“SURVIVING CLERKSHIP”

A Guide by SST

"The student begins with the patient, continues with the patient, and ends his studies with the patient, using books and lectures as tools, as means to an end." -Sir William Osler, 1905

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Note: Much of the work for this “Clerkship Survival Guide” has been done by our predecessors listed above. We have compiled multiple documents and edited the particulars that have changed (e.g. the format of exams and the on-call responsibilities of clerks) with the hope that you will find this very useful next year. You are all going to make amazing clerks.

Enjoy your year!

Sincerely,
Graham Bergstra and Andrea Cowan (Class of 2015)

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RULES OF CLERKSHIP

from "The House of God" by Samuel Shem

1. Never stand when you can sit.
2. Never sit when you can lie down.
3. Eat when you can.
4. Sleep when you can.
5. F#@& when you can.
6. Never lie to your senior.
7. Never let them see you eating or sleeping.
8. If you enjoy your free time, never spend any of it within line of site of the nursing station, or it won't be free for long.
9. Never buy an expensive pen, your consultant will steal it.
10. Nobody ever gets in sh*t for showing up on time.
11. When nature calls, make sure you're listening.
12. You can't go wrong by going to see the patient.
13. Know your patient better than anyone else does.
14. Caffeine is your friend.
15. Medicine is a team sport. Be a team player.
16. If you don't take a temperature, you can't find a fever.
17. Never pass up free food.
18. Never skip a teaching session, or it will inevitably show up all over your exam.
19. Don't get the patient's bed dirty.
20. Nobody likes a miserable clerk.
21. Never upstage your colleagues, especially at rounds, no matter how good you think you'll look.
22. If you're scrubbed in a) make sure the field is well lit, b) have the suture scissors ready BEFORE you're told to cut, c) suck the smoke.
23. Never fudge a finding.
24. Never piss off people senior to you, it will come back to haunt you.
25. Read something every day.
26. Follow the chain of command.
27. Take your pulse first (in a panic situation, make sure you're calmed down and thinking clearly)
28. If anyone suggests, hints, or alludes to you possibly, maybe, potentially going home/taking a break/getting a meal… don't think about it… THANK THEM AND GO!
29. When a code is called, clerks traditionally have three roles 1) get the gawkers out of the room, 2) make sure the chart is handy, 3) fight the urge to run around screaming "whatdoIdowhatdoIdo…"
30. Never miss any rounds sponsored by a drug company.
31. You're no good to anyone if you're still asleep (when you're paged in the middle of the night, give yourself 30 seconds to wake up before slurring your speech into the telephone).
32. Don't try to be a hero. Know when you're over your head.
33. Never talk about patients in public areas. You never know who's listening.
34. Never talk about staff in public areas. You never know who's listening.
35. "Sure, I'd love to do that rectal exam for you."
36. Make your seniors look good, and they'll make you look good.
37. You make a mess, you clean up the mess.
38. Get a life!

A GUIDE TO USEFUL RRESOURCES FOR CLERKSHIP

The decision of what books to buy in clerkship is controversial. Most medical students already have a wide assortment that will serve them well. These days, many of you will be studying online copies of textbooks on your laptop/iPad and using a smartphone instead of pocket references.

We advise basing your decision to buy books on what specialty you plan to enter and how much time you will actually spend reading during clerkship. Each rotation will present you with a list of their own departmental recommendations – some good, some not so good. Also remember, if you are hesitant about paying money for new books before getting a good look at them, try searching the UWO library system or borrowing from a friend. There are plenty of free resources available!

1. SMARTPHONE

Back in the day, clerks would carry around tons of pocket textbooks with guides to all the drugs and medical conditions. Now? You have access to tons of apps and any website within seconds from the palm of your hand. However, don't feel like you have to get a smartphone just for clerkship - people get through clerkship without it!

Must-Have Apps:

1. A Drug Reference Tool
   - Recommended: Micromedex
     - Free. Details every drug, its dose, and its indications.

2. Quick Reference for Medical Conditions
   - Recommended: Medscape
     - Free. Presentation, workup, management.
   - Recommended: Dynamed
     - Subscription available for Schulich students. Contact dynamedsupport@ebscohost.com with your @uwo.ca e-mail address to have a serial number e-mailed to you. **Evidence-based** point-of-care reference. Will make you look good.

c) Medical Calculator
   - Recommended: Qx Calculate
     - Free. Pretty exhaustive calculator for anything you will need in clerkship.

Link to UWO Library Apps:
(for Dynamed, Diagnosaurus, Epocrates Rx, MedCalc, Medscape, Micromedex, etc.)
http://www.lib.uwo.ca/programs/clinicaloutreach/guidetohandhelddevices.html

** UptoDate – Although UptoDate is no longer supplied to students through Schulich, many past clerks have found it useful to purchase their own subscription. One subscription allows you to download the phone app to two devices, so you can split the cost with a friend. Purchasing UptoDate is by no means necessary for clerkship success and the tools mentioned above are good alternatives. Most students, however who have bought he subscription find that it's worth the cost and use it frequently on all rotations.

