The Surgical Site Infection Prevention Collaborative (SSIPC) has been formed under the auspices of the Perioperative Enterprise and Perioperative Executive Committees to facilitate ongoing efforts to reduce surgical site infections (SSI). The charges of this committee are to serve as a data resource and data bank for specific ongoing initiatives by diverse groups involved in perioperative infection reduction and to facilitate communication, information flow, and incorporation of successful processes across the perioperative platform.

Beginning October 2008 the Center for Medicare & Medicaid Services (CMS) has been mandated by a recent revision (CMS-1533-P) to the Inpatient Prospective Payment System (IPPS) to no longer reimburse hospitals for charges related to several nosocomial infections including catheter-associated urinary tract infections, vascular catheter-associated infections and certain surgical site infections (SSI), such as mediastinitis following coronary artery bypass grafting. This new policy has helped to refocus efforts on evaluating processes related to the prevention of SSI. Approximately 15% of elective surgical patients and 30% of patients undergoing contaminated or dirty cases are estimated to develop SSI(1). Several pre- and intra-operative measures may reduce SSI. Among these measures is the performance of the surgical prep.

Several different antiseptics agents have been utilized commonly for preoperative skin preparation and surgical scrubs. Table 1 lists characteristics of these agents (2).

### Table 1

<table>
<thead>
<tr>
<th>Agent</th>
<th>Mechanism of Action</th>
<th>Gram-Positive Bacteria</th>
<th>Gram-Negative Bacteria</th>
<th>Mtb</th>
<th>Fungi</th>
<th>Virus</th>
<th>Rapidity of Action</th>
<th>Residual Activity</th>
<th>Toxicity</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>Denature proteins</td>
<td>E</td>
<td>E</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>Most rapid</td>
<td>None</td>
<td>Drying, volatile, ototoxicity</td>
<td>SP, SS</td>
</tr>
<tr>
<td>Chlorhexidine</td>
<td>Disrupt cell membrane</td>
<td>E</td>
<td>G</td>
<td>P</td>
<td>F</td>
<td>G</td>
<td>Intermediate</td>
<td>E</td>
<td>Ototoxicity, keratitis</td>
<td>SP, SS</td>
</tr>
<tr>
<td>Iodine/Iodophors</td>
<td>Oxidation/substitution by free iodine</td>
<td>E</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>Intermediate</td>
<td>Minimal</td>
<td>Absorption from skin with possible toxicity, skin irritation</td>
<td>SP, SS</td>
</tr>
<tr>
<td>PCMX</td>
<td>Disrupt cell wall</td>
<td>G</td>
<td>F*</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>Intermediate</td>
<td>G</td>
<td>More data needed</td>
<td>SS</td>
</tr>
<tr>
<td>Triclosan</td>
<td>Disrupt cell wall</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>P</td>
<td>U</td>
<td>Intermediate</td>
<td>E</td>
<td>More data needed</td>
<td>SS</td>
</tr>
</tbody>
</table>

Abbreviations: E, excellent; F, fair; G, good; Mtb, Mycobacterium tuberculosis; F, poor; PCMX, para-chloro-m-xylene; SP, skin preparation; SS, surgical scrubs; U, unknown.

Data from Larson E.199

* Fair, except for Pseudomonas spp.; activity improved by addition of chelating agent such as EDTA.

(Continued on Page 3)
Perioperative Services 2007 Service Awards
Congratulations!

Bernice Pope —— 45 Years
OR Administration

“Bernice is part of the fabric of Perioperative Services. Her presence over the years has set a standard for customer service and support for patients and surgeons. I recently had the opportunity to review Bernice’s evaluations over her tenure. She is unfailingly described as committed, outstanding, and caring with a calm demeanor that keeps her unrattled in the face of much pressure. We are very fortunate to have her on our team. Way to go Bernice!”

-Nance Feistritzer, RN, MSN
Asst. Hospital Dir. Perioperative Svcs.

Prince Peters—40 Years
Central Sterile Processing

“Prince Peters has given Vanderbilt forty great years of service, and we are thankful to have had him in Central Sterile Processing for the last two years. His excellent work ethic and his devotion to customer service makes him a superb role model for our staff. Prince consistently gets compliments from nurse managers and other employees for his great personality and commitment to service. It has been an honor and a pleasure to work with Prince in my time at Vanderbilt.”

