

### **Taking a Problem vs System Oriented Approach to Assessments**

When Lawrence Weed introduced the Problem Oriented Record System more than 30 years ago, he was initially viewed with some hostility, especially by those who practiced Internal Medicine. Internists had always prided themselves on their record keeping, and notes were often several pages long with detailed discussions about differential diagnosis and treatment options. Weed was not deterred and most came to view his approach as a significant contribution to patient care. It led to more comprehensive care as the “problems” were an inventory of patients’ issues, and focusing on each separately led to more complete care whereas previously, there was attention paid only to one or two issues. Physicians were thought to have good “Clinical Judgment” when they were able to keep sight of the “big picture” while paying attention to and considering the details.

Through the 1970s, more and more care in teaching hospitals was given in MICUs and CCUs and significant parts of one’s training were done in these venues. Patients treated in these settings often had complex multi-organ disease, and house officers initiated a Systems Oriented approach for more comprehensive care. In the hectic environment of a unit, one could cover his/her bases by working at the various organ systems and pre-printed forms with this method proliferated.

However, as one who has reviewed write-ups by residents and students for many years, I would suggest without hesitation that looking at problems will lead to better care out of the units than a systems approach. I recently reviewed a record where hypovolemia, hypokalemia and hypercalcemia were all discussed together in a brief paragraph to the detriment of high quality case analysis.

In June of 2001, while attending at the VA, we admitted a man who was 72 years old, and had not sought medical care for more than 15 years. However, over the previous two weeks, he complained of chest pain with and without

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exertion, dyspnea, orthopnea and PND and palpitations. On physical exam, he had rapid atrial fibrillation, was in gross CHF, had a grade 4/6 murmur of aortic stenosis, and had 4mm ST depressions in the lateral leads. To evaluate this critically ill man carefully and comprehensively under one heading, “Cards” would, in my opinion, do him an injustice. Focusing on just the atrial fibrillation, and the need to slow it and start anti-coagulation needs careful attention in the context of CHF, aortic stenosis, possible acute coronary syndrome, and the looming possibility of rapid interventional treatment.

The strength and wisdom of problem orientation has lasted all this time because it is a significant improvement over previous record keeping systems. The systems approach, which had its genesis in the units, might be appropriate there, but has limitations in a ward or clinic setting. To lump asthma and pleural effusion and lung cancer in a patient under the heading “Pulm” will interfere, in my view, with the careful analysis necessary to optimally approach each of these issues.

*J Caslowitz*

## **THE INPATIENT TIMES**

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# **The Inpatient Times**

*All the news that makes you more fit to treat!*

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### **You are Sending My Patient Where?**

In an effort to educate our inpatient service about what happens to our patients after leaving BMC’s inpatient service, several of this editions articles will focus on the places to which we transfer our patients. Hopefully, you know about them. If not, here’s a brief primer on a few of those spots. *J Greenwald*

### **The Barbara McInnis House: A Medical Respite for the Homeless**

As a resident it can often seem mysterious where patients end up after discharge. It is particularly challenging to know where to discharge homeless patients. One valuable community resource available to you is Boston Health Care for the Homeless.

Boston Health Care for the Homeless Program (BHCHP) began in 1985 as one of nineteen Health Care for the Homeless Projects originally funded by the Robert Wood Johnson Foundation and the Pew Charitable Trust. Our mission is to provide access to high quality health care for all homeless individuals and families in the Boston area.

BHCHP sees patients at over 60 sites, including 3 hospital based clinics and a free standing medical respite unit, the Barbara McInnis House (BMH). At BMH we provide short-term medical services for homeless adults who are too ill for the rigors of life on the street or in the shelter, but are not in need of hospital-level care. Since opening our doors in 1993, we have provided health care services to thousands of homeless men and women. We are a 90 bed facility with 24 hour nursing care and medical oversight by a team of physicians, nurse practioners and physician assistants.

Our patients have a high burden of illness with the majority of patients carrying 4-6 diagnoses each. The most commonly encountered illnesses included pneumonia, cellulitis, diabetes, acute and chronic liver disease, HIV-related illnesses, exacerbation of COPD and asthma, trauma and orthopedic injuries, post surgical care (especially following day surgery for cataracts, hernias, etc., which had essentially been unavailable to homeless persons), and cancer. Patients are often found to have undiagnosed illnesses such as recent cases of severe hypothyroidism presenting as dementia, pulmonary embolism, and head and neck cancer.

Our multidisciplinary team includes social workers, psychiatrists and case managers. Our goal is to discharge patients into favorable situations such as recovery programs and supportive shelter programs whenever possible. We emphasize continuity of care and prioritize patients getting reconnected with primary care or establishing new primary care providers.

