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An Educational Intervention on Daily Chlorhexidine Gluconate Bathing and Central Venous Catheter Infection Rates in the Pediatric Population: A Quality Improvement Initiative

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AN EDUCATIONAL INTERVENTION ON DAILY CHLORHEXIDINE GLUCONATE BATHING AND CENTRAL VENOUS CATHETER INFECTION RATES IN THE PEDIATRIC POPULATION: A QUALITY IMPROVEMENT INITIATIVE

by

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Dedication

This document is dedicated to the children past and present, who have been affected by cancer as well as the nursing staff who selflessly provide care to this fragile population. The bravery the children expend is extraordinary and admirable. The compassion provided by the nursing staff is unique and hard to come by in the healthcare field.

Additionally, I would like to dedicate this document to my family, especially my husband and our three children. They have tirelessly encouraged and supported me throughout my academic journey. And to my parents, for always encouraging me to do my best, take risks, and never give up.

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Abstract

The use of Central Venous Catheters (CVCs) in the healthcare setting is essential to patient survivability. While convenient, the utilization of such devices places patients at risk for Central Line- Associated Bloodstream Infections (CLABSI). The US spends nearly $2 billion dollars annually treating CLABSIs. The utilization of CLABSI bundles has shown to be effective in infection prevention. Daily bathing with Chlorhexidine Gluconate (CHG) is recommended by the Centers for Disease Control and Prevention (CDC) and is often included in CLABSI bundles. In an attempt to reduce the incidence of CLABSIs at a metropolitan pediatric hospital in the Southern US, a nurse driven quality improvement (QI) initiative is being proposed. The proposed QI initiative will target pediatric hematology/oncology nurses and will consist of a 15-minute educational session regarding CHG bathing. A pretest/posttest design combined with retrospective chart reviews will be utilized. A hopeful increase in daily bathing compliance rates with a subsequent reduction in the occurrence of CLABSIs will be a direct result of the QI initiative.

Keywords: *central venous catheter, infection, chlorhexidine gluconate, pediatric, education, nursing*

An Educational Intervention on Daily Chlorhexidine Gluconate Bathing and Central Venous Catheter Infection Rates in the Pediatric Population: A Quality Improvement Initiative

The use of central venous catheters (CVC) is prominent in the healthcare setting. These devices provide continuous access to the patient's vascular system for laboratory specimens, lifesaving medications, fluids, intravenous nutrition, and blood products. Although convenient for both the provider and patient, central line-associated bloodstream infections (CLABSI), are one of the most common Healthcare-Associated Infections (HAI) in the United States (Raulji, Clay, Velasco & Yu, 2015). The healthcare industry terms an infection that occurs while receiving care in a healthcare facility as an HAI (World Health Organization, 2018). To be considered an HAI, the infection must not be related to a preexisting illness that was incubating at the time of admission (WHO, 2018). Aside from CLABSIs, other common HAIs include: catheter associated urinary tract infection (CAUTI), surgical site infections (SSI) and ventilator associated pneumonia (VAP).

The Joint Commission (2018) estimates 250,000 HAIs occur annually in the United States with 80,000 of those being associated with a CVC. It is estimated that 100,000 deaths occur every year in the United States due to an HAI, one third of those deaths are due to a CLABSI (The Joint Commission, 2018). Age and underlying disease(s) are unmodifiable risk factors for CLABSIs with infection rates being higher in children than adults (The Joint Commission, 2013). Hematological, cardiovascular, and gastrointestinal (GI) diagnoses are associated with higher infection rates as well as immunosuppression (The Joint Commission, 2013). Thus, the pediatric population is uniquely vulnerable to CVC associated infections due to incontinence and being partially, if not completely dependent upon adults for all of their daily

care needs. Note, there is a lack of robust data regarding CHG bathing and its benefits in children under two months of age due to few studies being conducted in this population.

The occurrence of a single CLABSI is costly for both the patient and healthcare industry due to an increase in hospital stay, an increase in mortality, and significant cost to treat (Dray, Floren, & Papazian, 2019). It is estimated that one CLABSI in the pediatric population costs up to $70,000 to treat and adds an additional 21 days to the patient's hospital stay. (Wilson et al., 2014). With the use of central line care bundles which include proper aseptic insertion, frequent hand hygiene, routine central line maintenance including sterile dressing changes and changing all needleless access device as implicated, disinfecting all access points prior to utilization, and daily patient bathing, the occurrence of CLABSIs has decreased (CDC, 2015).

