GOJO

HAND HYGIENE TIMES

Your resource for the latest news in effective infection control program development and best practices.

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Healthcare Associated Infection Prevention Bundles (Part 1)

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The Centers for Disease Control and Prevention (CDC) estimates that 5% of hospitalized patients acquire a healthcare associated infection (HAI) in the US each year. This corresponds to approximately 1.7 million HAIs associated with nearly 99,000 deaths each year. It is estimated that these HAIs result in $26-33 billion in excess healthcare costs.[1]

Recent efforts to incorporate HAI performance measures into hospital Quality and Safety reports reflect the growing focus on HAIs through regulatory and financial reimbursement systems. With a focus on HAIs as preventable, many infection prevention groups have published practice improvement bundles to prevent specific HAIs. The Institute for Healthcare Improvement (IHI) defines a bundle as a "structured way of improving the processes of care and patient outcomes: a small, straightforward set of evidence –based practices-generally three to five- that when performed collectively and reliably, have been proven to improve patient outcomes."[2]

A bundle puts together in a package the evidence based interventions that science proves must be followed to prevent infections.

The bundles can be a collection of strategies for device and procedure associated HAIs, or specific to an HAI causing organism. The bundles contain proven strategies that when performed together will decrease the chances of the patient acquiring an infection while hospitalized.

An example of a bundle is the grouping of strategies or interventions to prevent central line associated bloodstream infections (CLABSI). It is estimated that patients experience 248,678 CLABSI infections each year with an estimated annual cost of $9.1 billion.[3] The Compendium of Practice Recommendations[4] highlight practical recommendations and best practices for prevention and monitoring of CLABSI. These recommendations include:

- **Educate healthcare personnel** involved in the insertion, care and maintenance of Central Venous Catheters (CVCs) about CLABSI prevention
- **Use a checklist at catheter insertion** to ensure adherence to infection prevention practices. The insertion should be observed by a nurse who as appropriate education and empowerment to stop the procedure if breaches in aseptic technique are observed.
- **Perform hand hygiene** before catheter insertion or manipulation
- **Avoid using the femoral vein** for central venous access in adult patients
- **Use an all inclusive catheter cart or kit**
- **Use maximum sterile barrier precautions** during insertion
- **Use a chlorhexidine–based antiseptic** for skin prep in patients older than 2 months of age
- After insertion, **disinfect hubs**, needleless connectors and injection ports before accessing the catheter
- **Remove nonessential catheters**
- For non-tunneled CVCs in adults and adolescents, **change transparent dressings** and perform site care every 5-7 days or as needed
- **Replace administration sets** not used for blood, blood products, or lipids at intervals not longer than 96 hours.
- **Perform surveillance** for CLABSI

Another HAI preventable by using a bundle is Surgical Site Infection (SSI). SSIs occur in 2%-5% of patients undergoing inpatient surgery in the United States. Approximately 500,000 SSIs occur each year resulting in approximately 7-10 additional postoperative days, with attributable costs ranging from $3000 to $29,000 for each SSI.[5]

Basic strategies for prevention and monitoring of SSIs include:

- **Survey** for SSI
- **Administer antimicrobial prophylaxis** before surgery according to evidence based standard and guidelines
- **Do not remove hair at operative site** unless the presence of hair will interfere with the operation; do not use razors but clippers if necessary
- **Control blood glucose level** during the perioperative period
- **Measure and provide feedback** regarding rates of compliance to these strategies to OR staff
- **Educate surgeons**, perioperative staff, patients and families about SSI prevention

The IHI recommends that bundles be kept simple with scientifically robust elements that when taken together create much improved outcomes of reducing HAIs.[6]

1 Centers for Disease Control, Office of the Director (2009). Public Health Grand Rounds. Retrieved from http://www.cdc.gov/about/grand-rounds/archives/2009/download/GR-101509.pdf

