

House call, anyone?

Did you know that Boston Medical Center has the oldest home visiting medicine program in the country? Established as a maternal child health program in 1875, physicians and medical students delivered health care in the home to immigrant mothers and children in the neighborhoods surrounding the Medical Center. 130 years later, primary care and nursing case management are still being delivered in the home but now to frail, vulnerable older adults who are homebound. The BU Geriatric Services (BUGS) provides an integrated system of care to elders who are seen in the ambulatory, home care, inpatient and nursing home settings.

How and when do I refer my older patient to the Home Care Program?

Not every older person needs an interdisciplinary team approach to their care but for those older adults with complex medical, functional and psychosocial issues a team effort with a multifaceted care plan is essential. It really does take a village! Think about a referral to Home Care if your patient:

- Has advanced age and frailty
- Has multiple co-morbid conditions that negatively impact physical function (including the ability to come to clinic)
- Has cognitive impairment that interferes with access to health care
- Has family or others who are burdened by issues around care-giving for their elder

To qualify for Home Care patients must:

- Be 65 years old or older
- Live in the City of Boston
- Be willing to change their primary care provider to BU Geriatrics
- Be willing to receive their care at BMC

Please have a discussion about the referral with your patient and/or family before you make the referral. We do not accept new Home Care patients who are on hemodialysis.

To make a Home Care referral call: Clare Wohlgemuth, APRN, BC, Nursing Director, BU Geriatric Services at 638 – 6100.

C Wohlgemuth

STAFF/H.O. FLU SHOTS

WILL BE OFFERED

NOVEMBER 8, 9, 10, 12, 13.

MORE DETAILS TO FOLLOW.

ALL HEALTH CARE WORKERS SHOULD GET A FLU SHOT ANNUALLY!

THE INPATIENT TIMES

*** * *CONTRIBUTORS* * ***

Tamar Barlam, Infectious Diseases
Kathy Davidson, Nursing
Ashley Flowers, Nutrition
Jessie Gaeta, McInnis Health Group
Chi-cheng Huang, Hospital Medicine
Brian Lucey, Radiology
Chris Manasseh, Family Medicine
Carol Sulis, Infection Control
Clare Wohlgemuth, Geriatrics

Jeff Greenwald, Editor

THE INPATIENT TIMES

ALL THE NEWS THAT MAKES YOU MORE FIT TO TREAT

VOL 12; OCT 2005

**A PUBLICATION OF THE HOSPITAL MEDICINE UNIT AND THE
DEPARTMENT OF MEDICINE**

A pathway to better heart failure care

There is perhaps no field of medicine as replete with data as cardiology. Studies in this field are held up as the paragon of evidence due to their multicenter designs, large populations, and randomized structures. With years of these studies accumulating, the compiled evidence has lead the medical community to recognize that, while individual variations in practice may be needed to accommodate a specific patient, there are reasonably well established guidelines that should be considered in the care of patients with certain conditions for which good data exists. These compiled guidelines were used to develop the concept of Best Practices, those care strategies for which sufficient data has accrued so that they may be held up as the Gold Standard.

Such Best Practices exist in the field of heart failure management, including the management of acute decompensated heart failure in the hospitalized patient. These practices have been distilled for Boston Medical Center by members of the Departments of Cardiology and Medicine into the Heart Failure Pathway. This pathway includes an orderset (on SCM); a paper pathway that guides the medical management with step-by-step reminders; guidance for nursing about patient care and education; a patient pathway informing them about their disease and what to expect in the hospital; a nursing sign-off section to document services and information provided to patients and family; and, finally, a discharge orderset (accessible from SCM by entering the regular “discharge” orderset) which has some quick questions regarding what has been done for and provided to the patient. To ensure we all are providing Best Practices based care for our heart failure patients, this Pathway is audited for compliance. In fact, many of the outcomes tracked by the pathway are reported to CMS, the Center for Medicare and Medicaid Services, and are accessible to other hospitals and individuals nationally for review and comparison.

