**Stop the Rat Race:**

**Take an Inspiration Break!**

“It’s payday and I get a massage???”

That’s right, on Thursdays at 2pm in the ICU classroom on the 5th floor of Menino nurses and other guests from some of the hospital’s most intense units gather for a time of rest and relaxation. Their hosts, social worker Alisa Zaref, and chaplains Jennie Gould and Peg Newman, provide refreshments, relaxing music, shoulder, neck and hand massage. Alisa has let us borrow her foot massager that comes with disposable booties so that people can enjoy an invigorating foot massage! Also available is a collection of art therapy materials and supplies for making stress balls. In addition, Peg often provides inspirational messages and short stories that folks can take with them.

This “inspiration break” is an opportunity for people to unwind and, if they choose to, leave their burdens behind. An added benefit is the chance for staff from different units to connect with each other. There are no rules and no expectations, just friendly people and a place to seek whatever kind nourishment suits them best. A nurse might drop in on a busy day for just a minute or two and leave with a cookie or a story but the next week she/he might be able to come back and enjoy “the works” - a cup of herbal tea, a neck and shoulder massage, a hand or foot massage, a snack, some good conversation and laughter, probably the best medicine any hospital has to offer.

The break team hosts explain, “We truly appreciate the hard work and dedication of staff working with our very challenging patients and we have identified a great way to give back to them. When people leave the inspiration break with a smile on their face and a little more spring in their step, it is easy to see that not only the staff, but also their patients, benefit from this much-needed self-care.”

All are welcome. Please join us for an inspiration break.

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**THE INPATIENT TIMES**

**Contributors**

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Find old editions of The Inpatient Times at [www.internal.bmc.org/medicine/it/it.html](http://www.internal.bmc.org/medicine/it/it.html)

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**Medication Reconciliation! What is all the Fuss?**

**Blocking Future Admissions by Safely Discharging Your Patients**

“It’s not this what we’ve been doing all along?” Perhaps you have, but the system has not! Medication errors are the #1 cause of post-hospitalization confusion and problems with patients discharged from the hospital and therefore the #1 cause of preventable readmissions and avoidable hospital utilization (including ED visits). They don’t take the correct meds; they take too many meds; they don’t fill their meds; they take meds they were supposed to have stopped, etc…… You know the reasons.

So 2005 marks the beginning of the nationwide push to curb these medication errors and adverse events and BMC has joined in the efforts to improve medication accuracy, communication, and education. The process is called Medication Reconciliation. It is a multi-step process to “do the right thing” for your patients, both in hospital and as they transition back to the ambulatory setting. This is how it works:

1. Admitting teams take a detailed med history from the patient, family, and available records and document the complete “real” med list on the H &P (Part I) form. Teams must document any planned changes (additions, dose changes, eliminated meds) in their assessment & plan sections and confirm in their admitting orders that they have done so.
2. The RNs check the EMAR to make sure that all meds ordered there make sense based on the med list documented in the H&P form (Part I) and any changes noted in the assessment & plan and speak with the team about the discrepancies.
3. When a patient is transferred between services or locations (e.g. transfers from surgery to medicine or MICU to D2) the med lists must be reviewed and “reconciled,” eliminating any old meds that are no longer relevant and adding any new ones, always looking back at the admitting list of “outpatient” meds to make sure the current list is appropriate and complete.
4. In preparation for discharge, patients must be educated about their medications; nurses and pharmacists join physicians in completing this part of the process.
5. Consideration of how the patients will acquire their medications may require pharmacy, care management, patient, and family input.
6. The primary team is responsible for reviewing the outpatient list documented on the admission H&P and using it and the inpatient list to create a med list for the discharge summary, breaking meds down into old meds to continue, new meds to take, and meds no longer to take at home.
7. Prescriptions for new meds are to be written in Logician and the Logician med list should be updated to reflect the discharge medication list.
8. RNs will prepare a medication list to take home and review it with the patient.
9. The team will communicate with the primary care and other relevant caregivers at discharge.

These 9 steps can be cumbersome and time consuming but are necessary. This program will be fully operationalized over the next few month and must be up and running by 1/1/06. As the technology improves, more of this process will be automated to make your job easier. Thanks for working to keep our patients safe. A little extra work now may keep your patient from bouncing back tomorrow.