The National Healthcare Safety Network (NHSN) reports a 50% reduction in CVC infections from 2008 to 2016 following the utilization of central line care bundles and guidelines by many healthcare facilities across the US (2018). From 2016 to 2017, there was an additional 9% reduction in CLABSIs nationally with the most significant reduction occurring in the non-ICU setting (NHSN, 2017). The Standardized Infection Ratio (SIR) is a tool utilized by the NHSN to track HAIs across the US. Each year, the NHSN publishes a new report for each state to determine if improvements have been made with HAI reduction. Of the 70 facilities reporting to the NHSN, there was no significant change in CLABSI rates compared to the previous report however, CLABSI rates remain below the national benchmark (NHSN, 2019). The CDC credits nurses for a 58% reduction in CLABSIs between the years of 2001 and 2009 following the implementation of infection prevention guidelines (2016).

While positive strides have been made, the NHSN recommends further intervention to trend occurrences downward even further (2018). Due to pay-for-performance initiatives and

the Affordable Care Act (ACA) incentivizing healthcare facilities, further expansion in best practice guidelines is necessary to prevent increased healthcare cost, lack of reimbursement, and patient mortality (Woodward and Umberger, 2016).

The majority of CLABSIs are often attributed to bacteria that naturally reside on the patient's skin (Raulji et al., 2015). Healthcare facilities across the United States require or recommend some form of daily skin cleansing for all inpatients with a CVC to prevent infection (CDC, 2016). Skin cleansing with Chlorhexidine Gluconate (CHG) has been utilized since the 1970's (Raulji et al., 2015). The solution has proven to be effective in inducing bactericidal effects in a wide spectrum of gram negative and positive organisms as well as fungi and viruses (Raulji et al., 2015). Thus, implementation of daily CHG bathing is proposed as a mechanism for reducing CLABSIs in pediatric patients.

Theoretical Framework

The Adult Learning Theory birthed the concept of Andragogy, a synonym for adult education coined by the Europeans in the 1950s. The concept of adult learning dates back into the 19th century. While not the father of the theory, Malcolm Knowles is recognized as first introducing the concept to the United States (US) in the late 1970s to 1980 (Zmeyov, 1998). Knowles identified five assumptions for the adult learner: self-concept, adult learner experience, readiness to learn, orientation to learning, and motivation to learn (Knowles, 1972). A unique attribute to adult learning identified by Knowles is that adults do not passively reciprocate education as children do (Knowles, 1980). Instead, adults need explanations as to why they are being taught a specific concept. For the proposed quality improvement initiative, the former statement was considered.

The addition of another daily task to be completed can be frustrating and seem impossible to many healthcare professionals. Simply discussing the importance of a task, such as a daily bath will likely be insufficient. Instead, providing statistics to illustrate the detrimental effects that can possibly occur by not simply bathing a patient on a daily basis is essential. Discussing these consequences may promote the concepts of readiness and motivation to learn. Furthermore, transferring this new information to both the patient and their family by the healthcare team can further intensify the effects of the education. Discussing the repercussions of a CLABSI to the healthcare team may remind them of a particular patient that they cared for that was critically ill and perhaps passed away due to a preventable infection, thus addressing the assumption of the adult learner experience. And lastly, reminding the healthcare team of the expectations for care set forth by the employer can be beneficial. Such expectations include existing policies stating every patient with a CVC should receive a daily CHG bath. Gently reminding the provider that there should not be an option to refuse to give or receive a daily CHG bath; that this task is required and is expected.

Furthermore, adult learners fall into one of three different categories: visual, auditory, or kinesthetic (Knowles, 1980). Visual learners benefit from demonstrations or picture aids. Auditory learners prefer traditional lectures to learn new content. And finally, kinesthetic learners master new concepts through directly performing a task.

For the intervention, all three adult learning categories were incorporated to ensure optimum retention and application of the information presented. Visual and auditory learners were addressed during the educational component. In addition, the visual learners were addressed during the evaluation period with the strategic placement of visual aids throughout the clinical site. And lastly, the kinesthetic learner was targeted following the intervention with the

routinely completion of CHG baths. By accommodating to all three learning categories, the assumption of self-concept is also being addressed by enabling the adult learner to choose their appropriate learning pathway.