The parameters tracked in this pathway include documentation of left ventricular EF (may be written as percent, e.g. LVEF = 40%, or statement, e.g. LVEF moderately decreased); whether patients in atrial fibrillation have been started on warfarin; whether patients with LVEF \leq 40% have been started on an ACE-inhibitor (or an ARB is acceptable now); if the patient has a home scale and understands how to monitor his or her weight; whether smoking cessation counseling and information has been given to the patient (if a smoker); and whether follow-up for heart failure care was established. These parameters have been shown to improve outcomes for heart failure care. You should consider them during your care of this patient population.

Remember, the pathway, like all the medical pathways at Boston Medical Center, may be started at any time. If the patient comes into your care even days into the hospitalization, please use the pathway. It will help make sure your patient gets all the care, discharge planning, and services Best Practices suggest.

In the coming year, Boston Medical Center will be placing a particular emphasis on improving the care of heart failure patients. These disease-specific quality indicators will be monitored closely and improvement strategies evaluated. The pathway, with its ordersets, patient education, and multi-disciplinary approach, can help all of us take better care of this vulnerable population. Please contact the Cardiomyopathy Team with all your questions about heart failure management and the pathway. *J Greenwald*

Taking imaging of the small bowel to the next level

Imaging of the small bowel has always been challenging for radiology. Difficulties included the length of the bowel, the tortuous nature of the small bowel and poor distention of the small bowel. These difficulties were compounded by the relative paucity of pathology in the small bowel relative to other organs and the poor sensitivity and specificity of suspecting small bowel disease prior to imaging. Imaging modalities available to examine the small bowel have for the most part been confined to fluoroscopic evaluation following oral contrast; the well known ‘Small Bowel Follow Through’ (SBFT) examination from the early days of Roentgenology until recently. The SBFT is limited in both sensitivity and specificity for detecting small bowel pathology. A modification of the SBFT is small bowel enteroclysis. This involves intubating the proximal jejunum with a small bore tube and injecting a barium suspension directly into the small bowel. This has increased sensitivity and specificity for detecting and characterizing small bowel pathology over the SBFT, however, is time consuming and quite an unpleasant experience for many patients.

Conventional CT imaging was insufficient to evaluate the small bowel given the inability to obtain thin slices over a large area and poor coronal reformats as a result. In addition, small bowel distention remained difficult to achieve with conventional oral contrast agents.

As for direct visualization, push endoscopy has the capability to reach 40-100cm into the jejunum from the stomach and slightly less into the ileum from the colon. As a result, a large part of the small bowel has remained a blind spot for physicians.

Over the past couple of years, small bowel capsule endoscopy has been introduced. This modality gives direct images of the small bowel throughout its length for the first time. Although this represents a giant leap forward, the capsule endoscopy results in approximately 57,000 images that requires reviewing by the gastroenterologist. In addition, the capsule retention rate is reported to be 0.75% and this requires surgery for removal.

Continued →

Therefore, capsule endoscopy is by no means the panacea it was once thought.

The introduction of volumetric CT with the 64 row detectors now available has changed the landscape of small bowel imaging. These scanners can image the small bowel at 0.6mm slice thickness. This makes for excellent coronal and sagittal reformats. This has removed the length of the bowel and the tortuous nature of the bowel as limiting factors for small bowel evaluation. With regards to bowel distention, there are now commercially available negative oral contrast agents that result in improved small bowel distention compared to water. This enables optimal visualization of the small bowel mucosa and the bowel wall. This new CT technique to evaluate the small bowel is called CT enterography (CTE) and this is now available at BUMC. This will suit patients suspected of small bowel pathology, particularly Crohn’s disease, and will be useful in the investigation of anemia of unknown etiology with negative upper and lower endoscopy. This imaging technique is not for routine screening of all patients but should be considered in select patients suspected of small bowel disease, and in all patients for whom a capsule endoscopy is being considered. CTE is not designed to replace capsule endoscopy but should be used as an adjunct to evaluating the small bowel. One of the principal uses will be to identify those patients in whom a capsule should not be performed to avoid the potential risk of capsule retention.

B Lucey

MEDICATION RECONCILIATION

REDUCES ERRORS.

MAKE SURE TO RECONCILE

YOUR PATIENT’S MEDICATIONS

ON ADMISSION, TRANSFER, AND

DISCHARGE!