Referrals for admissions are made through our admissions department. Referrals are screened carefully to ensure that patients are appropriate for our facility. This includes the ability to complete their own activities of daily living and being free from communicable diseases such as tuberculosis.

We have had an electronic medical record since 1996. This allows us to coordinate care from our multiple sites and provide continuity of care. Our physicians attend on the wards at BMC or MGH and we are dedicated to education around caring for the homeless. We are committed to delivering the highest quality health care with compassion, dignity and respect. I invite you to come and visit the Barbara McInnis House to meet some of our remarkable patients and staff. *M Bharel*

## TEACHING CORNER

### WHAT IS A CLINICAL TEACHER?

A good clinical teacher is much more than a good lecturer. Therefore, clinical teachers should not re-create mini-lecturing modes in various teaching settings. This is particularly a disastrous approach at the patient's bedside. The following twelve roles have been described for a clinical teacher:

1. Lecturer in a classroom setting
2. Teacher in a clinical setting
3. Clinical role-model
4. Teaching role-model
5. Learning facilitator
6. Mentor
7. Assessor of trainees
8. Evaluator of teaching programs
9. Curriculum planner
10. Course organizer
11. Information material developer such as handouts
12. Developer of learning resource materials such as major curricula

### HOW DOES ONE ACHIEVE EXCELLENCE IN CLINICAL TEACHING?

Three levels of teaching competencies have been described in increasing order of complexity. One can start at level 1 and slowly proceed to level 3. There are courses available nationally and internationally to facilitate this progress in individual educator careers.

2. Doing the right thing: basic technical competencies
  - a. Teaching large and small groups
  - b. Teaching in clinical settings
  - c. Facilitating and managing learning
  - d. Planning learning
  - e. Developing and working with learning resources
  - f. Assessing trainees
  - g. Evaluating courses and undertaking research in education
3. Doing the thing right: knowledge of educational methods
  - a. Teaching with understanding of the principles of education
  - b. Teaching with appropriate attitudes and ethics

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- c. Teaching with appropriate decision making skills and best evidence based medical education
1. The right person doing it: leading efforts to improve education
  - a. Taking on higher responsibilities and leadership in education
  - b. Personal development with regard to education

*S Ramani*

#### References:

1. Hesketh et al. A framework for developing excellence as a clinical educator. *Medical education* 2001;35:555-564
2. Harden and Crosby. The good teacher is more than a lecturer: The twelve roles of the teacher. *Medical Teacher* 2000;22:334-347.

### Whither Medical Ethics?

Medical ethics at BMC is in an interesting predicament. At the School of Public Health, we have an eminent medical legal center. The key personnel, George Annas, Michael Grodin, Wendy Mariner, and Leonard Glanz, are only the core of a larger group of affiliated members of a rich program in medicine, ethics, and the law, whose academic contributions are legion. But despite this wealth of expertise, ethical consults are not often requested at BMC. A key reason is that few of our *clinical* faculty see the need to address ethical problems in a formal fashion. Dr. Michael Grodin, virtually alone, has assumed the responsibility of addressing moral quandaries when they arise, but his services are offered on an *ad hoc* basis. This is hardly sufficient.

Recommendations regarding an Ethics Committee structure and availability at medical centers require personnel with specified expertise (professional bioethicists, lawyers, and physicians), as well as specified organizational requirements to function professionally (see Aulisio, MP et al, "Health care ethics consultation: Nature, goals, and competencies. *Annals of Internal Medicine* 133:59-69 and *Ethics Consultation. From Theory to Practice*, M.P. Aulisio, R.M. Arnold, and S. J. Younger (eds.) Johns Hopkins Univ. Press, 2003). If BMC is to fulfill current mandates, then our medical faculty must be recruited to function as ethicists.

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The immediate question is how to better involve clinical faculty in bedside medical ethics. A first priority is to awaken interest in the field. Indeed, if enough interest justifies the effort, a CME course will be scheduled in January. The purpose of such a seminar would be to introduce the discipline of medical ethics to the BMC clinical faculty and thus bring ethical awareness to a new level. By training clinical faculty in the basic principles of moral reasoning in the clinical setting, these physicians could then serve both to alert house staff to moral dilemmas that are too often ignored, and, more ambitiously, serve on a vitalized BMC ethics committee.

I envision a ten week seminar, using textbooks, case studies, and relevant journal articles, which would offer the enrolled an opportunity to achieve a basic competence in moral philosophy and its application to medical ethics. It is hoped, and anticipated, that this activity will stimulate further efforts to treat medical ethics as a significant problem deserving professional attention. If interested, contact Alfred Tauber at [ait@bu.edu](mailto:ait@bu.edu).