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**The Inpatient Times**

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

Vol 11; July 2005

A publication of the Department of Medicine and the Hospital Medicine Unit
Urine Drug Screens

Urine drug screens (UDS) are frequently ordered on patients who exhibit symptoms of intoxication, experience trauma, or have a history of drug abuse that requires the monitoring of compliance with a rehabilitation program. The Clinical Laboratory at Boston Medical Medical Center offers immunoassay screening of the common drugs of abuse. Most immunoassays for UDS are automated and offer rapid turnaround times. The common drugs or classes of drugs in the UDS include amphetamines, barbiturates, benzodiazepines, cannabinoids, cocaine metabolite, methadone, opiates, phencyclidine and tricyclic antidepressants. The BMC UDS offers amphetamines, barbiturates, benzodiazepines, cocaine metabolite and opiates. Methadone and cannabinoids are offered but must be specifically requested. The laboratory no longer offers phencyclidine since it is not commonly seen at BMC. Tricyclic antidepressants are only offered in BMC’s Serum Drug Screen.

The specific immunoassay methodology utilized by the BMC laboratory is based on the EMIT (enzyme-multiplied immunoassay technique). In this assay, an antibody is designed to detect a specific class of compounds (e.g. barbiturates), a parent drug (e.g. methadone) or a metabolite (e.g. benzoylecgonine, a metabolite of cocaine). Qualitative results are based on a specific calibrator concentration. Positive results reflect a concentration above the calibrator cutoff, while negative results reflect concentrations below the cutoff and do not exclude the presence of drug or metabolite. The antibody specificity varies within the drug class and each individual drug within the class requires a different urine concentration to trigger a positive result. Certain antibodies may also cross-react with medications outside the target drug class leading to false positive results.

The extent of cross-reactivity depends on the manufacturer’s platform and the assay cutoff. The Department of Laboratory Medicine (clinical laboratory) has on its website (http://www.internal.bmc.org/laboratory/chemistry.html) information on the cross reactivity of specific drugs with the UDS (e.g., morphine is detected by the opiate assay, but oxycodone is usually not detected unless very high concentrations are achieved) and possible interference of therapeutic medications (e.g., therapeutic concentrations of the fluoroquinolone antibiotics, oxofloxacin and levofloxacin, can interfere with the opiate assay).

Clinicians should appreciate the limitations of UDS in the medical setting including potential interferences. If a physician suspects a false positive result or is concerned about non-detection of a prescribed drug (e.g. compliance with certain pain medications) the laboratory should be notified and the specimen should be sent for confirmatory testing after consultation with the clinical pathologist [the clinical pathology (Laboratory Medicine) resident on-call, is 4564, who can facilitate with the additional testing]. Confirmatory assays are specifically important when positive screening results could influence a decision on removal of a child from a parent, compliance with a drug rehabilitation program, or in any situation that could impact on a patient's ability to keep a job or receive appropriate pain medication, in the case of a negative result).

The toxicology information tables (on the website) identify the current toxicology panels (both serum and urine) used at BMC, the specific drugs detected with each assay and duration of a positive result. Ability to know if therapeutic drug testing can also be found on the website and specifies when blood should be drawn, container (tube) type, and critical alert values for drugs that are tested for at BMC. For additional information on laboratory testing, please see the BMC Department of Laboratory Medicine's homepage http://www.internal.bmc.org/laboratory/index.html

Excerpts of this article are from “False positive urine drug screens: What clinicians should know and When the laboratory should be consulted?” by Stacy Melanson and BJ Magnani, for News Path, 2005

Want to write an article for the Inpatient Times? Contact: Jeff Greenwald
SCM Diet Order Guidelines

Have you been called by a nurse to change a patient’s diet order when you clearly see “Regular” as an active order on your computer screen? The following guidelines should help navigate the
New Sunrise Clinical Manager (SCM) System diet order entry system.