2. BOOKS

Strongly Recommended:

The Toronto Notes

~ $150 (including online subscription, textbook, and clinical handbook)

- This is a handy reference, but is in point form and therefore better for review than learning
- The clinical handbook is compact and can be very useful on new rotations
- The online subscription is unfortunately not well-integrated with smartphones but creating a small PDF of relevant chapters can put the information into a usable format for phones

The Sanford Guide to Antimicrobial Therapy

- This small reference book is authoritative for bugs and antibiotics; the next best thing to a face-to-face conversation with an Infectious Disease specialist.
- It may seem cryptic at first, but if you learn to use it, and use it well, you'll be better with infectious diseases than most residents (and some consultants!).
- Infections are relevant **everywhere**

If you don't use a smartphone:

Tarascon Pocket Pharmacopeia

- Contains almost all the drugs you will be ordering, their indications, and their CANADIAN dosages
- **Not necessary to carry around given the availability of free smartphone apps**, but if you prefer to have a hard copy and quick reference for pharmaceuticals, this one is universally recommended. It's also nice to have if you feel self-conscious about pulling out your smartphone when people will think you're texting etc.

Other Textbooks Recommended by Prior Classes

- The Calgary Black Book
- Care of the Medical Patient
- The Oxford Handbook of Clinical Medicine
- Cecil's Essentials of Internal Medicine
- Current diagnosis and treatment in Surgery
- Recall Series
- On-Call Series (Principles & Protocols, Surgery, Medicine)
- Lange Casefiles Series
- NMS Review Series
- The Intern's Pocket Survival Guide
- Essentials of Clinical Examination Handbook (concise guide from U of T)
- Pocket Medicine (Massachusetts General Hospital Handbook of Internal Medicine)
- Clinical Microbiology Made Ridiculously Simple

One of the best resources for finding really good books is your resident(s). See what they would suggest.

To save money, share pocket references with classmates who have a different rotation schedule than you do!

For more detailed textbook recommendations for each clerkship block, take a look at the specific chapters!

Most of your clerkship will be spent in centres with ready access to the internet. **Being able to access online information quickly (using a computer or your phone) is a crucial skill to polish.** You will likely find it much more useful in clinical practice than in the pre-clinical years. Some useful sites for this include:

- American Academy of Family Physicians – www.aafp.org
  - Quick search of a large library of handy review articles
- CMA – www.cma.ca
  - Included with your CMA membership is online access to MD Consult as well as OVID online access to a ton of full text journals (ensure you have your CMA number)
- Medscape – www.medscape.com
  - Medical news, articles, and a medical student section full of handy resources
- Emedicine – www.emedicine.com
  - Free, reliable, online textbooks by medical professionals for medical professionals
- Wikipedia
  - Usually **the fastest way to get answers to questions**
- UpToDate
  - Great for evidence-based information, also useful for printing out patient information handouts

Again, a great way to get access to subscription-only websites is through Western Library's clinical outreach page: http://www.lib.uwo.ca/programs/clinicaloutreach/

<u>APPROACH TO THE MANY TYPES OF 'ROUNDS'</u>

There are different types of rounds. Your first day, the resident you are with may say for you to show up tomorrow at 7:00am for "rounds". Rounds vary somewhat from specialty to specialty with regards to who is present (residents and staff vs. residents only) and length (ortho rounds = 15 patients in 30 minutes vs. medicine rounds = 10 patients in 3 hours). In general, the main forms of rounds are:

1. *<u>Patient Rounds</u>* - this involves seeing patients assigned to your team (there is usually a team list on PowerChart) with the residents and clerks +\- consultant, and dealing with any issues left over from the evening and making plans for the day. These types of rounds are most often used by surgery services. They might also be used on weekends while on Pediatrics and Medicine when there are a large number of patients to check in on but a smaller team.

   Clerk's Role – Consider showing up 10 minutes early to print out the team list for each resident. The team list can be found on PowerChart, however you usually have to be given access to the list by one of the residents before you're able to view it. You'll therefore likely not be able to print the list on the first day of a rotation – don't worry, no one expects you too?

   KEEP UP with team as you move from patient to patient. Push the chart rack down the hall. Grab the patient's charts when going in to see them. Grab the patient's bedside chart containing vital signs, write a progress note (SOAP format explained later). Usually the senior resident will talk with the patient while you write a note in the chart and the junior resident will put in any orders PowerChart.