- Kevin Allen
Director Central Sterile Processing

30 Years

Debbie Bourgoin PACU
Janis Bryant TVC PACU
Tom Connor PACU
Debra Gleaves PACU
Dinah Hazlett PACU
Betty Sue Minton Main OR
Margaret Siciliano PACU

20 Years

Karon Harris MCE PACU
Cheryl Sinclair N/E/W
Latasha Todd Neurosurgery

15 Years

Dianne Baugh TVC OR
Debbie Evans MCE PACU
Jackie Fowler FA’s
Rhonda Finerty FA’s
Gloria Gatewood FEL OR
Franklin Hatfield Metro
Tanya Hereford MCE OR
Barbara Jones MCE PACU
Jeffrey McCauley FA’s
Kelly McDaniel MCE OR
Tonya Neely PACU
Nimesh Patel OR Informatics
Deborah Sanders N/E/W
Bonnie Wright MCE OR

10 Years

Julia Champman MCE OR
Cheryl Cotton N/E/W
Frank Feldt TVC PACU
Rhoda Griffiths OR Admin
Donna Hamilton VPEC
Janie Hardaway Main OR
Oscar Hilton OR Admin
David Huey FEL OR
Gil Humbert Neurosurgery
Charles Jones PACU
Karim Mayes FA’s
Hollie Parker Ortho
Pamela Rayburn VPEC
Donna Tibbs PACU
Tracy Tinsley N/E/W
Mike Webb Support
Leanna White PACU
Timothy Willis MCE Obs
Josh Yarbrough OR Informatics

5 Years

Cheryl Adams MCE OR
Rickey Boyte OPOM
Goldie Essary Neurosurgery
Kascey Malone OPOM
Julia Rill Trauma/Burn
Sherri Sinks Neurosurgery
Beth Spallinger Trauma/Burn
Bobby Steen PACU
Kim Grant PACU
Christopher Snider Ortho
Kevin Douglas Informatics
Katie Jackson Metro
Kathleen Sloan FEL OR
To reduce the variability of prep solutions within the OR and to facilitate educational processes regarding appropriate techniques for preoperative prep, the SSIPC recommends a transition to chlorhexidine based preps.

Chlorhexidine Preps - Are They “Best Practice” for OR Use? continued from Page 1

A high degree of variability exists across VUMC operating rooms regarding the use of surgical prep solutions reflecting a lack of consensus regarding “best practice” in the prep chosen. This variability may contribute to variability in the education for and performance of prep application. The numerous products currently available for use within the VUMC operating rooms are shown in Table 2. No studies have adequately assessed the comparative effects of preoperative skin antiseptics on SSI risk in well-controlled, operation specific studies; and thus, the CDC does not recommend one prep solution over another(2).

One randomized study has compared povidone-iodine 10% in alcohol versus chlorhexidine and demonstrated a significant reduction in clean case SSI in the chlorhexidine group (3). The recommendations provided are based on data from studies regarding the reduction of skin microbial flora in various body regions, in vitro activity and killing properties, well designed and powered studies of skin preparation for central venous catheter placement, and toxicity profiles. These data have been recently reviewed in the orthopedic literature(4-6). The extrapolation of these data supports using chlorhexidine based solutions over povidone-iodine based preps. Compared with povidone-iodine, chlorhexidine provides more prolonged reduction of skin colonization, is not inactivated by blood or proteins, and produces less skin irritation. Some data suggests that methicillin resistant *Staphylococcus aureus* has increased resistance to chlorhexidine and that alcohol in combination may reduce skin colony counts of this organism(7). To reduce the variability of prep solutions within the OR and to facilitate educational processes regarding appropriate techniques for preoperative prep, the SSIPC recommends a transition to chlorhexidine based preps.