NURSING EXCELLENCE

Most of what nursing contributes to Boston Medical Center, to the community and the patients, is observed at the bedside. In collaboration with physicians and other multidisciplinary team members, more than 1,400 RNs provide the highest quality patient care. In addition to competence at the bedside, nursing has many recent accomplishments that I would like to share.

This year, we developed and published our first Nursing Annual Report, which showcases nursing achievements at all levels, from executive leadership to staff. Several of our nurses have been featured in national nursing publications for their professional practice, and many have won local and national awards in nursing excellence. Additionally, we have a strong nursing research committee that is charged with supporting evidence-based practice and nursing research projects throughout the organization. Over the past year, many nurses have become certified in their professional nursing specialty areas. A growing number of nurses participate in on-site Reiki training, used to support patients with stress management and the healing process. Our significant involvement in the community extends our care beyond the walls of the hospital. Nurses involved with our successful patient flow initiatives have presented our successes to national audiences, and serve as expert resources in the community. And, we recently completed our second annual RN Satisfaction survey with a 60% response rate. The results are benchmarked internally and against national hospitals. Last year, we scored above the national average in several categories. This list doesn’t include the everyday nursing interventions that significantly impact our patients, and often go unnoticed by many.

Departmentally, nursing has initiated several major projects to improve patient care. These include: a new nurse call system, new patient beds, many expansions and cosmetic updates on the units, and achievement of 95% pain assessment and reassessment. In our continued support of nursing excellence, and in

Continued →

recognition of the invaluable contributions of staff nurses, The Division of Nursing has begun an exciting journey toward Magnet designation. Magnet is a prestigious, competitive award given to health care organizations by the American Nurses Credentialing Center (ANCC), the largest accrediting organization in nursing. To be a Magnet Hospital, organizations must emphatically demonstrate that they meet the high standards of the “Forces of Magnetism.” Criteria include: high levels of nurse autonomy in their professional practice, strong collaborative relationships between nurses and physicians, commitment to continuous quality improvement that includes staff nurse input, staff that value and participate in ongoing professional development, improved patient outcomes, and evidence-based practice. Quite simply, the award is a tangible representation of the amazing work already being done here.

There are currently 169 Magnet Hospitals nationwide, and 4 are in Massachusetts: Massachusetts General Hospital, Winchester Hospital, Jordan Hospital, and the Dana-Farber Cancer Institute. Many more are in the application process.

This organization-wide initiative involves every employee. Because nurses are the “nucleus” of patient care, we interact and collaborate with a wide range of indirect and direct patient caregivers. Therefore, this award is not achieved in isolation. In the coming year, we look forward to continued recognition of our staff and the entire BMC community. Our collective efforts, successes, and accomplishments will bring us closer to attaining an award we so rightly deserve.

K Davidson

THE BOSTON MEDICAL CENTER

COMMUNITY FLU SHOT DAY

WILL BE HELD

DECEMBER 8

DETAILS TO FOLLOW.

**Food and nutrition services:
utilizing the diet education website**

Boston Medical Center's Patient Education Committee is in the process of creating a "Patient Education" website so that all staff can access patient education documents on the BMC intranet at all times. The dietitians have been the first to accomplish this. They have standardized, updated, revised, and tested for literacy many nutrition education handouts and continue to work on the remainder. One of the many services provided by the clinical dietitians at Boston Medical Center is the provision of diet / nutrition education to a diverse population of patients with a wide array of diseases and conditions. Although we now have easy accessible nutrition education handouts, this does not replace one of our most valuable services, consultation for dietitian services. A nutrition consult may be obtained by calling the dietitian office on the Menino Pavilion at 4.3837 or on the Newton Pavilion at 8.5945. Pager numbers for each dietitian are also posted on each patient unit.

Until the Patient Education website is established, nutrition education materials can be obtained on the Clinical Nutrition website found on the intranet by using the following steps:

- 1) Double click on the Internet explorer icon.
- 2) Choose the "Departments" heading at the top of the page.
- 3) Choose "Clinical Nutrition" from the list of departments.
- 4) On the left of the screen, choose the "Diet Education" option.
- 5) Choose any topic that is attached to a link (underlined) A PDF file will open with the appropriate education material.

Please refer to examples of available topics at right. More topics and updated information are continuously added.