2,6 Institute for Healthcare Improvement Critical Care Improvement Stories Retrieved from http://www.ihi.org/IHI/Topics/CriticalCare/IntensiveCare/ImprovementStories/WhatIsaBundle

3 Klevens RM, Edwards JR Richards CL, Horan T, Gaynes R, Rollock D, Cardo D, Estimating healthcare-associated infections in U.S. hospitals, 2002. Public Health reviews (in press) Stone PW, Braccia D, Larson E. Systematic review of economic analysis of health care-associated infections. Am J Infect Control 2005;33:501-9
Roberts RR, Scott RD, Cordell R, Solomon SL, Steele L, Kampe LM, Trick WE, Weinstein RA. The use of economic modeling to determine the hospital costs associated with nosocomial infections. Clin Infect Dis 2003;1424-32.

4,5 Yokoe, D.S. et.al. (2008). A compendium of strategies to prevent healthcare-associated infections in acute care hospitals. Infection Control and Hospital Epidemiology 29:S12-S21.

THAT'S a FACT!

According to the National Quality Forum, preventable errors cost theUnited States an estimated 98,000 lives and $17 billion to $29 billionper year in health care expenses, lost worker productivity, lost income, and disability. While health care spending grows more than 7 percent peryear, it is estimated that patient safety is improving by only 1 percent.[7]

7. http://ohsonline.com/articles/2010/04/12/health-care-should-be-safer.asp

Product Feature

HAND HYGIENE SOLUTIONS FROM GOJO

Fundamental to reducing the spread of germs that may cause illness is good hand hygiene. GOJO offers a variety of hand hygiene solutions that are focused on helping hospital facilities improve hand hygiene compliance.

Introducing New Green Certified Products from GOJO

GOJO offers a complete line of green certified products that are safe, effective and easy on the environment. Our green product portfolio includes **PURELL® brand foam and gel hand sanitizers** and a **PROVON® brand foaming hand soap.**

PURELL® Green Certified Instant Hand Sanitizer is the first green hand sanitizer* to meet Ecologo™ CCD-170, the standard for environmental leadership and performance. You can expect the same proven performance from PURELL Green Certified Instant Hand Sanitizer as you get from the original PURELL. The difference is that the green formula uses 100% naturally renewable ethanol. Purell Green Certified Instant Hand Sanitizer:

- Helps condition skin with a natural moisturizer
- Offers dispenser refills that are made with lightweight recyclable material
- Provides formulas that are readily biodegradable[1]
- Is fragrance and dye free
- Kills 99.99% of most common germs that may cause illness
- Is mild to the skin

PROVON® Green Certified Foam Hand Cleaner is a biodegradable foam soap formula that is certified by Green Seal® and Ecologo™ to meet their joint standard GS-41/CCd-104 for hand cleaners and hand soaps. It is:

- A biodegradable formula proven effective, yet mild enough for frequent handwashing
- Produced in part with renewably sourced ingredients
- Fragrance and dye free

Description	Order Number	Case Pack	Use with
TFX™ DISPENSER REFILLS			
PURELL Green Certified Instant Hand Sanitizer Foam 1200 ml TFX Refill	5391-02	2	2720-12, 2780-12, 2790-12-EEU00
PURELL Instant Hand Sanitizer Skin Nourishing Foam 1200 ml TFX Refill	5398-02	2	2720-12, 2780-12, 2790-12-EEU00
PURELL Instant Hand Sanitizer Skin Nourishing Foam 1000 ml TFX Refill	5399-02	2	2720-12, 2780-12, 2790-12-EEU00
PURELL Green Certified Instant Hand Sanitizer 1200 ml TFX Refill	5491-04	4	2720-12, 2780-12, 2790-12-EEU00
FMX™ DISPENSER REFILLS			
	5191-03	3	5120-06
PURELL Instant Hand Sanitizer Skin Nourishing Foam 1200 ml FMX Refill	5198-03	3	5120-06
PURELL Instant Hand Sanitizer Skin Nourishing Foam 1000 ml FMX Refill	5199-03	3	5120-06
PURELL Green Certified Instant Hand Sanitizer 1200 ml FMX Refill	5091-03	3	5120-06
BOTTLES			
PURELL Green Certified Instant Hand Sanitizer Foam 12 fl oz Bottle	3691-12	12	-
PURELL Green Certified Instant Skin Nourishing Foam 535 ml Bottle	5791-04	4	5700-06
PURELL Instant Hand Sanitizer Skin Nourishing Foam 535 ml Bottle	5798-04	4	5700-06
PURELL Green Certified Instant Hand Sanitizer 8 fl oz Bottle	9691-12	12	-

