



CSICU Succeeds With Liver and Heart Transplants in the Same Patient

by Catherine Mangan, Associate Partner and Janine Zoch, BSN, RN, Full Partner, both from the Cardiac Surgery ICU

The nursing staff in the Cardiac Surgical Intensive Care Unit (CSICU), located on the 6th floor in the Weinberg building, have found themselves quickly mastering and managing state-of-the-art technologies including a variety of ventricular assist devices like the Impella LVAD and

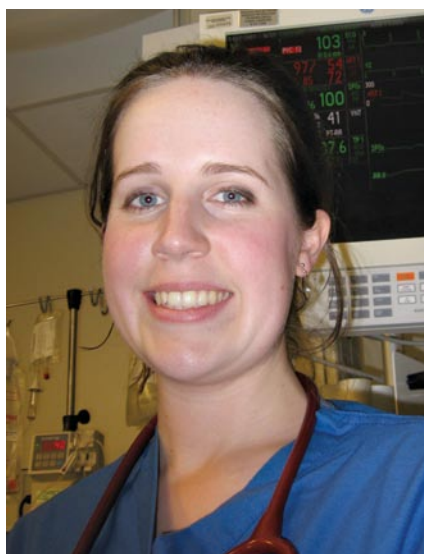
the Syncardia Total Artificial Heart. This past October, the CSICU nursing staff tackled a unique case and another first for the highly innovative unit – a 34-year-old patient who received both a new heart and a new liver during one long transplant surgery.



Janine Zoch, BSN, RN, Full Partner in the CSICU who helped care for a recent patient who received a new liver and a new heart in one long transplant surgery.

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Catherine Mangan, MS, RN, Associate Partner in the CSICU who helped care for a recent patient who received a new liver and a new heart in one long transplant surgery.

After a lengthy procedure, surgeons **Sina Moainie, Benjamin Philosophe** and **Luis Campos de la Borbolla** brought a 34-year-old patient to the CSICU with a blood glucose too high to be read by a glucometer and 1.5 liters of blood in his chest tube. “As open heart nurses, at first we were alarmed with the amount of bleeding,” said Senior Partner **Jennifer Matvey**, “until we realized that the surgery lasted all day and the drainage had occurred when the patient got his liver!”

From admission to discharge, CSICU nurses got a lesson in LIVER 101. Nursing staff from the Surgical ICU, where liver transplants are typically admitted, provided CSICU nurses with a comprehensive manual on liver transplantation, required lab work, expected findings, and recent research on the procedure. “Management was truly a team effort,”

see **CSICU** on page 2

CSICU from page 1

said **Carol Wade**, CRNP, Nurse Practitioner. “We worked with nephrology, cardiology, infectious disease, and pharmacy to correctly dose immunosuppressive drugs and decide the best plan of care for the patient.”

The patient suffered from restrictive cardiomyopathy which had led to his congestive liver failure. Post-operative nursing care involved tackling cardiac, hepatic, and other sensitive issues exacerbated by the length and nature of the surgery. Hemodynamic stabilization and maintenance of acid/base balance became essential. Nurses fought to aggressively wean the patient from the ventilator, a process which took longer than it does for most heart patients. Since kidney function took a hit during the surgery, nurses aggressively managed the continuous venous venous dialysis (CVVD) machine to rid the patient of pulmonary edema and keep his electrolytes in check until his kidneys bounced back. Once they were able to remove excess fluid from this patient, he was able to be removed from the ventilator and extubated.

It took most of a day to adequately control hyperglycemia caused by glucose release from the grafted liver as well as from steroid immunosuppression. “We had to give tons of boluses,” said Senior Partner **Anne Hall**, who helped get the sugar under control to reduce risk of infection. Labs, including the patient’s International Normalized Ratio (INR), a measure of clotting time, remained extremely high for several days. In another patient population, fresh frozen plasma would be given to correct this value. However, since the patient was not

actively bleeding, he was given FFP only when some of his invasive lines were removed. During line removal, the nurses held pressure for an extended period of time because his line insertion sites took longer to clot than similar sites of typical ICU patients.

The patient’s platelet count was low as expected the first week after liver transplant usually shows low platelets. Nurses frequently checked liver enzymes and coagulation factors on a regular basis to make sure the numbers (off the charts!) were trending in the right direction. Nurses weaned off dobutamine so that unnecessary central lines could be removed early in the post-op stay to reduce the risk of infection in the immunocompromised patient. They also checked a plethora of “non-standard labs” including serum osmolality (which can be caused by hyperglycemia), bicarbonate levels, liver function tests, and CD3 counts (used to dose immunosuppressive medications like thymoglobulin).

The immunosuppression regimen administered by nurses following a heart transplant is complicated, but adding the liver transplant made this regimen even more of a unique challenge. A week after getting a new liver and heart the patient was successfully transferred to the CS Telemetry step-down unit.

The CSICU is proud of the work we do. It is truly a team effort to care for this kind of patient. We look forward to facing new challenges with our future patients making our unit a great place to work!

Nursing Leadership Changes

After many years of dedicated service as the PCS Manager of the CSICU and Telemetry Unit, **Regina Hogan** is moving on to a new role in the Medical Center. Regina who will become the manager of Employee Health Services.

David Hunt, MSN, RN, has accepted the manager position for the CSICU and Tele Unit, effective January 21, 2008. Some of staff had the pleasure of meeting Mr. Hunt when he interviewed for the Director of Nursing for Cardiac Care position. The Medical Center was fortunate to have two excellent candidates surface in that job search - **Angie Amig**, current Nurse Manager of CCU and PCU, and David Hunt. With Angie Amig placed in the role of Director for Cardiac Care, both nursing and surgery leadership thought David would be an excellent fit with the CSICU and Tele unit. The feedback received from the nursing staff about David was outstanding, and he was receptive to our offer to be the manager.

David Hunt has worked in the Johns Hopkins Hospital CSICU for thirteen years in many roles including Nurse, Nurse Educator, Safety Officer, and Assistant Manager. He brings extensive experience and expertise in safety, clinical care and education, teamwork and communication, and performance improvement. Welcome David to UMMC and congratulate Angie.

Choose Holiday Unit Decorations Wisely

Baltimore City fire code, National Fire Protection Association, and the Joint Commission have strict requirements for use of decorating materials that can affect occupant and building fire safety. Medical Center staff is expected to comply with these requirements by following the guidelines set forth in the **Holiday Decorations** guidelines.