A Flowers

Nutrition information sheets

Food Allergy / Food Intolerance Education:

- Egg Allergy Diet
- Shellfish Allergy Diet
- Soy Allergy Diet
- Nut Allergy Diet
- Milk Allergy Diet
- Following a Low-Lactose Diet

For Women:

- Feeding Your New Baby
- Nutrition and Pregnancy
- Gestational Diabetes

If You Have Diabetes:

- Carbohydrate Counting
- Using Sugar in Moderation
- Hypoglycemia

Food-Drug Interactions:

- Diet for Warfarin (Coumadin) Use

Enteral Nutrition:

- Continuous Tube-Feeding
- Syringe Bolus Tube-Feeding

Nutrition and Heart Disease:

- The DASH Diet
- Following a Sodium-Controlled Diet
- Understanding Fat

General Healthy Eating:

- Guide to a High-Fiber Diet
- Boost Your Iron Intake
- Interpreting the Food Label
- Healthy Eating in the Fast Lane
- Healthy Nutrition for Children and Adolescents

A Flowers

**Filing incident reports:
system improvements
not blame and shame**

Has one of your patients ever missed a drug dose; fallen out of bed; not gotten a scheduled therapy or test; gotten the wrong treatment, or nearly so? Medical errors and near misses happen all too commonly and account for a substantial number of the preventable bad outcomes for patients. Near misses, while they do not result in bad outcomes for patients, reflect a flaw in the system which, if not fixed, might result in patient harm in the future.

As busy nurses and doctors on the inpatient service, you are in an excellent position to take part in the improvement of the system so that it becomes safer and more efficient for those patients who will visit Boston Medical Center in the future.

One way to capture adverse events and near misses is by using the incident reporting system that is online. It only takes a couple minutes to file a report and the downstream effects of your efforts can make the difference between a safe environment for patient care and a system with holes in its safety net which permit patient injury.

Incident reports are brief statements of a situation that avoid blaming individuals for errors. They include the facts about the adverse event but not specific individuals. When reviewed, these reports are interpreted in the context of the "system improvement" mentality not the "blame and shame" mentality. That is, the reviewers of the reports do not try to point fingers at individuals for being lazy, negligent, or malicious. The reviewers try to identify system failures that can be remedied so that the same adverse event or near miss does not happen again. As practitioners of "the system," you front line care givers know where the holes exist so Boston Medical Center needs you to identify them so they may be fixed.

How do you file a report? Easy! Go to the Boston Medical Center Intranet Home Page and follow the following simple steps:

Continued →

1. Click on "Incident/Medication Safety Report in the right hand column.
2. For an "Incident Report," click the STARS link in the right hand column.
3. Type "BMC" in all three fields requested and press the login button.
4. Click on "IncidentReport" form
5. This opens the Incident Report Form. It is a self explanatory form that only takes a few minutes to complete.

Importantly, you will note that this form is confidential. You may include your name and contact information if you like but it is not needed.

Safety is everyone's responsibility. Do not let a patient adverse event or near miss turn into a missed opportunity to help the system learn. Make it your personal goal to fill out at least one Incident Report while on service this month and you will see how easy it is.

J Greenwald

Remember!

**On admission, please fill in
the medication lists
completely**

**INCLUDING whether you are
continuing each medication
and why you have stopped
those you have stopped.**

THANKS!

For better glycemic control for your inpatients use
the insulin orderset
found in SCM by typing "insulin."
Better glycemic control equals better care!

CASE REPORT OF COMMUNITY ACQUIRED MRSA

The case:

An otherwise healthy 25 y/o presented with cellulitis surrounding a moderately sized abscess located in his right lower arm. After the abscess was incised and drained, the patient was admitted for observation and initiation of IV antibiotics pending culture reports of his wound and blood specimens. The wound culture was positive for MRSA *sensitive* to multiple antibiotics including levofloxacin, bactrim and tetracycline. He was afebrile for 24 hours and was discharged on bactrim.