   During your Medicine and Pediatric (CTU) rotations you will be given the responsibility of following your own patients. Make sure you know their medical issues, current lab-work, investigations and plan forwards and backwards before rounds, as the consultant/chief resident will usually ask you a question or two regarding the status and plan for your patient.

2. *<u>Team Rounds</u>* – a staple of medicine, often with pharmacy. You meet with the team (seniors, juniors and staff) and go over patient progress, and management plans. This may occur either before, after, or instead of patient rounds. Often referred to as "running the list" when done quickly. On medicine this is done usually once at the beginning of the day and once at the end of the day.

   Clerks Role – Know your assigned patients. Know their meds, any changes overnight, the plan for the day, and the overall plan. If you were on call and dealing with floor issues it's a good idea to have a list of overnight issues written on your list since they'll ask for them and it can be hard to remember.

3. *<u>Site Rounds</u>* – Usually held after patient rounds or at lunch-time. All teams at a certain site meet to discuss patients (as in mortality and morbidity [M&M] rounds), discuss case presentations, or discuss a topic). Questions are often asked of the clerks in this setting.

   Clerks Role – Read around the topic of the day, and be prepared to answer questions. Try to avoid saying "I don't know" if you don't know the answer – most consultants have said that a wrong answer is better than no answer. **NEVER EVER SHOW SOMEONE UP**. If you know the answer to a question asked of someone else and they obviously don't know the answer, wait until you are asked or the group is asked to answer. When food is available

show up early to avoid interrupting the flow of rounds if possible (and to ensure you get the food).

4. *Grand Rounds* – Usually held weekly or monthly. All teams from all sites in a specialty meet and discuss case presentations or other topics. These rounds are somewhat hierarchical with consultants sitting up front. Clerks are generally not asked questions during grand rounds. Drink your free coffee, eat your muffin and pay attention to what's being said as it may turn up during the day's discussion in the OR, on the ward, etc.

GUIDE TO NOTE WRITING

There are two basic notes that you will write. The admission note and the progress note. The demands of these notes vary with the specialty you are on. As a general rule, medicine admission notes should be 1-2 pages depending on the complexity of the patient and progress notes will be 1/3 - 1 page. Surgery admission notes are rarely more than 1 page and progress notes are rarely more than 5 lines. Here are some general principles to remember.

ADMISSION NOTES

Organization of notes is generally based on personal preference, but try to keep all of these headings in mind. If you want something to stick out, don't be afraid to circle it or underline it to draw in people's attention.

Section 1: **Patient ID**. No more than 2 sentences and usually has age, sex, and current living situation. Sometimes you will include occupation, geographical location, ethnicity, or handedness.

Section 2: **Chief Complaint**, or "reason for referral", or tentative diagnosis.

Section 3: **Past Medical History**. Often, this will be divided into categories (Medical History, Surgical History, Obstetrical History, Gynecologic History, Psychiatric History, Developmental History, Perinatal History, etc.) depending on which specialty you are writing the note for. As a rule of thumb, separate this section into a specialty-specific past history and a general medical history. This section of the note is very important because it puts the rest of the note into context. You might consider writing this section as a **Problems List** with active and inactive problems separated.
If you're able, its often helpful to give a couple of details for each problem. For example, if the patient has type 2 diabetes make a note if they are diet controlled, on oral agents or on insulin. If the patient has a history of COPD try to find their most recent PFTs and write down the FEV1. If the patient has a history of CHF, find their most recent ECHO and write down their EF. If the patient has had a prior stroke, make a note about the type of stroke and if there are any persisting deficits.

Section 4: **Medications.** Dosage and frequency. Make note of patient compliance if you are getting the details from medication bottles or an ODB profile. Don't forget to ask about OTC medications or complementary and alternative medicine products.

Section 4: **Allergies**. Note the drug and the type of reaction.

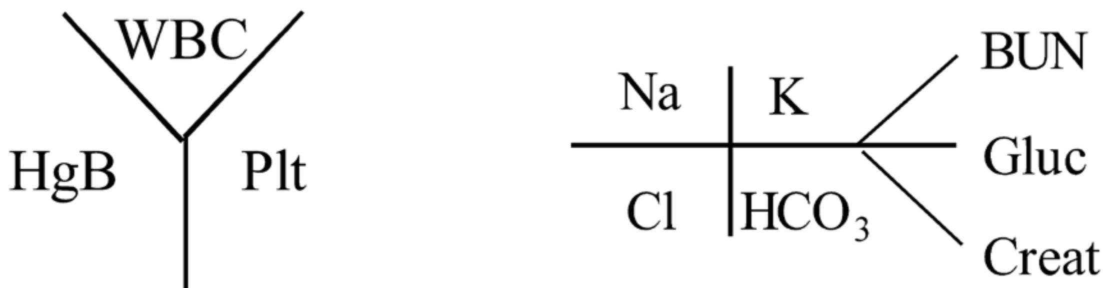
Section 5: **Social History**. Bare minimum is smoking, alcohol, and illicit drug use. Details of living situation are usually helpful. In Psychiatry, this will often be more elaborate (e.g. Forensic History, Life Stressors, etc.). In Pediatrics, a developmental history could be put under social history or under past medical history. In geriatrics, a functional history might be included in the section (IADLs, ADLs etc.)