Anyone who wants to decorate their workspace, common areas and/or patient rooms should read and adhere to these guidelines. If you have any questions or are in doubt, ask before hanging. The three page policy is available on the Intranet, but a few of the important elements from it are summarized here:

General Guidelines:

1. Decorations must be appropriate to their setting. For example, do not use small objects that may be choking hazards in pediatric areas or areas where children are likely to encounter them.
2. Decorative materials must be made of substantially non-combustible materials (e.g., foil) or be fire retardant (must have documentation such as UL label).
3. Small amounts of paper or non-rated plastics are permissible.
4. Use of live (or dead) plants, wreaths, or other vegetation is discouraged.
5. Decorative gift wrapping **paper** is not acceptable, but metal foil is acceptable.
6. Decorations must not obstruct exit corridors or free travel in public areas.
7. Decorations are not permitted on fire doors, in stairways or in elevators.
8. No open fires (candles) are permitted in the Medical Center unless specifically **reviewed** and approved by Operations & Maintenance or Safety & Environmental Health.
9. For safety reasons, only artificial Christmas trees allowed in the Medical Center.
10. Trees must be placed out of the travel pathway & cannot obstruct exit doors, or corridors.
11. Trees must be non-combustible construction (or labeled as fire retardant).
12. Keep trees away from heat sources.
13. Trees taller than 6' shall be secured to prevent toppling. Trees cannot extend closer than 24" to the ceiling.
14. Actual gifts under trees are permissible. Gift wrapped props must be wrapped in non-combustible wrapping materials (or they will be removed).

Lighting – follow manufacturer recommendations.

1. Only UL (Underwriters Laboratories) approved holiday lights may be used.
2. If multiple outlets are needed, use surge protectors when possible. Do not use multi-plug adapters.
3. If extension cords are required, use hospital grade cords – contact Operations and Maintenance for hospital grade extension cords.
4. No more than 3 sets of lights per extension cord.
5. Unplug lights when not in use.
6. Do not hang decorations from any fire protection equipment (sprinklers, fire alarm devices, etc.).
7. Any non-compliant decorations will be taken down and disposed.

If you questions about this policy contact, **Jim Chang**, CIH, Director, Safety and Environmental Health at 410-328-6001, and pager # 1336.

Flu Vaccine Product Alert

The Pharmacy is currently distributing two brands of Influenza Virus Vaccine.

- Fluarix Influenza Virus Vaccine made by GlaxoSmithKline, and
- Fluzone Influenza Virus Vaccine made by Sanofi-Pasteur

PLEASE NOTE: The tip cap and the rubber plunger of the **FLUARIX** Vaccine syringes contain dry natural latex rubber that may cause allergic reactions in latex sensitive individuals. As a result, use of Fluarix is not recommended in latex allergic individuals. In such cases it is recommended that the pharmacy draw up the dose of the drug and send to the nursing unit.

Latex-allergic healthcare professionals administering Fluarix are cautioned to wear gloves as they do run the risk of having an allergic reaction if they come in contact with the latex rubber on the syringe.

Please contact Alabi, Esther with questions at calabi@umm.edu.

OR Fellowship Nurses Enjoy New Simulation Training

by Lena Stevens, RN, MSN, Clinical Education Coordinator, Perioperative Service

The Operating Room staff has added a new workshop on laparoscopic surgery with hands-on training to their Operating Room Nursing Fellowship. This workshop, designed for the new OR Nurses, consists of:

- Lecture on laparoscopic surgery, taught by Dr. Charlie Godinez.
- Demonstration of various endoscopic instruments, led by John Brown from ETHICON's Endosurgical division, provided opportunities for nurses learn about the latest technology in endoscopic instrumentation and have some hands-on instruction on handling these instruments; and
- The work-shop finished in "OR A" where nurses used advanced life-like simulators to learn and practice the techniques of laparoscopic surgery. Many staff found attempting to tie a simple knot proved to be quite a challenge when using instruments and watching their movements on a video screen.



Michael Berger, RN; Elizabeth Johnson, RN, and Angela Cartwright, RN, using their skills on the simulators.

Rooms. It was designed for training residents, medical students, military personnel, nurses, and allied health care professionals. According to **Sheree Carter Chase**, MSN, MBA, RN, MASTRI Center Training Specialist, "The beauty of simulation is that learners can make errors then correct them without jeopardizing patient safety." **Lena Stevens**, RN, MSN, Clinical Education Coordinator in Perioperative Services, said, "The MASTRI center provided our staff with the opportunity for hands-on training and practice with simulated and virtual patients. The staff really enjoyed the work-shop and I believe this type of training will have a great impact on improving staff education and patient safety."



John Brown, Ethicon Endo-surgical representative, showing the latest in endo-mechanical surgical instrumentation.

The use of simulation training in this workshop was made with the technology-based training resources in our Maryland Advanced Simulation, Training, and Research and Innovation (MASTRI) Center, located on the 7th floor of the South Hospital.

The MASTRI Center, which opened in 2006, has four simulation rooms, a conference room, and offices that were converted from an area previously occupied by the Operating

After Hours Supply Delivery Improves

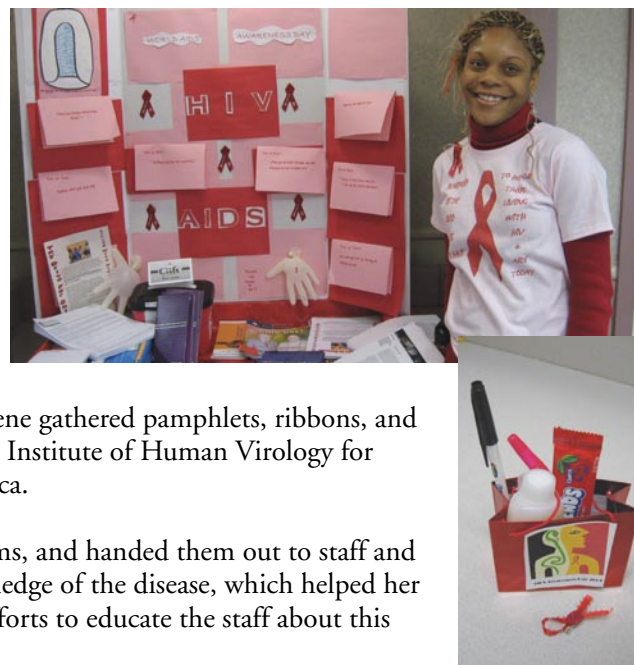
Materials management and SOSC/Customer Connect have partners to provide more responsive after hours communication and delivery to Patient Care Services areas. This new improvement became effective December 3 and now you need place one call to SOCC at 8-5174 from 6:30 pm to 6:30 am for all supply related requests: medical and surgical supplies, linen, water, and other supplies.

PCTs Develop World Aids Awareness Day Projects

Latoria Harris, CNA, PCT on 13 East and West and **Shirlene Martin**, CNA, PCT, on 3D, developed projects for their co-workers and unit visitors in honor of World Aids Awareness Day on December 1st.