Other Instant Hand Sanitizer Options from GOJO

PURELL® Instant Hand Sanitizer Skin Nourishing Foam with DERMAGLYCERIN SYSTEM™
Clinically proven to improve skin condition in 14 days[2,3]

- A synergistic moisturizing blend of seven moisturizers to nourish skin
- Green Certified
- HCWs noticed improvement in skin condition[2]
- Perceived by HCWs as "soothing"[2]
- Contains 70% ethyl alcohol
- Helps to reduce contact dermatitis
- CHG, Latex, Vinyl and Nitrile compatible

PURELL® Instant Hand Sanitizer Foam
The *power of PURELL in a non-aerosol foam*

- Thick foam clings to your hand
- Patent-pending formula, free of fluorinated chemicals
- Contains 62% ethyl alcohol
- Contains moisturizers to help keep skin healthy
- Compatible with latex, nitrile, and vinyl gloves and CHG

PURELL® Instant Hand Sanitizer with DERMAGLYCERIN SYSTEM™
Hand sanitizer efficacy with hand lotion performance

- Contains no unnecessary colorants
- Helps moisturize and improve skin condition
- Helps prevent dry, damaged skin from frequent handwashing or harsh winter weather
- CHG, Latex, Vinyl, and Nitrile compatible

PURELL® Instant Hand Sanitizer Advance Formula (VF481™)
Breakthrough formula when hand hygiene is critical

- Most effective hand sanitizer for critical hand hygiene situations.
- Proven broad spectrum antimicrobial efficacy
- Improves skin feel; leaves hands feeling soft and refreshed

Description	Order Number	Case Pack
PURELL® INSTANT HAND SANITIZER FOAM		
PURELL TFX™ 1200 mL Refill for Touch Free Dispenser	5392-02	2
PURELL FMX ™ 1200 mL Refill for Manual Dispenser	5192-03	3
Counter Top Pump Bottle 535 ml Bottle	5792-04	4
Pump Bottle 45 ml Bottle	5692-24	24
PURELL® Instant Hand Sanitizer with DERMAGLYCERIN SYSTEM™		
PURELL TFX™ Refill 1200 mL	5451-02	2
PURELL NXT ® Refill 1000 mL	2151-08	8
Pump Bottle 12 fl oz Bottle	9646-12	12
Personal Pump Bottle 2 fl oz Bottle	9648-24	24
PURELL® Instant Hand Sanitizer Advance Formula (VF481™)		
PURELL Advanced Formula (VF481™) 1200 mL TFX™ Refill	5496-04	4
PURELL Advanced Formula (VF481™) 1200 mL FMX™ Refill	6196-03	3
PURELL Advanced Formula (VF481™) 2 fl oz Bottle	9689-24	24

* First to meet an independent, 3rd party, type-1 Ecolab environmental standard for hand antiseptics
1. Formulas are readily biodegradable per OECD 301
2. Clinical field evaluation #1. (February 11, 2008 to March 21, 2008), GOJO Industries, Inc.Study ID 2008-01-F10176
3. Clinical evaluation #2, (October 9, 2007 to October 11, 2007) RCTS Study ID 2301

A Look Ahead

next month's issue

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