First of all, it is important to know that the interface between the Nutrition Services software, known as Computation, allows for only one diet order at a time to be interfaced. Because of this, the most recent diet ordered chronologically will be interfaced to Nutrition Services until a new diet order is entered. Discontinuation on the last diet order chronologically does not stop a tray or change the diet to a previous active order. In other words, all diet changes require a NEW DIET ENTRY and DISCONTINUATION of all previous diet orders. The only exception allowing multiple active orders is the ordering of an oral supplement, such as Boost, Mighty Shake, or Promod powder in addition to a diet order.

Ordering管Oral Diets and Supplements

- All patients must have a diet order, including those with NPO status.
- Select patient in SCM, click on “notepad” icon or on “orders”.
- Best option: Selection “Food & Nutrition” from the order browse.
- Select a diet order category from the order browse, i.e., NPO, liquids, cardiac, renal, diabetic, supplements, etc.
- Click on specific diet desired from category choices. Look for the dietitian’s recommendation in the medical record, or request a nutrition consult if unsure of diet appropriate for patient.
- Before submitting diet order, select “VIEW” if additional instructions needed to RN or Nutrition Department. “SPECIAL INSTRUCTIONS” provides a limited text field for more specific instructions important for patient tray service.
- Examples: “thickened liquids” or “1000cc fluid restriction”.

Ordering Tube Feeding

- Refer to the patient’s medical record for the “Nutritional Assessment” for tube feeding recommendations, and if not available request a nutrition consult.
- Select “Tube Feedings” under the “Food & Nutrition” browse; then select the desired tube feeding, and GOAL RATE.
  
  **Example**: Traumacal 50 cc/hr.
- Select the tab “VIEW” for additional nursing instructions, such as tube feeding advancement schedules or parameters for holding tube feedings.
  
  **Examples**: “advance tube feedings by 10 cc every 8 hrs to goal rate,” “hold tube feedings 2 hrs. before and after Levofloxacin dose,” or “hold tube feedings x 1 hr. when q 4 hr. residual check x 200cc.”
- All patient care units are assigned a dietician with pager numbers posted on each floor. When in doubt, always page the RD!

**Care Management and Social Work: A Winning Team**

Did you know every inpatient unit at BMC is covered by Care Management? The Care Management Department is made up of both RN Care Managers and Social Workers. Under this model, the Social Workers and Care Managers work together on care coordination and discharge planning in order to provide a seamless flow for the patient from admission, through discharge and extending into their aftercare. Many aspects of the roles overlap, however, each discipline brings unique experience and expertise to the role.

The inpatient medical social workers participate in many aspects of complex discharge planning such as skilled nursing facility placements, finding inpatient psychiatric beds, and referring patients to community agencies. However, a larger part of their role is to utilize their specific knowledge and skills pertaining to human behavior, social problems, and emotional concerns. Medical social workers look at the many factors that impact upon a patient’s physical and emotional well being in order to provide a holistic biopsychosocial assessment of their problems and needs. Social workers assess a multitude of factors in order to help a patient and family cope with a difficult medical situation and adjust to the illness. These can include a patient’s culture, financial status, religious affiliation, social supports, compliance with care, and relationships with family. Medical social workers can help a patient and family learn new coping skills to deal with the challenges and problems caused by illness or life changes. Inpatient social workers are also specially trained in providing crisis intervention and short-term, solution focused therapy. Victims of violence and patients who have experienced trauma are seen by the inpatient social workers to alert them to signs of post-traumatic stress disorder and to refer them to individuals counseling and support groups. End of life issues can also be addressed by the medical social worker who can help to educate the patient and family about their care options while providing supportive counseling for bereavement issues. Social workers also have expert experience and knowledge regarding mandated reporting requirements to regulatory agencies.

A social worker’s education and training brings another dimension to the care given at BMC. A medical social worker uses the unique perspective of always trying to understand the presenting problem from the patient or family’s point of view. From there, the social worker will focus on the patient’s strengths and past positive outcomes when dealing with illness or a life change.

The Care Manager’s primary responsibilities include utilization management, care coordination, and discharge planning. Utilization management includes communication with insurance payers to secure reimbursement, tracking variance delay days, decreasing the length of stay, and transitioning patients to alternate levels of care as efficiently as possible to accommodate BMC’s growing volume. Discharge planning includes arranging post hospitalization services such as Visiting Nurses, home oxygen, short and long-term rehabilitation.