Shirlene developed a poster board with information describing the disease, as well as questions that helped the viewer dispel myths, and gain a better understanding of what it is like to live with HIV/AIDS. Shirlene gathered pamphlets, ribbons, and other items to give away. And, she collected over \$150.00 to donate to the Institute of Human Virology for “Christmas in Rwanda,” a charity to help children with HIV/AIDS in Africa.

Latoria constructed small paper gift bags filled with HIV/AIDS related items, and handed them out to staff and visitors. She also collected information from the staff related to their knowledge of the disease, which helped her to develop her ideas for her education project. She plans to continue her efforts to educate the staff about this disease.



New Programs Support Nurses At All Stages of Their Career Development

The Medical Center has added new programs to support nursing professional development. These programs, both new and existing, support nurses at all stages of their career development – from student to new graduates to experienced practitioners. The table on the following two pages describes all of these programs in greater detail.

Students

Bridging the gap between school and work is a challenge for most nursing students, and the Medical Center will support this transition with two new programs. Both our new **student nurse program** and a new **student residency program** will be offered to nursing students. These programs allow the student to hone in their organizational skills while experiencing bedside nursing firsthand.

New Graduate Nurses

To support new graduate nurses being successful in their first job and feel welcomed, they must be supported as they enter the field of nursing. UMMC is committed to meeting the needs of the novice nurses. January 2008 marks the inception of our **New Graduate Nurse Residency** that will focus on providing ongoing opportunities for professional growth through personalized, comprehensive, and high quality experiences. Concurrently, we will continue to offer the Acute

Care Nursing, Critical Care Nursing, and Periop Nursing Fellowships that support the new graduate nurse or any nurse with less than 15 months of nursing experience.

Experienced Staff

Our experienced nursing staff is important to us. Beginning in January 2007, the **Professional Advancement Residency**, which will be offered new graduate nurses, will also be offered to all **incumbent nursing staff** beginning in July 2008. The program will provide continued support and mentorship as the nurse meets their career objectives.

UMMC tuition reimbursement has also been increased to UMMS staff taking courses at the University of Maryland School of Nursing (UMSON). Students in the UMSON’s BSN program can be reimbursed for up to \$6,000 per year, and staff taking graduate courses at UMSON can be reimbursed for up to \$10,000 a year, and it can all be **prepaid!** Also, the continuing education benefit (for non-academic programs) which reimburses up to \$500 a year is available to all nursing staff. This money can be used for conferences, workshops and certification review materials.

Check out the table on the following two pages to get more details on these new programs.

New and Existing Programs Available to Nursing

	<i>Student Nurse Programs</i>			<i>New Graduate</i>
	Student Residency (NEW)	Student Nurse Program	Clinical Scholars Program	New Graduate Nurse Residency (NEW)
Description of Program	Foster the clinical and professional growth of the student nurse. Objective: bridge the gap for student nurse from senior year of BS into their first year as RN. Focus: clinical competence, communication growth between student nurse and health care team, formation of realistic expectations of self and clinical staff, provide role clarity and assist with the assimilation of student to a RN.	Students in a nursing program with a CNA certificate. The student works in the CNA or PCT role in their hired unit. Must be in good academic standing with their nursing program to be eligible.	Student performs their senior practicum in their unit of hire. Scholarship in the amount of \$2,500 (12 month commitment) or \$5,000 (18 month commitment) awarded to student. Interviews with HR and unit manager performed prior to the semester start. Provides a smooth transition from the classroom to the workplace.	Mentor the new graduate nurse in their transition to a competent, professional nurse. Outcomes: Transition quickly into the Senior Clinical Nurse role (<2 years), become certified, accepted as a grad student at UMSON, perform a research project, conduct a poster presentation and produce and submit a paper for publication.
Length of Program	One summer and remainder of schooling	Until licensed as RN	One semester	24 months
When is the Program	Summer 2008, continues thru out academic year with 1-12 hour shift a pay period	Year Round. Based on unit-schedule	Fall, Spring, Summer Semesters	Year Round
Who is Eligible	BS students (UMSON preferred). Must have CNA and taken first med/surg clinical (post 2nd semester)	All nursing students with a CNA certification.	Seniors (BSN, CNL) completing their Practicum from UMSON and VJC. Must have 3.0 GPA.	BSN or CNL graduates (UMSON preferred) GPA of 3.25 preferred
Deadline for Application	March 17, 2008. Apply thru HR site. Applications screened by program coordinator.	None	Middle of semester prior to last (ex. Nov 16 for Sp 08) Apply thru coordinator and HR.	Deadline is prior to start of employment. Scholar application screened by coordinator. Apply thru HR.
Role of Unit Staff Nurse	Need a preceptor (preferred BS) Commitment of one year.	None. Student works as a CNA.	Preceptor to student per school guidelines (typically request BS). Semester long commitment.	Preceptor of a new graduate nurse.
Next Step of the Program:	If UMSON or VJC student, then the Clinical Scholars program and the New Grad Residency or Fellowship upon hire.	If UMSON or VJC student, then the Clinical Scholars program and the New Grad Residency or Fellowship upon hire	New Graduate Residency or Fellowship Program	Master's Degree Cohort Group or other Graduate Level Education

Legend: CNL - Clinical Nurse Leader; FT-Full-time; GPA - Grade Point Average; PT -Part-time ; UMSON - University of Maryland School of

ing Students and Current Staff Nurses at UMMC

ate Programs	Current Staff Nurse Programs			
Acute, Critical Care and Periop Fellowship	Professional Advancement Residency Phase I (NEW)	Professional Advancement Residency Phase II (In development)	Master's Degree Cohort Group	Continuing Education
Provides structure to the first year to 15 months of nursing. Provides a Clinical Education Specialist as support to the new nurse as they transition into the staff nurse role. Also, provides networking opportunities at social functions and in the classroom learning environment.	Mentor the staff nurse in their transition to a competent, professional nurse. Outcomes: Aid the Clinical Associate Nurse or the Clinical Nurse I to aid their advancement to the role of Senior Clinical Nurse. Residents will conduct research, perform unit-based PI projects, be involved in governance councils at all levels, continue their education at UMSON, and become certified	Mentor the staff nurse in their transition to a competent, professional nurse. Outcomes: Aid the Clinical Associate Nurse or the Clinical Nurse I to aid their advancement to the role of Senior Clinical Nurse. Residents will conduct research, perform unit-based PI projects, be involved in governance councils at all levels, continue their education at UMSON, and become certified	This is a grant program that is for the UMSON Health Service Leadership and Management Degree. This master's degree is designed for the full and part time bedside nurse who wants to advance their learning by receiving a master's degree that is applicable knowledge at the bedside and beyond. The purpose of the group is to provide education to the UMSON nursing students	Available to all staff in the form of continuing education monies for conferences, reference books, continued schooling
15 months	18 months	18 months	24 - 36 months	On-Going
Year-Round	Year- Round	Year Round	Next start: Spring 2008 semester. Last start: Fall 2008 semester	Year Round
New Graduates and Nurses with < 15 months of experience	May 2007 graduates of BSN and CNL programs. Ready to continue their knowledge growth	Nurses at the Clinical Associate Level and the Clinical Nurse I level. In good standing at the unit level	Must be FT or PT UMMC staff nurse with a BS degree.	Must be a PT or FT employee and be employed > 6 months
No application. Routine HR application.	Applications available. Program beginning January 2008. Residency application screened by Coordinator. Apply thru HR.	To Be Determined	Application deadline for Spring 08 was Nov. 1st. Deadline for Fall 08 is July 1st.	Applications only to HR for reimbursement or pre-pay of fees
Preceptor of a new graduate nurse	Clinical Education Specialist, mentor	Clinical Education Specialist, mentor	None	None
Continue their education in the Professional Advancement Residency, academically (BS, MS, DNP/PhD) and/or become certified	UMMC Cohort Group or other Graduate Level Education	UMMC Cohort Group or other Graduate Level Education	Continue employment with UMMC but have stronger ties with UMSON programs and their students	