The above scenario prompted us to consider community acquired MRSA as a probable diagnosis for this patient. The patient described was not a known IV drug user and had none of the following known healthcare associated risk factors for acquiring a MRSA wound infection:

- h/o hospitalization in the past year or resident of a long term care/skilled nursing facility
- h/o dialysis or surgery
- presence of indwelling vascular catheter
- recent use of broad spectrum antibiotics

The accepted definition of community acquired (CA) MRSA being, ‘a methicillin resistant *Staph.aureus* occurring in a patient without healthcare associated risk factors due to an isolate carrying the SCC *mecA* type IV and likely to express the PVL virulence factor’ seem to fit the patient we described above.

So what is the SCC *mecA* gene and what is the PVL virulence factor?

Important advances in the study of MRSA phylogenetics, based on the characterization of the sequence of the methicillin-resistance gene, *mecA*, and of the genetic elements that carry this gene in different organisms, have provided evidence that methicillin resistance has evolved in different genetic lineages of *Staphylococcus aureus* by means of horizontal transfer of various staphylococcal chromosome cassettes (SCC).

Continued →

- Three types of SCC (types I, II and III) were originally described in hospital-acquired MRSA strains (HA-MRSA), most of them isolated before 1990. A fourth type (type IV) was recently described, first in community acquired MRSA isolates (CA-MRSA) and then in several MRSA backgrounds, including hospital isolates.
- The SCC *mec A* encodes for the PBP2a Penicillin Binding Protein) which is not inhibited by beta lactam antibiotics.
- PVL stands for *Panton Valentin Leukocidin*, a toxin, the presence of which increases risk of invasive disease

Clinical significance of Community acquired MRSA

- Usually affects young otherwise healthy individuals like the above patient, increasingly found in athletes
- Commonly skin and soft tissue infections with abscess being a very common presentation.
- CA-MRSA is typically sensitive to several or all of the following: bactrim, tetracycline, levofloxacin, clindamycin, and erythromycin. If the sensitivity panel says the MRSA is resistant to erythromycin but sensitive to clindamycin, do NOT use clindamycin as resistance may rapidly develop.
- Levofloxacin resistance may also develop rapidly so this drug is not preferred for CA-MRSA.

...And now back to the case.

The management of this patient was appropriate with the first step being source control achieved by incising and draining the abscess. As this patient was only mild to moderately ill, while awaiting cultures, clindamycin, doxycycline and bactrim could have all been used as empiric therapy. Of course, if the patient were seriously ill, vancomycin should have been started, pending culture results.

C Manasseh

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

Contact Jeff Greenwald

Bird flu: not just for birds anymore!

There has been a lot of hype and fear about the flu season surrounding the possibility of an outbreak of “bird flu” or avian influenza. So what is this scoop on this feathered frenzy?

Avian influenza (H5N1) is a strain of flu virus found in some parts of Southeast Asia and is related to human influenza. The H (hemagglutinin) and N (neuraminidase) designations reflect immunologically active proteins on the viral surface.

The first major outbreak of avian flu (H5N1) was in 1997 in Hong Kong. Isolates of flu virus from 18 patients showed that the H5N1 avian virus had crossed the species barrier and directly infected humans. While this infection was associated with a high mortality rate, there was no evidence that the bird virus could efficiently transfer from human to human.

If this is so, then why is the rest of the non-bird handling world so worried about this flu? The major concern stems from the possibility that if human flu and avian flu were to co-infect a human, there might be the possibility that there might be the exchange of genetic material between the viruses, causing avian flu to acquire the needed coding to permit efficient human to human transmission. As there is very little immunity to H5N1 strains in the human population, the spread of this new hybrid virus could lead to the next pandemic, with estimates of death tolls potentially topping 100-150 million people worldwide. This figure compares with the 50 million deaths in the 1917 flu pandemic.

Human cases of avian influenza (H5N1) clinically differ from human influenza in a few important ways. First, in humans, avian flu tends to have more gastrointestinal symptoms than human flu. The bigger issue is that avian flu also appears to progress to pneumonia and respiratory failure much more frequently than does human flu. Most deaths have been attributed to respiratory failure.

Continued →

What about treatments or prophylaxis against avian influenza (H5N1)? We have a limited number of medications that seem to have anti-viral activities against avian flu. In human influenza, amantadine and rimantadine have anti-influenza effects, as do the neuraminidase inhibitors, oseltamivir and zanamivir. However, the efficacy of amantidine and rimantidine against avian flu (H5N1) has been variable, working in the original 1997 outbreak but not in the some of the subsequent smaller ones. The neuraminidase inhibitors have generally maintained their therapeutic effects although one case of resistant virus has been reported.

