort of reward. By offering an incentive, hopefully more direct care workers can be motivated to practice proper hand hygiene. One possible reward a worker may be granted could include earning a day off from work.

Residents can also be rewarded by this contest as well. Residents who continually tally the amount of times a worker washes their hands can receive a gift card to Chandler Hall's café, where they can enjoy a meal when their family comes to visit them.

Conclusions and Recommendations

In order to address the lack of hand hygiene performed by direct care workers at Chandler Hall Health Services, primary and secondary research was conducted. Primary research provided information regarding the prevalence of healthcare-associated infections due to lack of hand hygiene performance amongst workers. Meanwhile, secondary research consisted of specific investigations, such as observations and surveys, regarding Chandler Hall's current hand hygiene and infection control policies.

The results from the observations and survey suggest that direct care workers are failing to perform hand hygiene requirements instilled by Chandler Hall. In a population where patients are at an increased risk of infection, the lack of hand hygiene amongst workers raises concern for the transmission of disease. Therefore, future actions should be implemented in order to improve worker's compliance with safe hand washing.

Chandler Hall Health Services should be able to improve direct care staff hand hygiene compliance by taking four important steps:

1. *Implement Interactive Education Workshops.* In person training should be mandatory for workers four times a year to educate them and increase compliance when caring for residents. Replacing online with in person training may increase worker's knowledge and desire for practicing required hand hygiene in the nursing home.
2. *Institute The Direct Observation of Employees.* In order to insure that direct care workers are performing hand hygiene learned from the education workshops, a covert observer should be hired to analyze if the worker complies with the mandatory infection control policies.
3. *Add Hand Sanitizer Dispensers.* Since alcohol-based sanitizers are effective ways to prevent the spread of germs, dispensers should be placed outside of each patient's room. Workers will be able to see the dispenser and remember to apply sanitizer before and after direct patient contact.
4. *Engage Patients in a Monthly Contest.* A contest that offers an incentive to workers, such as earning a day off from work, will motive direct care workers to perform hand hygiene more often. This activity will also engage patients, who can earn a certain reward for their participation in recording when the direct care staff practices proper hand hygiene.

Although these changes may take some time to implement, small measures at Chandler Hall should be taken to assure that the practice of proper hand hygiene motivates workers to wash their hands in accordance with the required guidelines.

Chandler Hall is dedicated to providing safe and sanitary care to residents. If a resident contracts an infection that can be explained by spreading from an employee's lack of sanitation, then Chandler Hall may be at risk for facing possible litigations. As Chandler Hall is frequently

regulated by the state, failure to follow rules and regulations can also lead to future penalties. Therefore, it is in the best interest of Chandler Hall Health Services to work towards improving the hand hygiene performance of direct care workers in the nursing home unit.

References

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Appendix A

Department of Health and Human Services 2017 Inspection Report

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR MEDICARE & MEDICAID SERVICES

PRINTED: 8/3/2018
FORM APPROVED
OMB NO. 0938-0391

STATEMENT OF DEFICIENCIES AND PLAN OF CORRECTION	(X1) PROVIDER / SUPPLIER / CLIA IDENTIFICATION NUMBER 395305	(X2) MULTIPLE CONSTRUCTION A. BUILDING _____ B. WING _____	(X3) DATE SURVEY COMPLETED 11/01/2017
NAME OF PROVIDER OF SUPPLIER CHANDLER HALL HEALTH SERVICES		STREET ADDRESS, CITY, STATE, ZIP 99 BARCLAY STREET NEWTOWN, PA 18940	
For information on the nursing home's plan to correct this deficiency, please contact the nursing home or the state survey agency.			
(X4) ID PREFIX TAG	SUMMARY STATEMENT OF DEFICIENCIES (EACH DEFICIENCY MUST BE PRECEDED BY FULL REGULATORY OR LSC IDENTIFYING INFORMATION)		
F 0441 Level of harm - Minimal harm or potential for actual harm Residents Affected - Few	Have a program that investigates, controls and keeps infection from spreading. Based on observation of medication administration, wound care, staff interviews and a review of the facility's handwashing policy, it was determined that handwashing was not performed as specified in the facility policy by 2 employees for 3 residents (Resident R15, R33, and R44). Findings included: Review of the facility's policy and procedures regarding handwashing, dated (MONTH) 18, (YEAR), indicated the purpose is to decrease the risk of transmission of infection by appropriate hand washing or hand sanitizing. It further indicates that handwashing should be done after contact with body fluids, or excretions, mucous membranes, non-intact skin wound dressing, and before and after use of gloves. Indicators for washing hands with alcohol-based sanitizer should be used before and after having direct contact with patients, and after removing gloves. During the medication administration for Resident R44, on, (MONTH) 1, (YEAR) at 8:40 a.m., License Practical Nurse (LPN), Employee E3 did not wash her hands before preparing the medication, before contact with the resident during medication administration, nor after administering medication. Immediately afterwards at, 9:06 a.m., LPN Employee E3 was observed administering medication to Resident R33. Again, she did not wash her hands before preparing the medication, nor before contact with the resident during medication administration. During that medication pass, it was also observed, Employee E3 donning gloves without washing her hands before giving Resident R33 her inhaler. On (MONTH) 1, (YEAR), at 10:45 a.m., LPN, Employee E4 was observed providing wound care to Resident R15's left heel. After the removal of the soiled dressing, he applied the medication to the wound bed with out washing his hands. Employee E4 was also observed providing wound care to Resident R15's right heel. After the removal of the soiled dressing, he applied the medication and the dressing to the wound without washing his hands. The Director of Nursing confirmed on, (MONTH) 1, (YEAR) at 11:30 a.m. that hand hygiene should have been performed during medication administration and wound dressing changes. The facility failed to ensure that wound care and medications were administered in a manner to prevent contamination and the potential spread of infection. 28 Pa. Code 211.12 (d)(1)(5) Previously cited 12/08/16		

Appendix B

Perception Survey for Direct Care Workers at Chandler Hall Health Services

1. Do you wash your hands before touching a patient?
 - a. Yes
 - b. No
2. Do you wash your hands after touching a patient?
 - a. Yes
 - b. No
3. What is the effectiveness of hand hygiene in preventing health care-associated infection?

___Very Low___Low___High___Very High
4. Alcohol-based hand rub may be used instead of soap and water when hands are not visibly soiled.
 - a. True
 - b. False
5. In your opinion, how effective would the following actions be to improve hand hygiene permanently in your institution?
 - a. Health-care workers regularly receive feedback on their hand hygiene performance.
 - i. Not Effective
 - ii. Effective

This survey is adapted from the World Health Organization Perception Survey for Health-Care Workers