Integrated JCAHO Training Goes Online and Continues in

The *Integrated JCAHO Training* that started this fall will continue and it is now **available online**. The instructor-led sessions will continue in 2008 on the dates shown below. The instructor-led sessions are designed as a train-the-trainer experience to assist unit-based JCAHO trainers and other contact staff in clarifying compliance with selected JCAHO standards. Printed syllabus materials are available on CD-ROMs for participants' use in their subsequent unit-based staff training.

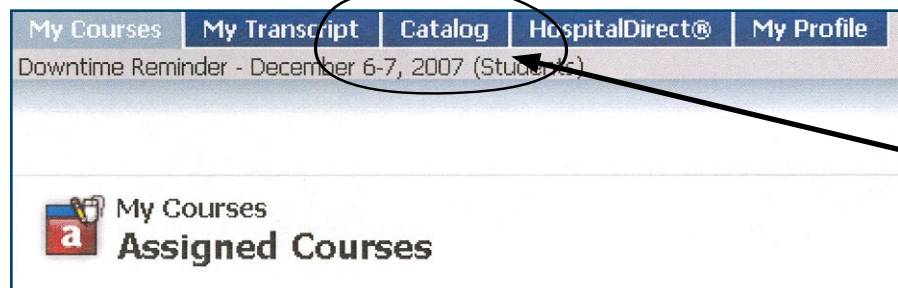
Online Self-Paced Sessions Now Available

The PowerPoint presentation from the instructor-led sessions has been adapted for front-line staff and put into online modules which are available 24/7 from *HealthStream*®. This training is **not** mandatory like other training on *HealthStream*®, with the exception of the Restraint module which is mandatory. Instead, it is elective training and listed on the elective section on each staff person *HealthStream*® home page. Only the restraint module is mandatory. Managers may add this online training to the other Joint Commission training formats currently available. The online modules include all of the content in the instructor-led session with the exception of the *Practice Implications of the New Moderate Sedation Policy* content.

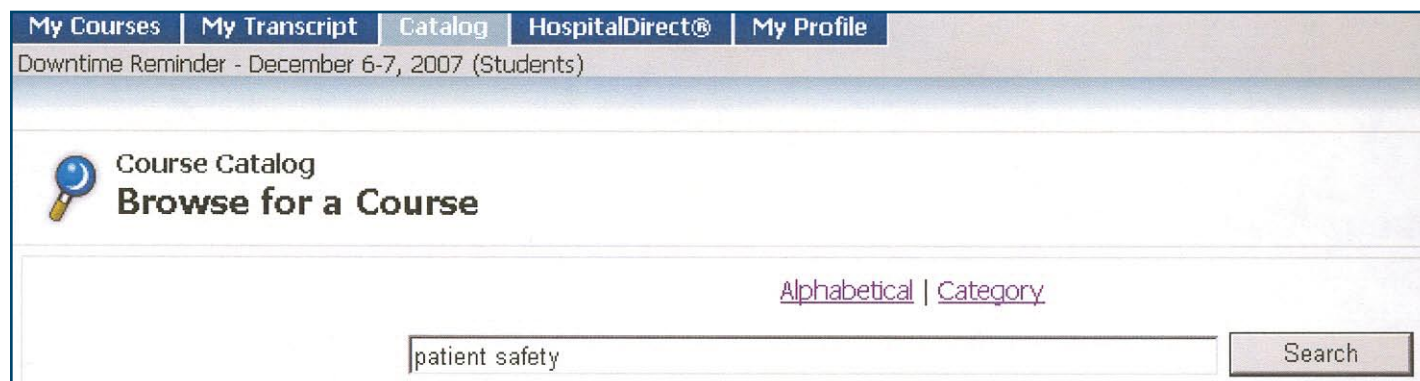
Instructor-Led Sessions Dates: January 10 and 23; February 5 and 28, and March 13 and 26 Held in PP Bldg.

Targeted Audience: Experienced and frontline inpatient & ambulatory staff in the Department of PCS with:

- Audience for Morning **Only** Content: All PCS staff - nurses, RTs, PTs, OTs, Pharmacists, Social Workers and other clinical staff including PCTs and NAs.



Navigating to this optional online training requires staff to click on the **Catalog** tab on their HealthStream Home page, which will take them to a **Browse For a Course** page. Staff should enter a word from the title of the courses Joint Commission training are online. The online Joint Commission courses that online include How to talks to a JC Surveyor, Patient Safety Goals, Documentation of Care, and Environment of Care.



- Audience for Afternoon Content: Only nurses & pharmacists attend the afternoon session.

Content in Integrated JCAHO Training Instructor-Led Sessions

Morning Topics for all PCS staff

What is the Tracer Method: Expectations of Frontline Staff - Fe Nieves-Khouw

JCAHO Standards for Ensuring Patient Safety – National Patient Safety Goals - Fe Nieves Khouw

Selected Provision of Care Standards:

Assessment and Documentation – Anne Naunton

Intake & Triage, Pain and Fall Assessments,

Pt. & Family Education and Plan of Care

Restraints and Restraint Alternatives – Carla Middleton

Environment of Care: What Clinical Staff Need to Know and Do

How to Talk to a Surveyor - Ella Giles

Afternoon Topics for Nurses & Pharmacists

Medication Management Issues and Action Plans – Barbara Sabatino

Practice Implications of the New Moderate Sedation Policy – Margie Stickle.