The neuraminidase inhibitors are the center of a national controversy regarding the insufficient U.S. stockpile in the event of an outbreak. Many other countries have done a more efficient job at stockpiling medications. Nonetheless, ongoing questions for practitioners exist regarding providing prescriptions for oseltamivir (Tamiflu) to patients. The Boston Public Health Commission has requested that providers NOT provide prophylactic personal stockpiles for the following reasons: 1. it is unknown if oseltamivir will be useful against an avian flu outbreak; 2. stockpiling may lead to indiscriminate use of the medication which may promote viral resistance; 3. the medication has special storage requirements; and 4. there is currently a national shortage.

Nonetheless, like human flu cases, it is important to make the diagnosis and to institute oseltamivir within the first 48 hours of symptom onset. Hospitalized patients should be managed using droplet precautions (surgical mask within three feet of the patient).

For now, the best we can do personally is watch our patients for flu symptoms, wear a mask when examining a patient with a new cough, sanitizing our hands before and after evaluating each patient, and getting a flu shot this and every year. As healthcare workers, vaccinating ourselves helps protect ourselves, our families, and our patients.

J Greenwald

C Sulis

References:
WHO. Current Concepts: Avian Influenza A (H5N1) infection in humans. *New Eng J Med.* 2005;353(13):1374-85.

“Double-covering” Pseudomonas: fact or fiction?

When treating serious bacterial infections, are two drugs better than one? There are theoretical reasons why a second agent might be desirable. The use of combination therapy might promote synergistic action with more rapid killing of bacteria (particularly in a setting of bacteremia or sepsis) or might delay emergence of bacterial resistance to treatment. In addition, legitimate concern that one drug might not be adequate in the setting of increasing antibacterial resistance often prompts a physician to hedge his/her bets by adding a second agent to increase the likelihood that empiric therapy will cover the causative organism. What is the most reasonable approach when gram-negative infections are a concern?

In the setting of empiric treatment, considerations for a second agent should primarily focus on increasing the likelihood that the organism is susceptible to the antibiotic(s) chosen. The more critically ill the patient, the more essential it is to ensure within reasonable parameters that an antibiotic with activity against the involved pathogens is on board quickly. If bacteria that have higher rates of antibacterial resistance, such as *Pseudomonas aeruginosa* or *Enterobacter cloacae*, are a serious consideration, it is very reasonable to treat with a beta-lactam agent such as cefepime and an aminoglycoside, pending cultures and clinical improvement. Although resistance to gentamicin is increasing, cefepime and gentamicin remain a good empiric choice.

It is a very different situation when the pathogen is identified and the susceptibility patterns are known. Assuming that resistance is not an issue, does combination therapy matter?

Twenty years ago, a prospective study demonstrated improved survival if patients were given combination therapy for *P. aeruginosa* bacteremia. However, the study had serious methodological problems including the fact that many patients on monotherapy were treated only with aminoglycosides. Earlier work had demonstrated that aminoglycoside monotherapy was associated with high rates of clinical treatment failure in serious *P. aeruginosa* Continued →

infections. Other studies have shown conflicting results. A 2004 meta-analysis of randomized studies examined beta-lactam monotherapy versus beta-lactam/ aminoglycoside combination therapy for non-neutropenic patients with sepsis. That analysis demonstrated that beta-lactam monotherapy was equivalent to combination therapy and associated with fewer adverse events for all patients including the subset with documented *P. aeruginosa* infection. However, that same year, another meta-analysis of patients with bacteremia using mostly non-randomized studies showed a survival benefit of combination therapy in patients with *P. aeruginosa* infection. As for the emergence of resistance, a cohort study conducted in 1999 suggested that treatment with ceftazidime or ciprofloxacin was unlikely to result in the emergence of resistance during therapy. Thus, a cephalosporin or ciprofloxacin (if susceptible – rates of *P. aeruginosa* resistance to ciprofloxacin at Boston Medical Center approach 50%) are preferred treatments for known susceptible *Pseudomonas* infections.