Much of the care coordination is accomplished through the care management/house staff rounds. Discussions between these two groups should occur daily on every unit. This provides an opportunity for the care managers and house staff to exchange vital information regarding the patients’ care. Usually a brief clinical update is discussed as well as potential discharge plans, thereby planning for “the day and the stay.”

The Care Managers and Social Workers are available 7 a.m. - 4:30 p.m. Monday to Friday, and also evenings, weekends and holidays. Addressing every aspect of a patient’s emotional and social need while simultaneously providing health care demonstrates care management’s commitment to provide “exceptional care without exception.”

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*Care Management Rounds: Menino Pavilion*

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<th>Notes</th>
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<td>B2 - 10:30am</td>
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</tr>
<tr>
<td>B3 - 10:45am</td>
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*A teams: 11:00 – 6th Fl Conf Rm*  
*Please Be On Time! Thanks!*  

*Continued ➔*

*Continued ➔*
PICC/Midline Service at BMC

What is a P.I.C.C. Line?

P.I.C.C. stands for Peripherally Inserted Central Catheter. This is a catheter designed to provide therapy to patients who need iv therapy for five days to one year. PICC Lines are placed at the bedside by Registered Nurses who have specialized training. The IV Team Charge RN on the Menino Campus and the IV Team Nurse Manager possesses the skill to insert PICC/Mildlines at the bedside under ultrasound guidance.

PICC Lines are inserted in the arm into the basilic, cephalic, or median cubital veins. The catheter tip is advanced until it is in the lower third of the superior vena cava. The PICC is available in single or dual lumen varieties. When PICC line insertion cannot be achieved by the IV Team, these patients should be referred to Vascular Interventional Radiology (VIR).

What is a Midline?

Midlines are inserted in the same fashion (basilic/cephalic vein) as a PICC Line, with the exception that the catheter tip is placed below the axillary vein. This is not considered a central line.

Consider the following criteria for long-term iv access line placement:

**PICC Line**

1. Length should allow for ideal tip placement in the Superior Vena Cava.
2. Use with patients with poor venous access.
3. Use with therapies with serum osmolalities >600mOsml, pH<5 or >9 (e.g. hypertonic TPN with dextrose concentrations >10%, irritating therapies, and solutions containing protein concentrations >5%).
4. For use with some patients with alterations in coagulopathy when other central lines may not be appropriate.
5. Can be used for therapies up to 12 months
6. Reduced risk of complications when compared to other central catheters.
7. Low cost for placement when placed by IV Team ($200) vs. VIR ($1500)
8. Eliminates multiple peripheral iv restarts.
9. Dressing changes every seven days.

**Midline Catheter** (categorized as a “peripheral catheter”)

1. Ideal for intermediate therapies of 5-28 days.
2. For use with peripheral therapies needing greater hemodilution.
3. Use with therapies with serum osmolalities <600mOsml and a pH between 5-9.
4. Idea for non-venous therapies via IVP or infusion.
5. For use with some patients with alterations in coagulopathy.
6. Very low risk of complications
7. Low cost for placement by IV team.
8. Dressing changes every 7 days.
9. No need for chest x-ray after placement.
10. Eliminates multiple peripheral iv restarts.

If you would like more information regarding early assessment of venous access needs for your patient, please contact the IV Teams at the following numbers:

**East Newton Campus**
Office 8-5753
Pager 2725 or 2453

**Menino Campus**
Office 4-4150
Pager 7070 or 7080

**John Costa, RN**
(Nurse Manager, IV Team)
Office 4-4613
Pager 5603

The Future of Venous Access is Coming to BMC

The volume of PICC lines inserted by the IV Team has grown substantially in the last several years. In 2000, with the combined effort of the IV Team and Vascular Interventional Radiology (VIR), there were 144. With 736 PICC placed in 2004, there was a 510% increase in PICC insertions. Out of the 736 PICCs inserted in 2004, the IV Team placed 57%. In June 2005 the IV Team inserted 75% of all PICCs placed at BMC (compared to 57% in 2004).