*A. Tauber*

### End of Life Corner: Imminent Death

Recognizing that a patient is actively dying is a skill all physicians should have, both to help prepare the patient and family and to help you redefine your medical goals to maximize comfort and quality of life. Once recognized, the exact time until death is difficult to accurately predict (24 hours to 10-14 days). Some signs that reveal a patient is actively dying: profound weakness; essentially bedbound; uninterested in food or fluids; cognitive changes: sleepiness, hypo or hyperactive delirium, obtundation, coma; altered respiratory pattern (either fast or slow); "death rattle" -- pooled oral secretions, not cleared due to loss of swallow reflex; dramatic skin color changes; sunken cheeks, relaxation of facial muscles; fever (common).

#### Treatment

- Confirm treatment goals with the patient and

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family (e.g. where do you want to die?).

- ◆ Go through orders and stop all treatments that are not contributing to comfort -- fingersticks, blood draws, antibiotics, lovastatin, pulse oximetry, IV fluids, etc.
- ◆ Transfer patient to a private room, if staying in hospital.
- ◆ Don't stop pain meds; assume that the pain is still present even if the patient cannot communicate that to you. Families need reassurance that their loved one is not suffering.
- ◆ Actively evaluate patient's comfort – constipation, urinary retention, dyspnea and delirium are all common symptoms at the end of life that need to be recognized and treated if comfort is a priority.
- ◆ Control dyspnea/tachypnea with morphine. It is very disturbing to families to see their loved one in a "coma" breathing at 40/min -- goal RR should be 10-12/min.
- ◆ NEVER use restraints -- if the patient is delirious, assess if there is a reversible reason (i.e. medications, pain). If needed, use haldol (1-2 mg po/IV; can use escalating dose). Avoid benzos, as they can make patient even more confused.
- ◆ Decrease oral secretions ("death rattle") with scopolamine patch.
- ◆ Provide excellent mouth care -- ice chips prn, small sips of water or 1-2 ml H2O via syringe into dependent side of mouth q 30-60 minutes prn.
- ◆ Provide excellent skin care.
- ◆ Consult pastoral services if patient/family wishes.
- ◆ Write in progress note "patient is dying, " not "prognosis is poor".
- ◆ Most importantly, make sure the patient (and the family) is aware that he/she is dying. Let the family say goodbye -- studies show they will have an easier bereavement.

*J Hughes*

**Got a great idea for an article?**

**Want to write for The Inpatient Times?**

**Contact Jeff Greenwald**

## **You're Sending My Patient Where? Jewish Memorial Hospital**

Jewish Memorial Hospital (JMH) is a 207-bed, JCAHO-accredited acute and chronic rehabilitation hospital located just 1.5 miles from The Boston Medical Center (BMC) campus. Two thousand and three marks the centennial of JMH as an institution that delivers comprehensive, compassionate and high-quality care to patients in and around the Boston area. True to its original mission in 1913 as a "haven for the chronically ill," JMH was recognized by the Channel 5 TV program Chronicle last year as a "haven of hope" for patients in the Boston area. This served as a testimonial to the dedicated staff at JMH who devote care to patients with complex medical conditions that often have a lengthy recovery phase.

Services available at JMH include: acute and medically complex rehabilitation, cardiopulmonary rehabilitation, ventilator management and rehabilitation, and medical geriatric psychiatric rehabilitation. The hospital provides: 24 hr physician coverage; 24 hr respiratory therapy, laboratory, and radiology service; physical, occupational and speech therapy; therapeutic recreation; and individual or family counseling and support services.

JMH has had a long, solid and successful relationship with the Boston Medical Center in the midst of its existence as an independent, free-standing medical institution. Among the major teaching hospitals in Boston, the Boston Medical Center remains a primary referral source for JMH. Indeed the proximal location of the two hospitals ensures that patients within our shared community can receive comprehensive medical care in their own neighborhood. In addition, several physicians within BMC's Department of Medicine provide medical subspecialty expertise at JMH. Pulmonary, cardiology, dialysis, infectious disease and nutrition expertise at JMH has been enhanced by the presence of BMC physicians. Drs. Martin Joyce-Brady, Liz Klings and Christine Campbell-Reardon from The Pulmonary Center consult for rehabilitation of chronic lung diseases such as

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COPD, asthma and obstructive sleep apnea as well as weaning from mechanical ventilation. The Ventilator Care Unit at JMH is directed by Dr. Joyce-Brady and has been in continuous operation since 1985. This unit has even received referrals from New York, Connecticut, Maine, New Hampshire and Washington state for management of ventilator weaning. Dr. Vaskan Kroschian from the Renal Division consults for dialysis management and Dr. Mandeep Dhadly for cardiology. Dr. Caroline Apovian consults for Nutritional Support Services. Drs. Brant Viner, Maura Fagan and Anthony Solage consult for Infectious Diseases. Discussions are currently underway with Dr. Steven Williams to extend BMC physician consultation to include rehabilitation. Lastly, Dr. Robert Witzburg provides expert service for Utilization Review.