Setting and Organizational Assessment

The intervention occurred on a 20-bed inpatient medical-oncology unit at a metropolitan pediatric hospital located in Southeastern part of the US. The site is a specialty unit that provides medical care to children with hematology and/or oncology pathologies. Such pathologies include leukemia, lymphoma, and tumors of the Central Nervous System (CNS), osteosarcoma, and neuroblastoma. The patients admitted at the clinical site range from ages 0-25 years with the majority of those having some form of implanted CVC including: infusaport(s), broviac and hickman catheters (single, double, or triple lumen), as well as Peripherally Inserted Central Catheters (PICC). The type of CVC implanted is dependent on the patient's diagnosis. The occurrence of CLABSIs amongst this population remain relatively high compared to the generalized pediatric population (Wilson et al., 2014). This can be contributed to the severity of their illness, the routine use of chemotherapy followed by subsequent, often prolonged immunosuppression (Wilson et al., 2014). Following their study regarding CLABSI rates in pediatric oncology patients, Rinke et al. (2013) noted a total of 74 CLABSIs amongst their 319 participants. Of those patients, 13% were admitted to the ICU for further management and 44% ultimately had their central line removed and replaced (Rinke et al., 2013).

Stakeholders for the intervention include: the nurse manager of the clinical site as well as nurse managers throughout the clinical facility, the nursing staff of the clinical site, infectious disease personnel, risk management, and the patients. While already required to ensure the patient participates in daily personal hygiene, CHG baths can be time consuming for the nursing

staff of the clinical site especially with the other daily required task that must be completed. In addition to that factor, the patients are often feeling ill and would rather not participate in daily hygiene. These two factors pose as a barrier to change. To promote change at the clinical site, appropriate permission was obtained from the clinical site's nurse manager and the research office Institutional Review Board (IRB).

Purpose

A system-wide policy requiring all patients with a CVC to receive a daily bath using CHG solution has already been established at the clinical setting for this educational intervention project. Based on monthly EMR reviews conducted by the clinical site's Assistant Nurse Manager (ANM), bathing compliance for the unit averages 92% ± 4 per month. Anecdotal evidence that may affect varying and often low bathing rates are thought to be due to nursing shortage, high acuity patients, and patients who refuse daily baths. For 2018, there were a total of seven confirmed CLABSIs on this nursing unit. The CLABSI rates for other units of the clinical site were not reviewed nor discussed.

Many CLABSIs are often attributed to bacteria that naturally reside on the patient's skin (Raulji et al., 2015). Healthcare facilities across the United States require or recommend some form of daily skin cleansing for all inpatients with a CVC to prevent infection (CDC, 2016). Skin cleansing with Chlorhexidine Gluconate (CHG) has been utilized since the 1970's (Raulji et al., 2015). The solution has proven to be effective in inducing bactericidal effects in a wide spectrum of gram negative and positive organisms as well as fungi and viruses (Raulji et al., 2015).

To further promote the existing bathing policy, a nursing educational intervention was proposed to provide valuable education to the staff which could then be transferred to the

patients regarding the importance of CHG bathing, repercussions associated with a CLABSI as well as proper bathing technique. With this educational intervention, an increase in bathing compliance rates and a reduction in CLABSI occurrence is the hopeful outcome.

Intervention

The intervention consisted of multiple scheduled educational sessions related to CHG bathing, policy, technique, and proper documentation with an end goal of increased CHG bathing compliance and a subsequent reduction in central line infections. All staff members are required to attend quarterly staff meetings, per unit policy. After collaboration with the nurse manager of the clinical site, 15 minutes of each scheduled staff meeting was allotted for the educational intervention. Prior to the session, the staff were presented with a nine question pre-test which also served as a preamble, to determine their current knowledge related to CHG and its antiseptic usage as well as CVC-care bundles (See Appendix A). Screenshots demonstrating appropriate documentation location in the EMR was also presented during the staff meeting (See Appendix B). And a diagram depicting proper bathing technique and CHG compatible skin cleansers was also presented (See Appendix C). A post-test consisting of the same questions was presented to the staff four weeks following the intervention in an attempt to measure knowledge retention.