Although one drug is adequate in the majority of patients with *Pseudomonas* infection, given the conflicting data it is a reasonable approach to add a second agent in patients with critical illness, *Pseudomonas* pneumonia, or severe underlying disease. But no data – old or new – has supported combination therapy for other gram-negative infections. Treatment of a gram-negative pathogen other than *P. aeruginosa* can be accomplished without the need for a second agent. Concerns regarding treatment of resistant gram-negative infections should be addressed to the Antibiotic Management Team (beeper 8523) or with an Infectious Disease consultation.

It is appropriate to cover broadly initially but when the pathogen is known, treatment must target the pathogen with the most effective agent available to the clinician. Adding a second agent for no good reason will not improve your patient's outcome but will increase adverse events and antibiotic exposure in the hospital community.

T Barlam

Vaccinating inpatients against the flu

It's flu season again and in an effort to protect our patients, Boston Medical Center began offering our inpatients flu vaccines starting on October 3. According to the CDC, patients considered high risk for contracting the flu include:

- persons >65 years old
- persons 2-65 years old with comorbid illnesses, make regular medical visits, or are exposed to long-term care facilities
- children aged 6-23 months
- pregnant women
- residents of long-term care facilities
- children 6 months to 18 years of age who are placed on long-term aspirin therapy
- persons with decreased ability to clear respiratory secretions or abnormal respiratory function
- household contacts and out-of-home caregivers of children aged <6 months

As most patients on the inpatient service meet the above criteria, providers should consider all hospitalized patients eligible for vaccination and should be encouraged, if not previously vaccinated, not allergic to eggs, and does not have a history of Guillain-Barre syndrome, to get vaccinated. The SCM discharge order set will be "pre-checked" to order the shot for all patients and providers must uncheck if they do not wish to give the vaccine. Please remember to talk with your patients about the vaccine on discharge and not just order it without asking patients.

The influenza vaccine, the inactivated form, is given intramuscularly while the attenuated form is given intranasally. This year's vaccine contains three different strains, namely two A virus strains (H3N2 and H1N1) and one B virus strain. Of note, the nasally delivered, attenuated vaccine is only approved for healthy individuals between the ages of 5 and 49 years

Continued →

of age.

This year's goal is to vaccinate 1,000 inpatients.

Often patients, family, and even health care providers question the effectiveness and the public health utility of the flu vaccine. Some believe, falsely, that one can get the flu from the flu shot. Here is some data. It is estimated that 5% to 20% of the United States population will contract the flu. Moreover, it is expected that 200,000 patients will be hospitalized with the flu or its complication and up to 36,000 will die from flu-related issues. Complications of the flu include bacterial pneumonia, dehydration, or worsening of the chronic medical conditions. It is believed that the flu vaccine is 50-60% effective in preventing hospitalization and 80% effective in preventing death in elderly nursing home patients.

Since flu season usually peaks between the months of December and March, it is recommended to begin delivering the vaccine in October. As there have been outbreaks as late as April, Boston Medical Center will continue to encourage vaccination until March. Flu shots for BMC staff and trainees will be offered in the coming several weeks and all eligible individuals are strongly encouraged to be vaccinated. It decreases sick days but more importantly, decreases the chances that health care workers will transmit the flu to other patients or to their families.

The best manner to prevent hospital workers from contracting flu, transmitting the flu, or having its complications is to receive the flu vaccine. We also encourage everyone to practice infection control measures, including hand washing, covering the mouth, and avoid spreading germs through close contacts. Lastly, antiviral medications are suggested to be used during the first two days of the flu for patient population at high risk for serious complications of the flu.

Help protect your patients by encouraging them to get vaccinated. For further information, please see the BMC intranet's section on the flu or contact: Dr. Jeff Greenwald at 617-414-4373.

C Huang

Despite harsh living environments at area shelters, medical services are accessible

After a recent tour of area homeless shelters, one BMC medicine resident declared, "Seeing the living conditions at Long Island Shelter was a tough experience. It was much worse than I thought it would be. I now have a different perspective of what our homeless patients cope with." The scene at Long Island Shelter is indeed grim.

The drive out to the island, through Quincy, is tranquil and deceiving. An approaching visitor can see clear across the bridge, past many small islands, to the Boston skyline. The scene evokes a sense of isolation and peace, until you reach the door of the shelter.