With these comprehensive medical services, JMH is a true "Jewel of Medical Hope" for its patients and their families. Under the watchful eye of its Board of Directors and its new CEO, Kimberly Smith, this durable facility embarks on a new era in the modern health care arena to fulfill its commitment as a rehabilitation hospital where "quality care continues" long into the future.

*M. Joyce-Brady*

## **Is ENC the Weakest Link???** **Combating Influenza**

It's flu season again. There have already been documented cases of influenza in the U.S. as close as New York. Most years, influenza *kills* over 30,000 people in this country. We can help protect our patients from adding to that statistic.

Again this year, we are offering our inpatients influenza vaccines during their stay. In the first two weeks of this initiative, started October 6, 2003, 119 vaccines were administered to our patients. That is fantastic. But...and there's always a but...Menino gave 90 of those and only 29 were given at ENC. How can this be? There are roughly 2/3 the number of patients on Medicine at ENC as at Menino, so that number should have been at least 60.

In the coming weeks, no doubt ENC will show its true colors and rise to the occasion to protect its patients. We all need to remember to vaccinate our patients. Remember, flu shots save lives!

*J Greenwald*

## **First Step Towards Eliminating Health Disparity: Linguistic Access**

Whether it is Ms. Ruiz, Mr. Khalid, Ms. Smith, Mrs. Coelho, Ms. Angelique, or Mr. Wassa, our patients all come with one goal. They have come to Boston Medical Center looking for the doctors, nurses and health care providers that will heal them and make them feel better. Most of them speak English quite well, however 30% of the Medical Center's patient population do not. For those patients, how can they explain if their pain is sharp or dull, or that they suffer from 'nerves' (when they mean stress), or that they did not take their medications because the directions were written in French Creole and not Cape Verdean Creole?

Many would think that family members can assist. But why is there a silence when a minor is told to let her mother know that she needs to have a hysterectomy? What should we do when family members refuse to tell their parents that they have cancer? Why is it that patients are sometimes unaware of the procedures they were about to have, right before surgery, if it was the daughter, the husband, or the brother that interpreted on their last appointment? Why allow family members to make decisions impacting the health of their loved ones, even though these patients are able to decide for themselves, yet can only speak the language through their next of kin? Would it be ok to ask the person on the bed next to your patient to assist with the linguistic barrier, and hope they understand the terminology and will keep confidentiality and never say a word to the community?

Every health care provider that works in a Medical Center as diverse as ours, is constantly faced with these questions, choices and practices. Although some of these examples seem clear in the way providers should handle them, the sad reality is that these scenarios play themselves out on a daily basis in hospitals across the nation. Patients can request to have family members or friends interpret for them, however providers need to be aware that by not

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having a trained medical interpreter present, they are exposing themselves and the Medical Center to numerous liabilities. Language skill levels of an ad-hoc interpreter, their lack of training in medical terminology, and the uncertainty in maintaining the communication confidential creates risk management concerns. As more attention is given to the need of communication between providers and Limited English Proficient patients (LEP), Federal and State agencies are mandating hospitals to offer interpreter and translation (written) services to their LEP patients. These regulations are based on Title VI, Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons.

BMC's Interpreter Services Department has the largest in-house staff of trained medical interpreters in New England. We have the flexibility to provide interpreter services in person, via telephone or video-conferencing. When an option is unavailable, care providers can request for alternative modes of service delivery. This will allow care providers to record an accurate patient history, legally consent a patient, clearly prescribe and explain how to take medications, assist during in-patient rounds, and most importantly, maintain confidentiality. These services are available 24/7.

Please take a few minutes to visit our intranet site for our telephone numbers, after-hour pagers, supervisor contacts and additional information. Call us at 414-7204 for an in-service training or to request for interpreter service department's informational brochures. Allow us to join your team by giving you and your patient a common language, and provide BMC's LEP patients parity of care. Our service can be requested by dialing 414-5549 and we can often offer telephone interpretation within a few minutes (for the more commonly requested languages).

We look forward to working closely with you and your team while we all strive to give excellent care to our diverse patient population.