All results of the intervention will be presented to the nurse manager of the clinical site regardless of statistical significance. All staff received information regarding bathing compliance rates prior to and following the intervention. The occurrence of CLABSIs during this time period was also discussed. The evaluator was the sole individual to present the educational content and conduct all chart reviews therefore, training of other team members was not necessary. The education content and chart reviews were both conducted following proper IRB approval.

Participants

The nurses providing direct patient care to pediatric patients with a CVC were the targeted subjects for this intervention. The clinical site currently employees 49 nurses. Inclusion criteria consisted of full-time, part-time and PRN (as needed) nurses on the pediatric oncology unit. Nurses from the float pool were excluded. Thus, 42 nurses participated in the educational intervention.

Data Collection

An EMR chart review for March and April 2019 regarding CHG bathing compliance was conducted. Following proper IRB approval, the educational content was presented in April 2019. Chart reviews for 6 weeks prior to and following the intervention were completed. A total of 48 patient charts were reviewed, 29 prior to the intervention and 19 following the intervention. Bathing compliance for the specified time periods was analyzed. Infectious disease reports were also reviewed during the same time periods mentioned previously. These rates were also compared. Bathing compliance is being reported as a percentage while infection rates is being reported as a whole number. Following the completion of the EMR chart reviews, the post-test was administered to the staff. Note, the time periods for the intervention and EMR reviews were modified from the original proposal due to delays in obtaining IRB approval from the clinical site.

To promote proper maintenance as well as security, a temporary student login and password was obtained from the clinical site's Information Technology (IT) department to provide access to the site's EMR. The components of a student identification are a unique username and password assigned by the facility's IT department. A student identification enables the evaluator to log into the EMR and access all relevant clinical information for each patient.

The assigned student login credentials were only utilized when conducting EMR reviews. The use of this student identification enabled the IT department of this clinical site to track and monitor the user's activity while logged into the EMR. This security mechanism ensures no unauthorized patient information was viewed. No patient data was transferred to another electronic source. All EMR reviews occurred at the clinical site.

The data collected and recorded included: the month of each specific EMR review, how many eligible patients received a daily CHG bath and how many did not as well as infectious disease reports for the same time period. For the patients who did not receive a bath, educational reinforcement was evaluated. Infectious disease reports did not contain any patient identifiers and simply states the month of the report and the number of CLABSIs confirmed in that month. All data collected was stored on the personal computer of the data collector. This computer is password protected and remained locked while not in use by the collector. No other individuals are permitted to access this computer other than the collector.

The risk for an adverse cutaneous reaction related to the components of the CHG exist, although minimal. Typically, skin reactions are localized and only include temporary erythema (redness) at the site. More serious reactions may include: urticaria (hives), vesicular formation, pruritis (itching), and desquamation (skin peeling) (Abdallah, 2015). There are no known religious' exemptions to receiving a CHG bath.

If an adverse event should occur following the use of CHG, the nursing staff will immediately notify the provider. The provider will proceed to the bedside to evaluate the patient. Treatment for the adverse event will be dependent on its clinical severity and is at the discretion of the provider. Generalized erythema might only require monitoring without pharmacological intervention while urticaria may require a medicinal intervention.

To determine if the reaction is merely a skin sensitivity reaction versus a true allergic reaction, a patch test should be performed. A patch test consists of the provider placing a small amount of the CHG solution on the patient's forearm and then covering the site with a small transparent dressing. The provider would monitor the site for erythema, swelling, urticaria, or other signs of a reaction. The nursing staff will then add CHG to the patient's allergy list, if applicable. The applicability of the allergy will be dependent on the results of the patch test. Mild erythema is a characteristic finding with skin sensitivity and does not qualify as a true allergy. Within the listed allergy, the nursing staff will also elaborate on the severity and description of the adverse reaction.

The education for the participants was performed during mandatory staff meetings and did not result in overtime. A current policy stating daily CHG baths are required for all patients with a CVC unless contraindicated has been established. Therefore, all necessary supplies to complete the baths are provided and do not add additional cost. The evaluator was personally responsible for creating all educational handouts and visual aids. EMR reviews, collection, and analyzing of data occurred during the evaluators own personal time and therefore, no wages were necessary.

Measurement

The data was measured and analyzed quantitatively through the use of Chi- square. While the EMR is an accurate measurement tool, discrepancies in documentation must be considered. Optimum data collection and measurement is dependent on proper documentation by the nursing staff. If a bath was not documented or if it was documented in the wrong location of the EMR, then it was acknowledged (or recorded for this project) that a CHG bath was not given that day.