New Joint Commission Staff Education Begins

Over the next several weeks, managers and staff will receive information entitled *Education Briefs* in the form of e-mail and hard copies sent to each managers and supervisor for distribution to staff. Also, this information will be on the Intranet under Patient Care Resources, click on Regulatory, then “Education Briefs” under Joint Commission. These briefs will focus on regulatory compliance areas identified during our recent mock Joint Commission survey as areas of opportunity, needing staff education and clarification. These compliance areas and their distribution dates are:

1. Environment of Care - sent;
2. National Patient Safety Goals – sent;
3. Patient Care and Documentation - sent;
4. Medication Safety - December 12;
5. Medical Record Management and Navigation - December 19;
6. Human Resource Management - December 26; and
7. Infection Control – January 2.

Staff will receive information on each topic on Wednesdays each week in the order shown above. The information will be 1-3 pages and in addition, you will receive a visual that may be in the form of a one-page flyer that can be posted on the unit to support education.

Testing and Confirming Knowledge

At the end of each 1-3 page *Education Brief* will be some test questions and a statement that staff will sign confirming that they have read and understand the content of the education brief. The tests that are distributed with each Education Brief are available on HealthStream®. As of November 28, the Environment of Care and the National Patient Safety Goal tests have been assigned to the appropriate staff based on job codes. Please have staff complete all tests, including the first week’s Environment of Care test using HealthStream®. This online approach will make management of the results and monitoring who has successfully completed the test more efficient. The passing score on all of the tests is 100%.

The expectation of all UMMC employees is that they will read and comply with all of the information in each education brief. This education is necessary to continue to deliver safe care and achieve the best patient outcomes. Managers will ensure their staff have successfully completed the HealthStream® tests.

Weekly Safety Communication

Each communication will be produced as a hard copy document and distributed to managers/supervisors with enough copies for one per staff member. The communication will also be distributed via e-mail and posted on the Intranet on the site described above. The weekly communication will include:

- Bi-Weekly Safety Flash; and
- Bi-Weekly Clinical Practice Updates.

Safety Checklist

Safety Checklists have been developed and distributed to all managers/supervisors as a resource to:

- Teach;
- Monitor compliance with hospital policies and procedures, regulatory requirements, and the National Patient Safety Goals; and
- Reinforce staff accountability.

Charge Nurse Checklist Developed

Managers have developed a **Charge Nurse Checklist** as an additional resource for teaching monitoring compliance, and reinforcing staff accountability. This checklist is available on the intranet under Joint Commission.

Direct comments about this new education strategy to **Carla Middleton**, 8-0909 or cmiddleton@umm.edu.

New PCA Pumps Are Here

The Medical Center converted to the new PCA/PCEA pumps on Wednesday, December 12, 2007 after staff was trained from December 4th through December 11th. Advantages of the new CADD-Prizm® PCSII Pumps include: therapy-based, customized protocols with hard and/or soft, maximum and minimum delivery rates. There are now standardized libraries of pain management protocols that provide added safety and accuracy of analgesic delivery by patient-specific parameters. Protocols are downloaded from desktop PCs to the pump so errors in programming are caught on the computer and can be corrected before they are programmed into the pump.



Restrain Yourself...More Information about Restraints and Restraint Alternatives

UMMC Philosophy

Restraints are used as a last resort and only after less restrictive alternatives, if appropriate, have been attempted and proven unsuccessful. Patients have the right to be free from restraints of any form that are not medically necessary or are used as a means of coercion, discipline, convenience, or retaliation by staff.

Restraint Alternatives

These devices are available to provide less restrictive ways to manage patients whose behavior puts them at risk for disrupting their medical care or therapy and/or to prevent them from injuring themselves or others. Efforts need to be taken to **prevent or minimize restraint use and to use less restrictive restraint alternatives** when possible and appropriate. Other examples include diversionary activities, increase frequency of patient checks, moving the patient closer to the nursing station etc. Restraint Alternative devices available at UMMC (PMM# follow each device) include:



L-Bow Arm Brace

Pediatric Small	176360
Pediatric Medium	176361
Pediatric Large	176362
Adult Medium	176363
Adult Large	176364

The L-Bow Brace keeps patient's hands away from their face and IV tubing.



Arm SkinSleeves

Light Tone 176357 and Dark Tone 176358

The sleeves provide a latex-free barrier that helps protect fragile skin. The SkinSleeve helps to prevent the disruption of treatment by camouflaging IV and wound sites. The neutral flesh tones (available in light and dark) discreetly blend with the patient's own skin.



Split Side Rail Protectors 176355

This device provides soft padding and helps deter patient attempts to exit the bed between split side rails. It may also be used as a seizure pad. It quickly secures to most split side rails with hook and loop attachments. The bacteriostatic vinyl cover wipes clean with liquid disinfectant.

Types of Restraints

Restraint for Acute Medical/Surgical Care - the use of a physical or mechanical device to limit the patient's freedom of movement in medical or post-surgical situations so that they do not interrupt their medical therapy.

Restraint for Uncontrollable, Violent and Aggressive Behavior (includes Chemical Restraint defined below) - the use of restraints in an emergency or crisis situation when the patient's behavior becomes self-destructive or violent presenting danger to his/her safety or that of others.

Chemical Restraint

The use of medication to restrict the patient’s freedom of movement for emergency control of behavior and that is not a standard treatment for the patient’s medical or psychiatric condition.

Regulatory requirements are not intended to interfere with the clinical treatment of patients who are suffering from serious mental illness and who need appropriate therapeutic doses of psychotropic medication to improve their level of functioning so that they can more actively participate in their treatment. Similarly, the regulation is not intended to interfere with appropriate doses of sleeping medication prescribed for patients with insomnia or anti-anxiety medication prescribed to calm a patient who is anxious.

Of course, as with any use of restraint, staff must engage in active patient assessment to determine whether there is some root cause or issue for the targeted problem that can be alleviated through less restrictive alternatives before using the restraint or drug intervention. A patient may be agitated because of pain, an adverse reaction to an existing medication, or an unmet care, need or concern.

Example 1: A patient has Sundowner’s Syndrome. She gets out of bed in the evening and walks around the unit. The unit’s staff finds the patient’s behavior bothersome, and asks the prescriber to order a high dose of a sedative to “knock out” the patient and keep her in bed. The patient has no medical symptoms or conditions that indicate that she needs a sedative. In this case, for this patient, the drug is being used inappropriately as a restraint.

Example 2: A patient is in a detoxification program. He becomes violent and aggressive one afternoon. Staff administers a PRN medication ordered by the patient’s MD/DO or LIP to address this outburst of specific behaviors. The use of the medication enables the patient to better interact/function. In this case, the medication used for this patient is not considered a “drug used as a restraint.” The availability of a PRN medication to manage outbursts of specific behaviors, such as, or aggressive, violent behavior is standard for this patient’s medical condition (i.e., drug or alcohol withdrawal). Therefore, this patient’s medication does not meet the definition of “drug used as a restraint” since it is “a standard treatment for his medical or psychiatric condition.”