*O. Arocha*

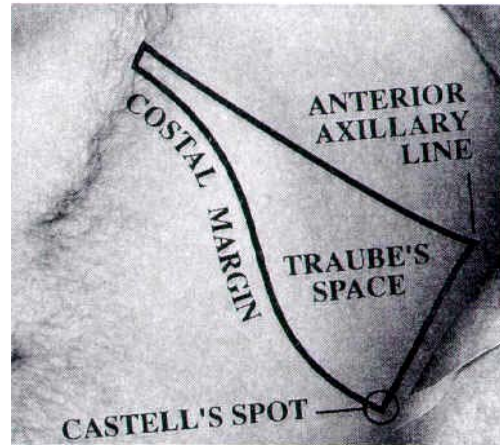
## WHERE IS THAT SPLEEN

Examining for splenomegaly appears to be a hit or miss affair. However, there are simple maneuvers that increase the diagnostic yield by physical examination.

Percussion seeks to identify the loss of tympany as the enlarging spleen impinges on the adjacent air-filled lung, stomach, and colon.

1. Percussion by Castell's Method: In the supine position, percussion is carried out in the lowest intercostal space in the left anterior axillary line in both expiration and full inspiration. In a normal examination, the percussion note remains resonant throughout this maneuver. Splenomegaly is diagnosed when the percussion note is dull or becomes dull on full inspiration.
2. Nixon's method: Nixon's method of percussion requires that the patient be placed in the right lateral decubitus position. Percussion is started at the midpoint (C) of the left costal margin (AB) and proceeds perpendicularly (CD). If there is dullness for > 8 cm, suspect splenomegaly. Sensitivity 59%, specificity 94%.

3. Percuss over Traube's space: This space is the triangle bordered by the 6<sup>th</sup> rib superiorly, left midaxillary line laterally and the left costal margin inferiorly. This space is normally the area of gastric fundus and is tympanitic. If there is dullness in this area, suspect splenomegaly. *Note: Dullness can also be caused by left pleural effusion, so correlate with clinical story.* Sensitivity 62%, specificity 72%.



S Ramani

## Help Us Find Patients for a Novel LMWH Trial for DVT

Up and running is a new DVT trial comparing standard treatment, enoxaparin and warfarin, with that of a new long-acting heparin (SanOrg34006) All patients with acute symptomatic DVT without PE potentially qualify. This is an open label study.

This new drug (also called idraparinux) has, in earlier trials, been proven safe and effective and bleeding incidents with this drug have been fewer than with warfarin. Treatment duration is 3 months or 6 months, depending on the baseline risk of DVT/PE recurrence. SanOrg34006 is given subcutaneously once-weekly and does not require INR monitoring. If possible we would like to evaluate these patients prior to their first dose of warfarin. If you have any patients with a DVT please call the study coordinator: Mary Ellen McDonough, R.N. #5606.

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## Grab Your Spleen!

Like percussion, there are many techniques for palpating the spleen. Relaxation of the abdominal wall is a prerequisite for successful palpation and can be assisted by both the examiner (friendly, gentle, and warm hands) and the patient (flexed, supported knees).

1. Two-Handed Palpation, With Patient in Right Lateral Decubitus: The left hand is placed around the back of the left lower thorax, gently lifting the left lowermost rib cage anteriorly. The tips of the fingers of the right hand are pressed gently just beneath the left costal margin, and the patient is asked to take a long, deep breath as the palpation of descending spleen is sought. If none is felt the procedure is repeated, lowering the right hand 2 cm toward the umbilicus each cycle until the examiner is confident that a massive spleen has not been missed. (Some authorities suggest starting palpation over the lower abdomen and moving up toward the costal margin.) Sensitivity 71%, specificity 90%.
2. One-Handed Palpation, With Patient Supine: With the patient supine, the tips of the fingers of the examiner's right hand are pressed gently just beneath the left costal margin, and the patient is asked to take a long, deep breath as the palpation of descending spleen is sought. If none is felt the procedure is repeated, lowering the right hand 2 cm toward the umbilicus each cycle until the examiner is confident that a massive spleen has not been missed. Some examiners like to apply counter pressure to the patient's flank with the left hand while palpating with the right. Sensitivity 56%, specificity 69%.
3. Hooking Maneuver of Middleton: The patient is asked to lie flat with his or her left fist under the left costovertebral angle. The examiner is positioned to the patient's left facing the patient's feet. The fingers of both the examiner's hands are curled under the

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left costal margin, and the patient is asked to take a long, deep breath as the palpation of a descending spleen is sought. Sensitivity 56%, specificity 93%.