For the questionnaire portion, a paired t-test was used to measure knowledge gained and retained by the nurses.

Results

A total of 48 patient charts were reviewed, 29 prior to the intervention and 19 following the intervention. To determine the statistical significance of the following variables: CHG baths completed and educational reinforcement before and after the educational intervention, a Pearson's Chi Square test for independence was performed. The results of the test indicated no significant association between the number of CHG baths given prior to and following the education, p= .85, *phi*= .08. Additionally, the test yielded no significant association between educational reinforcement for baths refused prior to and following the education, p=.68, *phi*= .12.

A total of 37 nurses completed the pre and posttest for the educational intervention. A paired samples t- test was conducted to determine the impact the educational intervention had on nursing knowledge prior to and following the presentation. The paired t-test yielded non-significant results (p=.138). However, the magnitude of effect from a clinical standpoint was medium (eta squared= .068).

Currently, six CLABSIs have occurred at the clinical site; four prior to the intervention and two following the intervention. All of the confirmed CLABSIs prior to the educational intervention were laboratory confirmed meaning that an organism was able to grow within a 48-hour window. These CLABSIs were due to a break in mucosal barrier integrity. This is a direct result of receiving chemotherapy and is essentially non-preventable. However, only one of the two CLABSIs that occurred following the intervention was laboratory confirmed. The

remaining CLABSI was due to a break in mucosal barrier integrity. All statistical analysis was conducted utilizing SPSS.

Discussion

Interpretation

The Pearson's Chi Square analysis revealed no significant difference between the number of CHG baths given before the education as well as after the education. The results of the paired t- test also indicated no significant association between the amount of knowledge gained and retained by the nursing staff prior to and after receiving the education. While not statistically significant, a medium magnitude of effect evidenced by eta squared could potentially indicate clinical significance. This clinical significance can be applicable system wide within the clinical institution. Nursing education is an easy and sometimes inexpensive method to promote policy adherence. There were no adverse effects noted during the clinical period. CLABSI rates prior to and following the intervention varied significantly.

Limitations

While the results of the intervention indicated no significant association amongst the variables, a few limitations should be considered. First, the ability to capture all patients with a CVC admitted to the nursing unit was challenging. The clinical site's research office required a data request form to be completed. This form required the researcher to specifically describe what information was needed for the chart reviews as well as ICD-10 diagnosis codes. This posed as a limitation because it is merely impossible to capture all patients based on ICD-10 codes because they vary drastically. In an attempt to capture as many patients as possible, the researcher included the top 8 ICD-10 codes used on that specific nursing unit: C91.0, C92.0, Z51.11, Z51.12, D69.6, D70.9, C74.90, C71.6, respectively. After submitting this form, 48

charts resulted. While this was an abundant amount of charts for the specified time frame, there was a discrepancy in the number of charts to be reviewed prior to the intervention (29) and following the intervention (19).

Additionally, the measurement tool utilized is not always reliable as mentioned previously. If a bath was given, but was not documented, the recorder must record the bath as not given during the chart review process. Additionally, if a bath was charted, but it was not specifically indicated that a CHG bath was given, it was acknowledged that the patient did not receive a proper bath for that day therefore being recorded for this project as not given. And lastly, if the nursing staff failed to document the CHG bath in the proper location of the EMR, it then was acknowledged that the patient did not receive a CHG bath for that day and was recorded in the chart review process as not given.

An additional limitation for the chart reviews is that while it may be documented that a CHG bath was given, whether or not that bath was administered appropriately is not a guarantee. Most patients would prefer for their parent to assist with their bath or they would simply prefer to bathe themselves. The laminated instructions placed in each patient room will hopefully ensure that the baths are given correctly however, if the parent or patient is not made aware of these instructions by the nursing staff, the chances of them being utilized diminish. Thus, the investigator was limited to the data provided in the EMR. This limitation should be considered when reviewing CLABSI rates prior to and following the education.

Lastly, the inability to involve all nurses in the educational intervention should be considered. Two nurses were on maternity leave at the time of the educational intervention while five others were on vacation. These nurses were unable to complete the pre-test and were therefore, excluded from the post-test. Of the 42 nurses who completed the pre-test, only 37

completed the post test. This discrepancy is attributed to maternity leave, leaves of absence, as well as vacation.