This increase is related to the micro-introducer technique introduced by the IV Team in the Fall of 2004 and with the portable ultrasound assist in the Spring of 2005. The cost of placing a PICC at the bedside is $200 vs. $1500 at VIR. Not only is there a cost savings but also now fewer patients are going to VIR for a low-tech procedure in a high-tech suite. For example, an ICU patient would travel with their RN, Respiratory therapist, and transport. This is an added expense, but first and foremost a patient safety issue.

In response to the new increase, the newly available technologies, and the desire to maintain safe and efficient practices, the Boston Medical Center IV Team will be creating the Venous Early Assessment Program, a program that will offer a proactive approach to venous access with an early assessment via the Venous Access Team (VAT). This program will be the first of its kind in New England and will ensure proper patient vascular access, eliminate iv restarts, improve patient satisfaction, decrease peripheral iv associated complications, save money, and decrease length of stay.

REMEMBER, early assessment of venous access needs for the patient begins in admissions! PICC/Midline referrals received early in the admission greatly increase the likelihood of successful PICC/Midline insertions without the need for a costly Radiology intervention!

CT Angiography has Arrived!

Over the past few years, with the introduction of multi-detector CT scanners, CT angiography (CTA) has been replacing conventional angiography for many indications. Coronary angiography has long been considered the ‘Holy Grail’ of CTA. Even the early multi-detector CT scanners could not produce images sharp enough or quickly enough to provide adequate resolution for coronary CTA. Cardiac motion and the tiny size of the coronary arteries always provided radiologists with a challenge. The development of 64-row detector CT has changed all that. BUMC currently has two 64-row detector CT scanners and is the only institution in the world at present with such an array of CT firepower.

These CT scanners permit imaging of the entire heart and coronary arteries in the length of time taken for five heartbeats. Scan thickness is now measured in microns not millimeters. The opportunities with such powerful CT technology are endless but include a new, robust imaging modality to evaluate patients with chest pain. Just imagine all those patients with chest pain that have equivocal or mildly positive stress tests or are unable to complete a stress test that you do not want to subject to invasive coronary angiography. A non-invasive alternative is now available. CTA is designed to compliment conventional coronary angiography, attempting to stratify those patients that require interventional angiography.

Alternative uses include the evaluation of acute chest pain from the ER, the so-called “triple-rule out” scan: a coronary CTA, CTPA and dissection protocol all in one imaging acquisition for patients presenting with acute chest pain. Another role for coronary CTA will be in the pre-operative work up in high-risk patients about to undergo major surgery. Such patients may not be directed to invasive coronary angiography routinely but now that a non-invasive alternative is available, this type of screening may be reasonable. In addition, patients undergoing CABG may be assessed pre-operatively to evaluate the internal mammary artery or evaluate the patency of the in situ grafts.

Got a patient who might benefit from CTA? Come talk with the radiologists. We want to hear from you!”

This academic year is full of excitement and change for everyone from the newest of interns to the most seasoned faculty. Countless business classes and psychology self-help books abound to help all of us adapt to change. Nothing can precipitate the heightened defenses of insecurity and fear like change. The “spin,” of course, is that change is good. So let me review with you our list of changes and why “no spin” is necessary.

First and foremost we have an outstanding group of 57 new interns. This group represents 35 medical schools and includes 26 women and 31 men. We also continue to successfully attract a diverse group with 12 underrepresented minorities and 2 international students. Our interns are already benefiting from the teaching and leadership of new PGY2 and 3 house officers (who are relieved from discharge summaries and on to new levels of decision-making responsibility, teaching and leadership).

First, we congratulate Dr. Joseph Loscalzo on his new position as the Hersey Professor of Medicine, Chairman of the Department of Medicine and Physician in Chief of the Brigham and Women’s Hospital. He was an inspiration and role model for all striving to excellence in all realms of academic medicine: teaching, patient care, and research. He helped us all do the best that we could and enriched our long tradition of excellence at Boston University Medical Center.

The Department is now under the interim leadership of Dr. Thomas Moore, formerly the Associate Provost for Clinical Research and more recently the Acting Provost of our Medical Campus. Dr. Moore is a distinguished scientist and clinician who spent the majority of his career at the Brigham & Women’s Hospital before being recruited to our campus as our Director of Research Center on hypertension, nutrition, and metabolism, where he is internationally known. He is also the chair of the search committee for a new chair of Medicine. That search is underway and the committee has already interviewed several outstanding candidates. We look forward to Dr. Moore’s stewardship during this time of transition.