Order, Assessment and Documentation Requirements

Type of Restraint	Order Renewal	Nursing Assessment and Documentation	Discontinuation	Types
Restraint for Acute Medical/Surgical Care	Every 24 hours – order is in PowerChart® for the prescriber	Every 2 hours: Remove the restraints, check circulation, perform range of motion, assess and document if there is still a need to use restraints. Document the continued need for restraint on the patient flow sheet, the assessment and observations on the patient flow sheet or the restraint flow sheet.	Document discontinuation criteria when restraints are applied and every 2 hours with the nursing assessment. Document whether or not they are met and restraints can be removed or need to be reapplied and continued.	<p>Mitts – these are considered a restraint only when tied</p> <p>Limb Holder – this device is more restrictive than mitts, especially when more than one is used</p> <p>Roll Belt – usually used for patients at risk for a life-threatening fall, this is less restrictive than using a vest.</p> <p>V-neck Vest/Sleeved Jacket – this device is more restrictive than a roll belt, however, is not considered a restraint if it is used for positioning purposes.</p>
Restraint for Uncontrollable, Violent and Aggressive Behavior (This includes Chemical Restraint)	Every 4 hours for adults aged 18 and older; 2 hours for children and adolescents aged 9 – 17; and 1 hour for patients under the age of 9.	An initial face-to-face assessment needs to be done by the prescriber or nurse and documented on the patient flow sheet. It then needs to be done and documented when each order is renewed (see order column for frequency).	Document discontinuation criteria upon implementation of restraint. Document every 15 minutes: Circulation, patient’s condition, need for restraint to continue or can they be discontinued if discontinuation criteria is met.	Same as above plus 1 to 5 point restraints, leather restraints, seclusion (only done in ED and psychiatry areas)

Staff Training Resources/References: Mandatory self-paced online module *Restraints, Restraint Alternatives and Seclusion* on HealthStream® available from the UMMC Intranet and Internet from home, policy on Intranet in Hospital Policy and Procedure Manual, call Carla Middleton at 8-0909 or e-mail her at cmiddleton@umm.edu for questions or more information.

Professional Advancement Model Continues to Evolve

Leaders of our new model have **Professional Advancement Model** been spending time at staff meetings and Senior Partner meetings to start educating staff; however, formal staff education began in November and runs through December. Please look for the dates and plan to attend one of the sessions. This article highlights some recent decisions about roles and the application process.

The Professional Advancement Model consists of four roles: Associate Clinical Nurse (ACN), Clinical Nurse I (CN I), Clinical Nurse II (CN II), and Senior Clinical Nurse (SCN).

- Nurses in Associate Partner, Full Partner and Senior Partner roles are eligible for the new roles (ambulatory nurses with equivalent titles are also eligible).
- Nurses with less than 12 months experience will most likely be in the Associate Clinical Nurse role unless they successfully pass probation and apply for another role.
- There will be no grandfathering into roles; however, the CN I role is similar to the current Full Partner role, the CN II role similar to the Senior Partner role, and the SCN role is a brand new role with higher expectations than our current Senior Partner role.
- All nurses (if here greater than 12 months) be at a CN I role minimally; nurses wishing to apply for promotion roles of CN II and SCN will complete their application process for the desired role and submit it to the Professional Advancement Board for review and decision.
- Nurses new to UMMC will be hired into an appropriate role by the hiring manager; these nurses will go through a six month probation period and the re-credentialing process in two years.
- Nurses transferring to another unit will discuss their roles with hiring manager; decision will be made as it is today if the manager feels it is a good fit as far as performance and competency level.

New Changes

- All roles require a specific number of continuing education hours.
- All nurses must maintain a professional portfolio (to be used at evaluation time and for re-credentialing).
- All nurses must be a member of a professional association.
- All nurses will go through re-credentialing process every two years to maintain role.

Responsibilities of the Applicant

1. Complete **“Intent to Apply”** letter (download from Intranet when available) - all eligible nurses will declare their intent for one of the four roles (only those with less than 12 months experience are eligible for the Associate Clinical Nurse role).
2. Complete application packet by deadline (Available on Intranet)

- Applications must be completed entirely.
- There will be people available to assist you with completion of the application.
- Applications need your manager’s signature to validate your professional activities.
- Each applicant will also complete a self assessment and get one peer review.

Staff Education Sessions

Staff education sessions will be offered as “drop in” sessions from November 27-Tuesday through December 2-Sunday; then December 12, 13 and 15. Six weekend days, nine weekdays, day and night shift will be covered. The sessions last 60 minutes each and location and times will be announced soon.

Important Tasks and Deadlines

Time Frame	Tasks Nurses Need to Complete
November - December 2007	<ul style="list-style-type: none"> • Participate in one of the staff education sessions • Analyze role descriptions • Complete individual nurse assessment in conjunction with manager/designee • Identify potential/desired role • Establish goals/plan, if not fulfilling all requirements • Start portfolio (download from the Intranet or pick up a CD-ROM in the Professional Development Office S10B02) • Start application packet: collecting documents/evidence, becoming a member of a professional organization, education hours, preceptorship, etc. • Completes “Letter of Intent”
January 15, 2008	<ul style="list-style-type: none"> • Submit letter of intent to manager (CN I, CN II, SCN) and a copy to the Advancement Model Board (CN II and SCN only) at the Professional Development Office)
January – February 2008	<ul style="list-style-type: none"> • Complete portfolio. • Complete application packet by the end of February
March 1 to 31, 2008	<ul style="list-style-type: none"> • Submit applications to the Advancement Board by March 31, 2008 (submit to the Professional Development Office-S10B02): <ul style="list-style-type: none"> • Complete portfolio including verifying documents • Complete self-assessment form • Sealed peer evaluation form • Sealed manager letter of recommendation • Obtain receipt of submission
April 1 – June 30, 2008	Advancement Model Board examines application and communicates outcomes.
July 2008	New nurse titles officially replace old job titles.

Check out the Professional Advancement Model Web-site on the Intranet; it’s under Patient Care Resources, PCS Governance.