Conclusion

While the results for CHG bathing rates and educational reinforcement were not optimum, a gain in nursing knowledge related to the reasoning and importance of CHG bathing was noted. This gained knowledge could lead to a wealth of knowledge being presented to the patients and their families. Perhaps over time, this could lead to better documentation by the nursing staff as well as more adherence to CHG bathing by the patients.

The current literature strongly supports the use of CHG bathing as a preventative measure for CLABSIs especially when used in conjunction with other components of the central line care bundles. The clinical site utilizes these bundles to prevent CLABSI within their institution. To make further strides to prevent CLABSIs, perhaps more attention could be placed on teaching nursing staff as well as the patient and their family on the proper bathing technique. The exact role of CHG bathing in medical-surgical patients remains undetermined (Marschall et al., 2014). Therefore, further research is needed specifically targeting pediatric patients in the non-ICU setting.

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Appendix A

Nine question pre-test/post-test

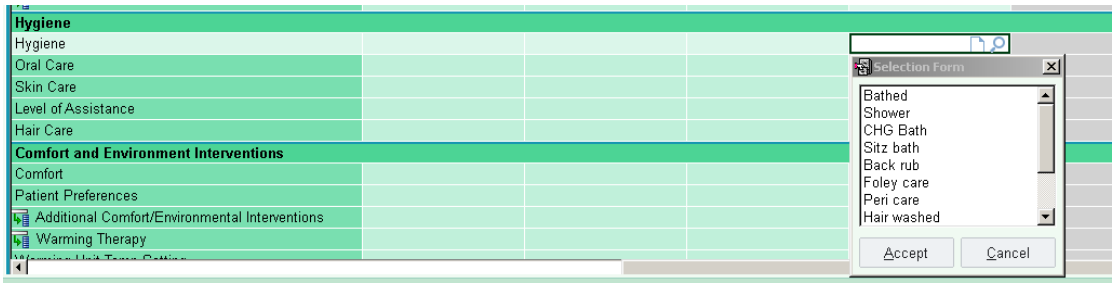
1. According to current policy, how often should a patient with a central line receive a CHG bath?
    a) Twice per day
    b) Every other day
    c) Once per day
    d) Once per week
2. Where do you document a CHG bath at in the EMR?
    a) Assessments→ integumentary assessment
    b) Daily care→ hygiene→ Bath/shower
    c) Daily care→ hygiene→ CHG bath
    d) None of the above.
3. What should you do if a patient or family refuses a CHG bath?
    a) Notify the provider.
    b) Document the refusal.
    c) Document education reinforcement related to CHG bathing.
    d) All of the above.

4. What lotions are considered compatible with CHG? You may choose more than one answer.
    a) Baby lotion
    b) Sween
    c) Eucerin
    d) None of the above
5. When do patients and families need education on CHG bathing?
    a) After line insertion.
    b) Upon admission.
    c) With bath refusal.
    d) All of the above.
6. What do you do if a patient has a reaction to the CHG?
    a) Notify the provider.
    b) Continue giving the bath.
    c) List CHG as an allergy.
    d) Tell the patient or family to not use CHG anymore.
7. On average, how many packets of CHG impregnated clothes are needed to perform an adequate CHG bath?
    a) 3
    b) 5
    c) 2
    d) 4

8. True or False: CLABSIs are arguably the most preventable hospital acquired infection.
9. True or False: A single CLABSI on average, adds 7 days to a patient's hospital stay.