The contrast is stark. The "bedrooms" are dimly lit and filled with heavy air. Hundreds of beds are crowded together in each large room, bunked on top of each other and only a couple feet from the next bunk. When in bed, a person can look to his left, right, and behind him and find that he's separated from the faces of others by only a few feet. The mattresses are green, plastic-coated, and flimsy. A hard pillow and wool blanket are usually, but not always, provided. There are no sheets.

The most dismal rooms of all in the shelter are the bathrooms. Cold, sticky tiles line the floors and walls. A row of sinks sits in front of several dingy toilets that lack doors and privacy. Showers, too, are wide open. The most uninviting aspect of all, though, is the stench of the bathrooms. This is the hardest part of the tour.

While the cafeteria has windows that look out over the harbor to the beautiful Boston skyline, the view gives occupants a strong sense of inequality. The kitchen serves large portions of inexpensive, high-fat, high-calorie food. A lump of macaroni and cheese with a slice of pie for dinner ... but at least there is dinner to be had.

On the first floor of the shelter, Boston Health Care for the Homeless Program (BHCHP) – A.K.A. McInnis Health Group – runs a nightly medical clinic, staffed by various

Continued →

combinations of nurses, a medical assistant, two physicians, and a nurse practitioner. Everyone has an exam room and a computer that is networked with BMC. The busiest clinic hours are the evenings, 4:30p to 8:30p, when the shelter is crammed with people. Primary care appointments and walk-in visits are the focus. There is rarely a dull moment.

In the shelter, relationships with patients take on a different quality. Barriers are broken down. Time is spent listening to complex life stories and figuring out reasons for homelessness. How does chronic illness fit in? Competing priorities become painfully clear to health care providers who deliver care in a shelter. Patients talk to nurses and doctors who understand what life in the shelter or on the streets is all about: survival. Ultimately, this reality is, as it must be, factored into creative medical decision-making.

On the adjacent page is a list of some area shelters commonly utilized by our patients. All providers may be contacted through the McInnis Health Group main paging system at: 781-221-6565. Contact information is listed for the BHCHP medical clinics located within each shelter.

J Gaeta

Need to Borrow an Ophthalmoscope to Examine a Patient?

At Menino Pavilion See:

**Jackie O'Shea
Nurse Manager, 6 East**

At East Newton Campus See:

**Brian Brisbois
Nurse Manager, 8E**

**Dina Bruneis
Nurse Manager, 7N**

Long Island Shelter, Quincy

Medical Clinic Phone: 617-534-2526, ext. 320

Nurse Manager: Karen Sherwin, RN

Providers: Matthew Joslyn, MD
Thoko Lipato, MD
Mary Smith, NP
Katie Fitch NP

Pine Street Inn, Boston

Medical Clinic Phone: 617-521-7215

Nurse Manager: Trish Bowe, RN

Providers: Jonathan Rothberg, MD
Jim O'Connell MD
Julie Moxen, NP
Toni Abraham, NP

Saint Francis House, Boston

Medical Clinic Phone: 617-542-4704

Nurse Manager: Cecelia Ibeabuchi, RN

Providers: Jessie Gaeta, MD
Monica Bharel, MD
Phil Pulaski, MD
Alison May, MD
Thoko Lipato, MD
Anne Fitzgerald, NP
Stacy Kirkpatrick, NP
Kevin Fairley, NP

Father Bill's Place, Quincy

Medical Clinic Phone: 617-770-3314, ask for clinic

Nurse Manager: Hope Wilson, RN

Provider: Jessie Gaeta, MD RN

Street Team (outreach on the street)

Reachable only via pager 781-221-6565.

Nurse Manager: Cheryl Kane, RN

Providers: Jim O'Connell, MD
Patrick Perri, MD
Jill Roncarati, PA

Remember!

It is the team's responsibility to contact the Primary Care doctor on admission, discharge, and with any significant change in patient status.

Better communication is better patient care!

Please be on time for Care Management Meeting.

Monday through Friday.

Help the Care Managers help you get your patients discharged!

Forget the Alamo!

**Remember the Pathways!
Heart Failure
Acute Coronary Syndrome
Chest Pain
Community Acquired
Pneumonia**