Reducing The Risk of Patient Harm From Falls

Reducing patient falls is an important national patient goal and meeting this goal require medical centers to implement a fall reduction program. The question and answers below describe the UMMC approach to meeting this goal. Staff should know the UMMC approach to falls reduction and answer these questions with responses similar to those below

- Whose **responsibility** is fall prevention?
 - Staff of UMMC, regardless of department or role, must be watchful of patients, note fall risk signs, and intervene to protect any patient at imminent risk of falling
 - Patient's RN initiates and implements fall precautions based on a falls assessment.
- What tool does UMMC use to assess and document fall risk?
 - Morse Fall Risk Assessment (researched tool, and used internationally)
 - **Inpatient Adults:** online Morse is in (1) Intake & Triage for admission and (2) stand-alone form for daily and prn use
 - **Pediatrics:** use Morse or developmentally-appropriate tool; pediatric-specific interventions; NICU/nursery exempt
- **When** is the patient assessed for fall risk?
 - **Inpatients:** admission, daily, post-op, after transfer, after a fall or near fall, new onset of confusion, agitation, weakness
 - **ASCU and outpatients:** initial assessment; more frequently if status or medication changes
 - **Procedure areas:** review handoff note (sticker) to determine fall risk status
- **How** are fall precautions implemented?
 - Morse tool has (3) risk levels with corresponding interventions
 - Morse score determines patient's risk (standard, high, critical)
 - 'Standard' interventions are the routine interventions for all patients (ie bed locked, call light within reach, etc)
 - 'High' and 'Critical' are extra interventions required for those patients
 - RN checks off corresponding interventions on tool and implements them
 - Example: bed alarm 'on' for high and critical risk
- Can the nurse **modify** a Morse Fall Risk Assessment which was done previously?
 - No, a **new form** must be done daily or with changes in patient status; enables anyone to review prior assessments
- Does the patient/family require **patient education** to prevent falls?
 - Yes
 - Methods: new handout available soon in Intranet; Micromedex, unit-specific handouts/signs, discussion
 - Documentation of education: Patient/Family Education Summary; may be located in population-specific section
- How have **staff** been **educated** on the fall prevention program?
 - Emailed power point presentation Spring 2007
 - ITG trainers assisted with 'go-live' of Morse tool
 - Competency marathons
 - Clinical Practice Summits
 - Staff meetings
 - Bulletin boards
 - (latest) This 2008 Patient Safety Goals review and test
- In addition to the Morse tool, **what else** has UMMC done to minimize falls or injuries from falls?
 - Slippers with non-skids on both sides
 - Bed exit alarms
 - Signage—fall risk and patient education
 - New patient education handout
 - Soon: gait belts for RN/PCTs to use; rehab to instruct
 - Investigating: mats, chair alarms
- How can **PCTs and CNAs** prevent falls?
 - Make rounds every 1-2 hours and encourage patients to use bathroom
 - Use bed alarms for high and critical risk patients
 - If assisting a patient for toileting, do not leave patient alone in the bathroom or on the bedside commode
 - Keep the new double-tread slippers on patient, even while in bed
 - Report changes in the patient, such as confusion
 - Learn to use a gait belt whenever walking a patient and use it for patients at risk for falls
- How does our hospital **monitor** the effectiveness of the fall prevention program?
 - Monthly patient safety committee focuses only on patient falls prevention
 - Risk manager participates monthly; prepares hospital-wide quarterly data for review by committee; severity of injuries included
 - Soon we will have unit-specific quarterly data.

New Research Course Offered in 2008: *Locating the Evidence*



This one-hour workshop provides hands-on instruction on how to do an electronic literature search. And, it also reviews the principles of evidence-based health care and offers strategies for finding the best clinical evidence. Held on February 27 from 1:30 to 2:30 pm in the basement distance education labs at HSHSL and taught by Librarian Stefanie Warlock. Call extension **8-6257** to register.

CARDIAC EDUCATION PROGRAMS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ACLS Provider (2 days) Pre-req: current BLS	5-6 26-27		8-9		17-18		26-27		20-21		8-9	
ACLS Renewal Pre-req: current BLS	25	16	7	18	3, 16		25	23	22	25	7	12
ACLS Instructor Pre-req: current BLS & ACLS and by instructor approval only										11		
ACLS-BLS-Conscious Sedation Incoming Residents ONLY						21-22 28-29						
ATLS (call x. 8-2399 to register)	24-25	21-22	13-14	3-4	8-9	19-20	24-25	21-22	11-12	2-3	13-14	11-12
BLS (CPR) Renewal (2-3 hours)	7, 24	4, 15	3, 15	7, 17	5, 19	2	7, 24	4, 22	8, 27	6, 24	3, 19	1, 15
BLS (CPR) Instructor Pre-req: current BLS and by instructor approval only										18		
PALS Provider (x.8-7532 to register)	9-10		5-6		14-15				4-5		12-13	
PALS Renewal (x.8-7532 to register)		7	3				9	6		8		11
PALS Provider Incoming Residents ONLY						18-19						
PALS Instructor (x.8-7532 to register)		21										

CLINICAL PROGRAMS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Aggression Management		21			15		17			16		
Applied Nursing Practicum (Acute & ICU Care - 6 days)		13-15, 18-20										
Applied Nursing Skills Day		19										
Applied Pediatrics Practicum (6 days)			Mar 31- Apr 1-2, 7- 8							13-15, 20-21		
Cardiac Rhythm Interpretation Course (2 days)	15,17	12,14	18,20	22,24		3,5	15,17	5,7 19,21	9,11	14,16	18,20	
Chemotherapy-Biotherapy, ONS (2 days)		6-7		Apr 30- May 1					17-18			
Complications of Cancer			6							23		
Critical Thinking & Delegation in the Clinical Setting NEW (formerly 2 courses: Critical Thinking; Delegation-Transition)	29											
Interpreting 12-Lead EKG										15		
Interpreting Lab Values		13		23				20		29		
Leukemia & BMT			5							22		
Managing Diabetes for the Bedside Nurses		TBD		TBD				TBD		TBD		
Mastering CRRT (CVVH/CVVHD)			12			10			4			3
Mock Code	2 hour course is held on unit by request only - Contact Professional Development x. 8-6257 to schedule.											
Moderate Sedation			12		21			13		15		
Pain: The 5 th Vital Sign (1/2 day)		14		9		11				8		
Patient Care Technician Program (4 weeks)	Jan 14- Feb 8											
Patient Care Technician Skills Day (1/2 day)	8	12	11									
Patient Safety for Managers & Supervisors			5		7				10		5	
Phlebotomy for Pediatric Patients		6		9								
Phlebotomy/IV Access in Adults		5		8		10		5		7		
Trauma Theory (5 days)		25-29						4-8		27-31		

CONFERENCES & CERTIFICATIONS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Advanced Cardiac Surgery Cert. Review						4						
CCRN Review	DVD available for individual review of CCRN examination - Contact CPPD Office, x. 8-6257 (Additional review materials available - see list below.)											
Fundamentals of Critical Care Support (2 days)				19-20						18-19		
Literature Review Courses	Courses held at Health Sciences Library - FREE to UMMC staff: http://www.hshsl.umaryland.edu/main.html -> Education and Training -> Fall 2007 Class Schedule											
Med Surg Review NEW	March 2008 dates to be determined. Course to be held off-site. For registration or information, contact Lola Massoglia, x. 8-7452.											
Nurse Practitioner Conference (2 days)			17-18									
Oncology Certification Review (2 days)				9, 16								
Special Topics in Trauma											8-9	
Team Management of Diabetes Joslin Ctr.			18									
Trends & Topics in Periop										21		
Trends in Nursing Practice					1							

Review materials are available to borrow on a monthly basis for the following certifications - Contact Lola in CPPD x. 8-6257.
CCRN. Adult CCRN. Neonatal CCRN. Pediatric CEN CMC CMSRN or RN-C CNRNCPNCSC PCCS

Additional Events & Programs continued on next page.