*Note: By the time the spleen is palpable, it has already enlarged about 2 and a half times its normal size. Therefore lack of clinical splenomegaly does not equal no splenomegaly.*

S Ramani

## Recommendations and Rationale

### Preexamination Clinical Suspicion (Prior Probability) of Splenic Enlargement

#### Less than 10%

Percussion or palpation for splenomegaly of limited usefulness

Maneuvers are not sufficiently sensitive to rule out splenomegaly

Given the low pretest probability of splenomegaly, test specificity of clinical examination is not sufficiently high to rule in splenic enlargement even if both tests are positive

#### 10% or more

Percussion and palpation can be used to rule in splenomegaly if both are positive

Percuss first and if positive then palpate

If percussion is negative, but your clinical suspicion remains high, order an ultrasoundogram as palpation in the presence of abdominal tympany is not specific enough to rule in splenomegaly

If percussion is positive but palpation is negative, then an ultrasoundogram is also needed to confidently evaluate spleen size

To confidently rule out splenomegaly, a radiological procedure is necessary due to the limited sensitivity of bedside examination

Guidelines for Examining for Splenic Enlargement

From: Grover; JAMA, Volume 270(18) Nov 10, 1993:2218-2221

**GET YOUR FLU SHOT FREE  
TODAY TIL 7PM!!!  
MENINO OR ENC LOBBY  
MAIN ENTRANCE**

## **Our Dirty Little Secret – Our Hands**

Exposé would not be too sharp a word to characterize the surge in recent print and broadcast media stories about poor medical outcomes. A surgical resident's observed poor hand hygiene at a Boston Hospital is declared by the press to be the cause of surgical wound infections. Neonatal deaths epidemiologically associated with providers' acrylic nails were reported as the fatal handiwork of reckless, callous people (with long nails). One message has rung out consistently in these stories: dirty hands cause infection. And this message, at first glance, seems to have hit home.

Businesses have taken notice. The antimicrobial soap market aimed at non-medical uses has blossomed. Disinfectants impregnate toys, clothing and household items (in addition to implantable medical devices). Regulators and governmental agencies are weighing in. The CDC issued a new, more stringent guideline for hand hygiene in health care settings. The JCAHO now surveys for compliance with this new guideline from the CDC. Alcohol based hand rubs and rinses are becoming widely used in health care. The use of acrylic nails is being restricted.

But there is a dirty little secret – a more careful look shows that Americans may be even worse at washing their hands now than they were in 1996—and we weren't good in '96. Studies suggest that American health care workers share this dirty secret, too.

In 2000 the American Society for Microbiology ([www.washup.org](http://www.washup.org)) repeated its study done in 1996. Approx. 8,000 observations were made of hand washing after using public restrooms in five locations around the US. Men washed appropriately 60% of the time in 1996 but only 56.6% of the time in 2000. Women washed appropriately 77.6% of the time in '96 but only 77.4% in 2000. Overall, hand wash rates fell from 68.8% in '96 to 67% in 2000. When asked directly in 1996, 94% asserted that they did wash after using a public rest room, while in 2000 the percent claiming that they washed rose to 95%.

According to CDC data [MMWR Vol.51/RR-16, Oct. 25, 2002] health care workers have been

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observed sanitizing their hands between 5 and 100 times per shift – depending on their position and location. When it comes to how often they should have sanitized, patterns of compliance become obvious. Observational studies have shown compliance with handwashing standards to vary from 5% to 81% with an average of 40%. Predictors of poor adherence to hand hygiene policies include professional category, hospital ward, time of day/week, type of care, and intensity of patient care.

Observed risk factors for poor adherence: Physician status (rather than nurse), wearing gowns/gloves, males, high number of opportunities per hour of care, working in an ICU, activities with high risk of cross contamination, working during the week (versus weekend).

Join the BMC Hand Hygiene Campaign – Nothing less for our patients! Alcohol rub [CalStat] before and after all patient care (even blood pressure) and after removing gloves.

*B Burke*

## **Rapid HIV Testing is Coming!**

For the last few years, the HIV Inpatient Testing Service (HITS), operated by Project TRUST, has offered routine HIV counseling and testing to inpatients. Located predominantly at Menino, HITS has identified over 80 positive patients since it started testing.

2004 promises to bring two exciting advances to HITS. First, we will be expanding the number of counselors we have on the inpatient service and, second, we anticipate rolling out rapid HIV screening to the inpatients around January. This plan is possible because of the new and highly accurate rapid HIV test called OraQuick, which utilizes a blood sample (either collected in a tube or from a fingerstick) and functions like an ELISA. Notably, the test results are ready in 20 minutes.

Like other ELISA HIV tests, all reactive tests do require confirmation with Western Blots (which unfortunately are not rapid) but nonreactive tests are considered truly negative. Also, these tests are done confidentially and the medical team of that patient may only get the results if the patient signs a release. Finally, these tests are for screening only, not diagnostic work-ups. Talk with the counselors (beeper: 8378 or TEST) if you have questions.