We have a new Dean and Provost, Dr. Karen H. Antman. Dr. Antman is an internationally known hematologist-oncologist who spent the majority of her career at the College of Physicians and Surgeons at Columbia University. Recently, she was the Deputy Director of Clinical and Translational Research at the NCI and NIH before being recruited here. She has already begun work on a number of exciting challenges including curriculum reform, and the completion of the Moakley Cancer Center and new National Emerging Infectious Disease Laboratory. We hope to involve her actively on the teaching and clinical service.

Boston University has a new President, Robert A. Brown formerly the Provost of MIT. He succeeds Dr. Aram Chobanian who many of us from his many years of leadership as Dean of the Medical School. President Brown assumes the leadership on September 1st and promises to be a real advocate for the scientific community here at BU.

We welcome Maria DeOliveira, our new program administrator. Maria succeeds Christine Curran, who served the department for 5 years. Christine obtained her Masters in Health Administration from BU and has moved on to administrative work the Brigham and Women’s Hospital. Maria was successfully recruited from the Carney Hospital where she ran several programs over the past 5 years.

Our Internal Medicine program recently received full accreditation and the maximum 5-year cycle length from the RRC-IM of the ACGME. We are very much indebted to all those residents and faculty who met with the site visitors and helped complete all the necessary paperwork in preparation for the site visit and review. I first set foot on this campus in 1982. The changes over the years have been astounding. The bottom line (no spin necessary) is that our housestaff is more and more impressive each year and the campus has never been healthier! We look forward to continued growth, prosperity and new leadership.

Continued →

Changes to the Fellowship Application Process

During my tenure as President of the Association of Program Directors in Internal Medicine, I began a movement to reform the fellowship application process because many Internal Medicine Program Directors felt that the process was grossly unfair to residents.

Currently I serve as the chair of The Task Force on Reforming the Fellowship Application process for the Alliance for Internal Medicine (AIM). AIM, represents the 5 major academic Internal Medicine groups including the Association of Professors of Medicine, the Association of Program Directors in Internal Medicine, the Association of Societies of Internal Medicine, the Clerkship Directors in Internal Medicine, and the Administrators in Internal Medicine.

To date we have made substantial progress with respect to several of the important goals regarding fellowship application. These goals include: a uniform electronic application process (ERAS) for all fellowships; delaying the application process to allow for more time for applicants to make career choices and for fellowships to evaluate applicants; and finally, encouraging fellowships to utilize the match rather than rolling appointments.

ERAS for fellowships was used last year by Pulmonary/Critical Care, Rheumatology, and ID. It was very successful. This year it will also be used by all the other fellowships (Heme/Onco, Renal, Cardiology, and Endocrinology) with the exception of GI and Geriatrics. They will both use it next year. The timeline for utilizing ERAS for fellowships will be detailed in an email to all residents. The goal is to facilitate a mutually beneficial resolution. “Often the resolution that a patient seeks is reasonable. Sometimes however, the proposed resolution is not a realistic one. In those situations, our role is to manage expectations” states Joe Churchill, the newest member of the Advocacy staff.

The Patient Advocates can be contacted at 4-4970. Office hours are Monday-Friday 8:00 am-4:00 pm. After hours and on weekends, the Central Administrator will respond to calls. We look forward to hearing from you!
Pain Management at the End of Life in the Elderly

Your 78yo patient with metastatic pancreatic cancer was admitted with 10/10, stabbing, intermittent, epigastric pain. What pain medication do you treat him with?

Pain is one of the most dreaded symptoms at the end of life. This article addresses the pharmacologic treatment of physical pain. Elderly patients with pain are managed differently than younger patients. The elder is more likely to under-report pain and has a higher incidence of side effects from pain medications. Untreated and under-treated pain can lead to negative outcomes such as depression, insomnia, ambulation difficulties, and social isolation.

The most widely used pharmacologic approach for pain management is the World Health Organization stepwise approach. (See Table next page.)