All courses require pre-registration unless specified otherwise. All registration fees must be paid prior to course participation or space may be forfeited.
Call 8-6257 for info or to register. PALS registration, call 410-328-7532. ATLS registration, call 410-328-2399.

October is recognized as National Pharmacy Month — a celebration of pharmacy employees and their contributions.

The profession of pharmacy is shifting from one that has been focused on the product to one that is focused on the patient. In other words, it is a shift from a dispensing-centered practice to a clinical practice. Clinical practice allows the pharmacist to apply his/her training by participating in a wide range of knowledge-based activities. These include recommending drug therapies, monitoring patient response, reducing adverse reactions, providing drug information to health care professionals, and educating patients directly.

This shift is being fueled by emerging technologies-- technologies that perform the dispensing functions and technologies that enable a more clinical focus. These technologies essentially liberate the pharmacist, providing the time and the information for clinical practice. This article provides a summary of technologies employed by the UMMC pharmacy today.

PharmNet® and CPMOE: PharmNet® is the core pharmacy information system. Prescribers' medication orders are entered into PharmNet®, either by the pharmacist directly into PharmNet® or by the prescriber via PowerChart®. The latter process is termed Computerized Prescriber Medication Order Entry (CPMOE). After orders are entered via CPMOE, they await pharmacist review via electronic verification. CPMOE ensures complete and legible medication orders. CPMOE eliminates pharmacist order entry and thus, saves pharmacist time.

The PharmNet®/CPMOE combination provides multiple functions—several key ones include:

- performs key medication-related safety checks, such as drug interactions checking, dose checking, and allergy checking for the pharmacists and through CPMOE for the prescriber;
- provides the information displayed on the E-MAR and other key reports;
- generates the patient labels for first and subsequent doses; and
- provides the information through interfaces that drives the Robot-Rx® and Omnicells® (see below).

ROBOT-Rx® automates the drug dispensing process for the 24-hour cart fill using bar-code scanning technology. The Robot-Rx® eliminates “the human element” from the dispensing process resulting in more than a half-billion bar-coded medications dispensed yearly with 99.99% accuracy. Research shows that humans are at best 97% accurate. The Robot-Rx® bar-code feature verifies the correct drug, dose, dosage form, and expiration date for each dose dispensed providing another mechanism to improve patient safety.

Omnicell® unit-based cabinets promote efficient and safe use of the medications that need to be stocked on the patient care units. The cabinets are designed to provide “controlled” access (secure and password-protected) to these medications. The UMMC “Omnicell® philosophy” dictates what medications are routinely stocked in the cabinets:

These include medications that are:

- needed urgently
- controlled substances, and
- frequently ordered “PRN”

UMMC is now piloting Omnicell®’s “Safety Stock.” Safety Stock® barcode scanning ensures the accurate placement and withdrawal of medications. Users are alerted when a medication is stocked in the wrong compartment or when a wrong medication is selected for patient use.

Another recent addition to Omnicell® is biometric (fingerprinting) technology. This feature uses individuals’ fingerprints to grant cabinet access as an alternative to the more cumbersome manual password entry.

IntelliFill® automates the compounding and labeling of intravenous medications in syringes. This technology uses a number of safety checks to ensure fill accuracy, such as barcode scanning, weight confirmation, and digital visualization of ingredients and products, all in a sterile environment. This technology is capable of producing up to 500 syringes per hour. Similar to Robot-Rx®, the Intellifill® enhances safety and saves time.

IV Track® is a medication system developed by the pharmacy to prevent medication errors in the dispensing of small and large volume parenterals. Upon receipt of pre-mixed, commercially-available intravenous medications, a technician labels each bag with a barcode identifier. Before a medication is dispensed to a patient, the barcode on a separate patient-specific label is compared electronically to the barcode on the medication to ensure a match. Thus, the right drug, dose, route, time, and diluent are checked before the drug is delivered to the patient care unit.

The Pharmacy’s mission is to provide standard-setting, proficient, and compassionate pharmaceutical care services to the patients and health care professionals of the University of Maryland Medical Center. The department’s commitment to installing and operating appropriate technologies, such as those described, drives the mission.

UMMC Is Going Green

by Denise Choiniere, BSN, RN, Environmental Health Coordinator

In November, the Medical Center had its first Patient Care Services Green Team conference attended by over 30 clinical staff. The conference was supported by hospital leadership and by a grant from Health Care Without Harm. Our Patient Care Services Green Team is the first Green Team in the state of Maryland that is comprised entirely of clinical healthcare staff. The team members include nurses, patient care technicians, secretaries, social workers and respiratory therapists who came together to learn about environmental health, how it impacts worker and employee safety, and the steps UMMC is taking to improve its impact on the environment.

At the conference, **Barbara Sattler**, DrPH, RN, from the University of Maryland School of Nursing, discussed various risks staff may encounter in their daily practice and addressed solutions to minimize risks, not only to ourselves as health care workers but also to our patients. Topics she introduced included:

- environmentally-preferable purchasing
- concerns about mercury
- PVC and DEHP
- waste segregation and disposal
- cleaning chemicals
- sustainable food

Lisa Rowen, DNSc, RN, CNO and **Leonard Taylor**, Senior Vice President for Facilities, discussed their personal as well as the institution's commitment to "greening" and noted the positive changes that have already been made. The PCS Green

Team is eager to implement paper recycling in the nursing units as well as find alternatives for the Styrofoam cups supplied in the kitchenettes, so be on the lookout for these changes to come.



The Patient Care Services Green Team is responsible for promoting conservation and environmental stewardship in the clinical work areas and for educating their unit staff about UMMC Green Team initiatives. The Team's vision is to raise awareness about the impact of the hospital's purchasing choices,



operations, and practices on patient and employee health, as well as the health of the community and the environment. All UMMC employees can support this initiative by conserving whenever possible, such as not

overstocking linen in patient rooms, not opening supplies unless needed, turning out lights and shutting down office computers at the end of the day. You can learn more about the greening of healthcare by visiting www.noharm.org or www.h2e-online.org. If you would like to get involved with the Patient Care Green Team and join the greening efforts at UMMC, please contact Denise Choiniere, BSN, RN at dchoiniere@umm.edu.



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