Appendix B

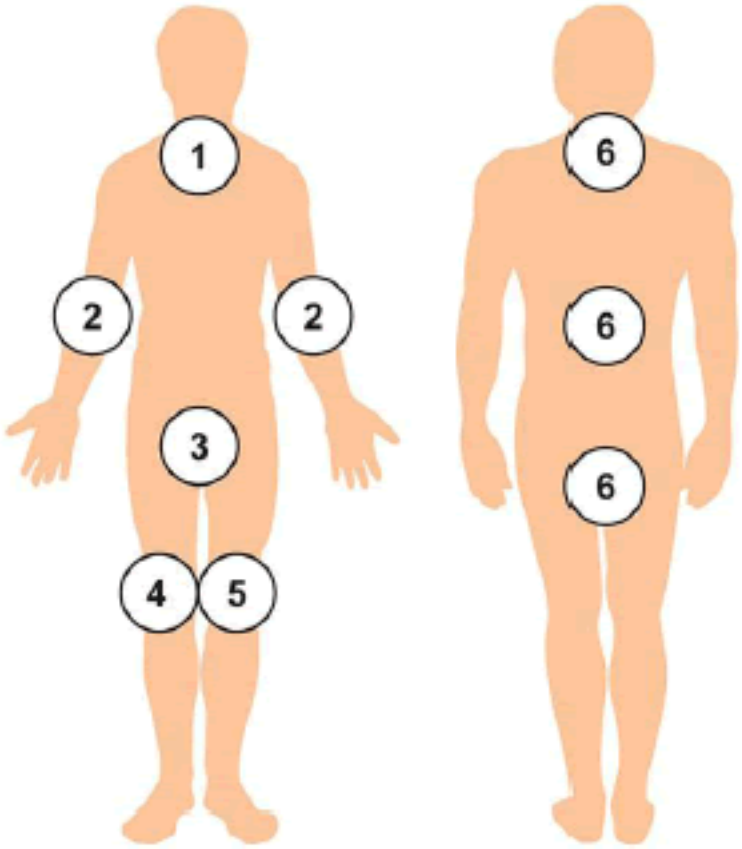
Proper CHG documentation in the EMR



Documentation of a CHG bath implicates that the CHG was performed correctly per bathing instructions provided.

Appendix C

Visual aids to be displayed during and following the educational intervention.



(Agency for Healthcare Research and Quality, 2013)

Before CHG Bathing

- Wash face and head first before starting with CHG.
- Use shampoo cap or directly use shampoo sparingly, avoid contact with rest of the body, as it may deactivate CHG.
- Cleanse face with regular washcloth. Do NOT use 2% CHG cloths near eyes or ears.

CHG replaces routine bathing: Do NOT bathe with soap and water while using CHG

A total of 7 cloths (4 packets) will be required for a CHG bath. Cloths should be warmed before use in designated cloth warmer.

- Use a clean CHG cloth for each area of the body:
    - Cloth 1: Neck, shoulders & chest
    - Cloth 2: Both arms, both hands, web spaces & axilla
    - Cloth 3: Abdomen and then groin/perineum
    - Cloth 4: Right leg, right foot & web spaces

  - Cloth 5: Left leg, left foot, & web spaces
  - Cloth 6: Back of neck, back & then buttocks
  - Cloth 7: Occlusive central line dressing & tubing
- Additional cloths may be needed for incontinent or obese pts.
- DO NOT use CHG wipes above the jawbone, on open wounds, or within six inches of the point of insertion of urinary catheters, drains, G/J tubes, rectal tubes or chest tubes.
- After application to each body site, be sure to clean central line tubing and wipe down drainage bags from Foleys, drains, G-tube/J-tubes, rectal tubes, chest tubes starting six inches away from the insertion site to avoid CHG contact on open skin. (additional cloths will be needed)
- The occlusive central line dressing should be wiped with a clean CHG cloth and tubing should be wiped moving away from the patient.
- DO NOT rinse the patient
- Allow patient to dry naturally
- If using lotion after bathing, you must use a CHG compatible lotion (Eucerin & Sween cream). Otherwise it will minimize the effect of the CHG
- Items Needed:

  CHG wipes
  Eucerin or Sween Cream
- Use additional cloths if needed for incontinence or for obese patients

Incontinence

- Remove urine/stool with usual chux/cloths and water.
- Do NOT use soap.
- Cleanse with CHG and allow to air dry (about a minute).
- Use as many CHG cloths as necessary.
- Apply CHG-compatible barrier product over affected area, as needed.
- During the day: If additional barrier protection is needed during day, it is okay to use another CHG-compatible barrier product.
- If additional bathing is required throughout the day, clean with CHG cloths, then reapply CHG-compatible barrier product, as needed.

CHG Bathing Update

- Sween Cream and Eucerin are the only lotions we should use on any time on our patients with central lines.
- Other lotions deactivate the CHG we are using for bathing.
- Sween Cream is stocked in the pyxis in door 35. Eucerin can be ordered from CSR (we are working on getting it stocked in the pyxis).

- Johnson's Baby Lotion should no longer be used on any patient with a central line!