Acetaminophen:
• Drug of choice for elderly patients with mild or moderate pain. Not for moderate to severe pain, however.
• Dose 650-1000mg qid
• Reduce dose by 50% in those with liver dysfunction

NSAIDs:
• Mild to moderate pain
• May not be well tolerated in the elderly
• Long term use associated with causing renal impairment, platelet dysfunction, gastrointestinal bleeding. Concurrent treatment with a proton pump inhibitor reduces GI bleeding risk.

Opioids:
• Moderate to severe pain
• Tolerance to side effects of sedation, nausea, some respiratory depression possible.
• Constipation- no tolerance develops.
• Laxatives must be prescribed concurrently. Colace should not be used alone for opioid-induced constipation. Natural laxatives such as prune juice can be recommended. Osmotic laxatives such as milk of magnesia or lactulose are usually required.

Combinations with stimulant laxatives such as senna or bisacodyl are often needed.
• Oxycodone: previously commonly used as part of percocet is no longer available in that form at Boston Medical Center. Percocet is available to patients not filling their prescriptions at BMC.
• Meperidine (Demerol)- Do not use. The active metabolite, normeperidine, can accumulate leading to neuroexcitatory toxicity and seizures.
• Methadone: recently prescribed more frequently because it is inexpensive, long acting, and effective for nociceptive and neuropathic pain. However, caution towards use as the analgesic half-life may be shorter than the serum half-life, increasing the risk for under and overdosing.
• Morphine- drug of choice at the end of life because it is inexpensive, easy to titrate, and has multiple routes of administration. Standard starting dose for an opioid naive person is 5-10mg q4h prn. Hospices usually ask for morphine to be prescribed at 20mg/1ml. The BMC pharmacy has a morphine elixir at 10mg/5ml if needed. If the patient is still able to take medications orally, a longer acting medication such as oxycodone or MS Contin would be appropriate.
• Fentanyl patches- should only be given to patients with previous exposure to opioid who require chronic pain control. They usually require 12 hours to have any effect. 25mg of fentanyl is roughly equivalent to 100mg of morphine in a 24-hour period. Fentanyl patches require there be enough fat stores to absorb and retain the medication, so a cachectic patient would not be an ideal candidate.

In general, in the elderly, acetaminophen should be first line therapy for mild to moderate pain. For opioids, start off with a low dose and titrate up, monitoring for side effects. The goal of care at the end of life is to provide the patient relief from pain and other distressing symptoms.

The World Health Organization
Stepwise Approach to Pain Management

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<th>Adjuvants</th>
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<td>Mild Pain (1-3/10)</td>
<td>Nonopioids +/- Adjuvants</td>
<td>Non-opioids</td>
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<tr>
<td>Moderate Pain (4-6/10)</td>
<td>Weak Opioids +/- Adjuvants</td>
<td>Weak Opioids</td>
</tr>
<tr>
<td>Severe (7-10/10)</td>
<td>Strong Opioids +/- Adjuvants</td>
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</tr>
</tbody>
</table>

Adjuvant Therapy: Anticonvulsants, Antidepressants, Corticosteroids, Dermal relaxants, Muscle relaxants, Stimulants

References:

Do You Know What to Do in a Disaster?
The hospital’s disaster plan is explained in detail on the intranet at: www.internal.bmc.org/emergency preparedness/. Take a minute to look at this site sometime to familiarize yourself with your role in the event of a disaster.

Phase A disasters (meaning a disaster has been reported but no casualties have arrived) require no action on your part. For Phase B events (a smaller event that the ED can handle with its clinical and support staff alone), unless you are rotating through the Emergency Department at the time, your only role may be to facilitate creating beds for incoming patients, a job the nurses, house officers, and attendings may be asked to do together.

Phase C events are large scale events that utilize capacity beyond that provided by the ED alone. During a Phase C, your clinical assistance you may have to do things outside your normal scope (like accept minimally evaluated patients or minor trauma care, etc.). During a Phase C, you may not leave BMC until released by an official through security who will tell you where to go. Hopefully, you will never need to use this information, but it is good to know if you do.

Do You Know What to Do in a Disaster?

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