*I Greenwald*

## **You're Sending My Patient Where? Shattuck Hospital**

Lemuel Shattuck Hospital operates 275 inpatient beds for adults 18 years of age and over. We are a Mass DPH organization affiliated with Tufts, Harvard, and UMass. Major affiliations for teaching, research and clinical services occur with the NEMC. Similar to BMC, we are committed to providing services in a caring and compassionate way, focused to meet the ever-changing needs of individuals, especially those who for whatever reason find themselves underserved by available healthcare resources. We are a full service hospital including:

### **Medical and Surgical Services**

Supported by full ancillary services, the multidisciplinary team of clinicians are able to effectively treat patients with a wide spectrum of needs through general internal medicine and twenty-two subspecialties. Both ambulatory and inpatient surgical services are available.

### **Intensive Care Unit**

The four bed ICU integrates the resources of critical care technology with the clinical skills of Critical Care trained physicians and nurses.

### **Pulmonary Care**

Treatment of ALS, TB, cancer, sleep apnea, and other respiratory diseases is provided for both inpatient and outpatients. Our inpatient ventilator program specializes in hard to wean patients with head and spinal cord injuries.

### **Dialysis Services**

Renal dialysis patients, including those requiring acute and chronic hemodialysis and peritoneal dialysis, are served on both an inpatient and outpatient basis.

### **Physical Medicine and Rehabilitation**

The scope of service includes physical, occupational, speech and language therapies, audiology, orthotic and prosthetic services and therapeutic recreation.

### **Geriatric Care Services**

This group addresses medical and function issues in patients >55. These include falls,

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confusion, memory loss, failure to thrive, complications with polypharmacy and behavioral problems.

### **HIV-AIDS Services**

Our HIV/AIDS team, providing services both inpatient and ambulatory, delivers integrated medical (including experimental protocol based care), social, and psychiatric HIV/AIDS care in a treatment setting truly supportive of patients and families.

### **Tuberculosis Care**

In this unique unit, our TB team treats not only the medical disease of tuberculosis and co-infections but also deals with the underlying personality disorders, addictions, mental illnesses, and relevant environmental factors that often effect the patient's ability to comply with treatment.

### **Correctional Medical Services**

Correctional health care represents a major commitment for the hospital and we service over two dozen state and county correctional facilities across the Commonwealth. Inpatient services include a secure, 25 bed unit and specialized rehabilitation therapy areas.

### **Medical-Behavioral Inpatient Units**

These acute care units serve the patient who is both medically and behaviorally compromised. Our units operate under a co-attending model where medicine and psychiatry work closely in developing appropriate treatment plans with the multi-disciplinary team.

### **Inpatient Substance Abuse Services**

Shattuck Hospital provides support to inpatient programs regarding substance abuse related issues including: psychiatric screening for dual and multi-diagnoses; detoxification and withdrawal; pain management for patients with addictions; referral for methadone maintenance; and engagement of patients in treatment for addictions. Additionally, regularly scheduled AA and NA meetings are held within the hospital.

Shattuck Hospital is located in Jamaica Plain.

*S Slomick*

### **REVIVE Your Heart Failure Patients**

We are still recruiting for an exciting new inotrope study called **REVIVE**. This is the Randomized, multi-center, **E**valuation of Intravenous **l**eVosimendan Efficacy vs placebo in the short-term treatment (24 hours) of decompensated heart failure patients. The **objectives** are **improvement of symptoms** and **quality of life** as well as **decrease re-hospitalization** for heart failure. The study also looks at **survival benefit** on this therapy compared to placebo.

The **background** for this study is that we know that *diuretics* rapidly improve symptoms of CHF, but they have no proven mortality benefit. We also know that *positive inotropes* provide short-term hemodynamic support and symptom relief, but have caused **increase in mortality** in several trials, particularly due to their **pro-arrhythmic** potential. However, a number of preliminary studies with *Levosimendan* have demonstrated safety and improvement in symptoms of CHF and suggested survival benefit compared to dobutamine and placebo.

Pateints that may be considered for REVIVE are anyone **HOSPITALIZED FOR WORSENING CHF WITHIN 48 HOURS**, having an **LVEF ≤35%** and still experiencing **DYSPNEA AT REST** despite one dose of IV lasix.

**LEVOSIMENDAN** is a calcium sensitizing agent with **positive inotropic** action via its Ca-dependent binding to cardiac troponin C, it is also a **vasodilator** via opening of ATP dependent K-channel in vascular smooth muscles. At high doses it also selectively inhibits phosphodiesterase III, but this does not contribute to the inotropic action at doses used in the study. Hence levosimendan increases **myocardial contractility**, **reduces filling pressure** and **dilates peripheral and coronary blood vessels**. It has an **active metabolite** that has a half life of 75hrs and reaches **peak concentration 1-4 days** after cessation of the infusion, thus has long lasting effects.

The most common **adverse events** have been hypotension and headache both occurring in about

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5% of patients. Combined tachycardia, extrasystoles and atrial fibrillation were reported in 4.5%. Nausea and diziiness were seen in 2% and 1.4 % respectively.