### Table 2. Preoperative Skin Preparation Products Available In the VUMC - OR

<table>
<thead>
<tr>
<th>Betadine (povidone-iodine 10%) paint</th>
<th>DuraPrep (0.7% iodine povacrylex/74% isopropyl alcohol)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Povidone-Iodine USP 7.5% skin scrub</td>
<td>Hibiclens (4% chlorhexidine gluconate)</td>
</tr>
<tr>
<td>Betadine prep kit (contains paint and scrub)</td>
<td>chlorhexidine gluconate 2% preoperative cloth</td>
</tr>
<tr>
<td>Phisohex (hexachlorophene 3%) skin cleanser</td>
<td>70% Isopropyl alcohol</td>
</tr>
<tr>
<td>Povidone-iodine 10% prep gel</td>
<td><strong>ChloraPrep (2% chlorhexidine gluconate/70% isopropyl alcohol) currently being newly acquired</strong></td>
</tr>
</tbody>
</table>

Reference List

NEW EMPLOYEES IN PERIOPERATIVE SERVICES

Angela Bins - Decontam Tech, VUH
Colleen Cassidy - Director Main OR
Julie Cottrell - LPN/ST, MOR Trauma
Fonda Johnson - CST II, MOR Trauma
LaTasha Penn - Instrument Specialist, VUH
Sandy Pike - STII, MOR Trauma
Diane Rankin - RN2, MOR Trauma
Beatrice Sarpong - CTI, MOR Support
Rebecca Todd - RN2, MOR Trauma
Sha’Mere Walker - Instrument Specialist, Metro Ctr.
Berenice Yebuah - CTI, MOR Support

Welcome to The Periop Team!!

Allen Stirrups Donated to Mock OR Lab

Ms. Sharon Pomeroy, RN, BS, MHA, Perioperative Resourcing Officer, was asked by Ms. Stephanie Randa, Administrative Director of the Operating Room, VUMC, to contact Allen Medical Systems to see if it would be possible for them to donate a pair of stirrups to our Operating Room RN Training Lab (as the ones we were using were roughly 20 years old) Ms. Pomeroy took this request to Ms. Holly Fondots at Allen Medical explaining to her the tremendous benefits of our OR Nurse training program and how important the vendors who support this training facility are to us. New OR nurse interns use these stirrups to learn to position and drape patients correctly. Ms. Fondots responded very positively and donated on behalf of Allen Medical a set of P.A.L. Pro stirrups—their top of the line stirrups!

A special “Thank You” to Allen Medical for new stirrups which are being used to train new OR nurse interns.

“Credo Heroes”

In this section of the modus operandi we would like to honor those faculty and staff members who exemplify the Vanderbilt Medical Center Credo. These employees have “gone the extra mile” in personifying the true ideal of our credo.

WELL DONE!

From TVC
Commitment to colleagues
Sissy Anderson, ST
Sharon Farmer, LPN
Ann Lewis, ST

From VPEC
Commitment to making those we serve our highest priority:
Julie Hamm, NP
Ruth Johnson, LPN
Julie Sutton, NP
Cindy Honaker Waite, NP

Commitment to colleagues
Kathy Amstutz, NP
Stephanie Bryan, NP
Lolita Fite, PSR

From MCE HR/PACU
Commitment to making those we serve our highest priority:
Bob Adams - RN2
D’Mitri Blivens - Environmental Svcs.
Tammy Benoit - CTII
Ann Bowers - RN3
Melissa Christy - RN2
Bob Francis - CTII
Karen Henson - RN2
Paul Hightower - CTII
Rosalie Lewis - RN3
Connie Meredith - RN2
Donna Nelson - RN3
Leah Parrish - RN2
Pam Phillips - RN2
Pamela Pitahin - RN2
Janet Stephens - RN2
Susie Stephens - Charge Nurse
Barbara Vinson - RN3
Mary Kay West - RN3

From MOR N/E/W
Service
Berenice Yebuah, CTI
Cassandra Baber, CTI
Beatrice Sarpong, CTI
Melissa Majors, CTI
Ms. Jama Maenza extends a big “Thank You” to these ladies for doing a great job keeping the OR rooms and OR tables clean.

From MOR HR/PACU
Commitment to colleagues
Cathy Lee, RN2—for updating our Orientation Manual

Service
All the staff that have picked up extra shifts on the weekend!
All the techs that are picking up extra shifts in the evening!