If you think you have a potential candidate for the study please contact or you have any questions regarding the study, please contact any one of the following: Cardiomyopathy Fellow, Co-investigator: Eugene Kotlyar beeper # 3004; Research Coordinator: Lorraine Keane, beeper # 1615; or Principal Investigator: Flora Sam, MD, beeper 1616

*F Kotlyar*

### **The Painful Reality of Direct Admits**

Don't you just groan when you find out that your next admit on long call is a direct admit from clinic? They are never packaged with labs, IVs, chest xrays...Bad news, my friend. You are likely to see more of these patients rather than fewer in the coming months. Why? Because the hospital needs to improve flow through the Emergency Department to prevent back-up and diversion and because many of these patients simply don't need an ED intermediary in their care.

The key to the successful direct admission is communication. Remember, it's your colleagues and attendings sending you these patients. If you hear about a direct admission from the Admitting Office, do the following:

1. Take the information from Admitting without giving them grief...they are only doing their job.
2. Talk with your Attending. That is who should have been contacted by the referring doc. Your attending should have information useful to you about the admission that may clarify things.
3. If your Attending hasn't heard about the patient, see if your resident has.
4. If no one has received sign-out about the patient, calmly and politely contact the PCP. They may be having trouble identifying the correct team to sign out to.

Let the chiefs or Dr. Greenwald know if there are problems.

*J Greenwald*

### **Nursing Update**

The Medical/Surgical Nursing division is working on several new and exciting initiatives this year. Here are some of the highlights and new faces.

#### **New Members of our Team!**

First, we are delighted to have Jackie O'Shea join the management team as the new nurse manager for 6 East Menino. Jackie has over 25 years of experience and brings a wealth of knowledge to our already strong team.

Second, we are equally as excited about Cheryl Williams, our new Nurse Practitioner for Adult Medicine. Cheryl is a great addition to BMC and we are so excited she is working on Firm B.

#### **Congratulations**

7 West Rehab-Acute Rehabilitation Unit recently received notification that they have been accredited by CARF for a period of three years. This achievement is an indication of the service performed on acute rehab. Congratulations to all those who work on 7 West Menino.

#### **New Initiatives**

We are working on selecting a new Nurse Call system for both campuses this year which should help improve communication on the units and reduce overall noise.

As you may have noticed, we continue to work on the condition of the work environment. Last year we removed the carpet and repainted and fix the hallways; this year we are working on new furniture and overall cleanliness of the units. Please help us keep the units looking good and JCAHO ready. We will be surveyed this June.

The nursing division, in conjunction with the house staff and the physicians, has kicked off the fall influenza vaccination campaign that started on October 6<sup>th</sup> and is off to a strong start. Special thanks to Cheryl Williams RN-NP, Carol Daly RN and Betty Murray RN for reminding us all to order and administer the flu vaccine for our patients.

Last but not least, we are working with John Chessare on the Robert Wood Johnson "*Urgent*

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*Matters*" grant which was awarded to BMC and only nine other hospitals in the country. This purpose of this project is to improve ED and inpatient bed flow. Our goal is to help reduce ED diversions, expedite patients from the ED to the units and to discharge patients in a timely manner. BMC is seen as a leader in this project and we are doing a great job.

#### **Special Thanks!**

Special thanks are in order to the managers on the units. Cil Weekes RN 4 West Menino, Sue Doherty RN 6 West Menino, Jackie O'Shea RN 6 East Menino, Marilyn Joyce RN 7 East Menino and Linda Meade RN 7 West Menino, are very devoted to the patients and the staff and work many hours to help improve patient care here at BMC. If you seen them on the units, please take the time to get to know them and say hello!

*L Guy*

### **To Discharge and Beyond! Extending DVT Prophylaxis Trial**

It is known that standard DVT prophylaxis is effective. The question is whether extended prophylaxis decreases the incidence of DVT/PE. Patients who potentially qualify for this trial are those whose level of activity is decreased compared to their pre-morbid state and with an anticipated decrease in activity for 5 ± 2 days. They must have the presence of one of the following conditions: heart failure, respiratory difficulties, stroke, acute infection, rheumatic disorder, IBD or cancer.

This is a double-blind study. All patients will receive standard treatment with enoxaparin (40mg sc qd) for 10-14 days. They will then be randomized to either continued enoxaparin (40mg sc qd) or placebo saline injections for a total of 5 weeks. At that time all patients will have an ultrasound of bilateral lower extremities to rule out the development of DVT. A 6-month observation period follows to watch for signs/symptoms of VTE. If you have any patients who might be appropriate candidates, call the study coordinator: Mary Ellen McDonough, R.N. #5606.