Section 6: **Family History**. Should be very short, stick to what is pertinent.

Section 7: **History of Presenting Illness.** Try to stick to pertinent positives and negatives. Brief sentences in point form will make it easier for others to skim your note.

Section 8: **Physical Examination.** Start with vitals. With time you will figure out which pertinent positives and negatives are the most important to report. However, early on you might find it easier to describe your findings by system in a head-to-toe fashion. Underline or highlight the key findings.

Section 9: **Investigations**. In notes, lab values are usually recorded in symbol format. The common formats are listed on the next page, but expect to come across many variations.



These are the common lab values. The rest can be listed anyway you choose. Don't forget **ECG**, **x-ray** and other imaging results.

Section 10: **Assessment.** A brief summary of the patient, chief complaint(s), pertinent signs and symptoms, and likely diagnosis (or diagnoses). Consider including a **differential diagnosis**.

Section 11: **Plan**. A numbered approach outlining what you will do. This will include further diagnostic tests, treatments, code status and disposition (to nursing home when recovered).

Note: the previous two sections are what you go to medical school for, so don't expect to be able to fill them in right away. Make sure you are at least thinking about what you would write. The only way to learn is to try.

Section 12: **Sign** your note with your level (M3) and pager number.

When you are asked to do an admission take some time to first look on PowerChart – often you can at least get started on the Past Medical History, Medications and Allergies sections of the note before even seeing the patient. After you see the patient and do your history and physical you will go over the case with usually a resident (but sometimes a consultant). It's often helpful to have most of your note finished with the exception of the Assessment and Plan before presenting the case – this helps synthesize all the information you've gathered in order to make a more succinct presentation.

Progress Notes

Again, this will vary according to the service.

For medicine, your note will be a slightly scaled down version of your admission note. It should have a patient ID and active problems list. Use the **S.O.A.P. format** to record your note.

S (subjective) includes how the patient is feeling (use quotes if necessary).
O (objective) encompasses your physical exam, labs, and imaging.
A is assessment and will change based on S & O.
P is plan, including next steps and discharge planning.

A popular option is the "issue-based" note. Instead of A/P, you can list the active issues and write the assessment/plan for each issue individually. Alternatively, you can list the issues and write the entire S/O/A/P in a few lines as it pertains to each issue. Continue including an "inactive issues" or "resolved issues" list, especially if patients are in hospital for a long time.

For surgery, your notes will be very brief, usually scrawled very quickly during morning rounds. You will catch onto the important things. Here is an example of a standard surgical progress note.

78 yo F POD #2 right hemicolectomy

S/ "I slept pretty well last night Dr. Mark"
good pain control with PCA
+ flatus, ϕ BM
feels hungry

O/ AVSS (Tmax = 37.2)
good U/O
incision healing well
+ BS, abdo soft ϕ distended

A/P stable
advance to clear fluids
D/C PCA and switch to Tylenol #3 1-2 tabs q4-6h prn

<u>The Discharge Dictation Format and Discharge Summary</u>

When a patient leaves your service, it is important to ensure that an adequate discharge summary is written – or more often, dictated – in order to ensure that future medical caregivers have quick access to the information they need. After a few middle-of-the-night complicated admissions, you will learn that the discharge summaries in each patient's old chart can be your best friend. Make sure to return the favour.

For dictation instructions google "lhsc dictation". You'll quickly learn to navigate the dictation system, but there are often instruction sheets taped on walls next to phones, on corkboards, etc. Don't lose your dictation ID#, it can be a pain to retrieve when you're in a rush. Once you navigate through the various menus your dictation would sound like this.

> "This is John Jacob Jingleheimerschmidt, clinical clerk meds three for Dr. Frankenstein, dictating a discharge summary on patient John Doe, patient # 11015555. Patient admitted to Internal Medicine at Victoria Hospital on September 1, 2000 under Dr. Frankenstein. Discharged September 6, 2000. Copies of this dictation to go to the chart, to Dr. Frankenstein, to the patient's family physician Dr. Hyde (address/fax# if needed), and (other physicians directly involved in the patient's care for this problem)." *Spelling names of physicians you want copied saves a call to transcription services later if they don't recognize the name.*

Patient Identification (include date of birth and patient identification #)
Date of Admission (under which service and consultant)
Date of Discharge
Date of Dictation
Admitting Diagnosis / Reason for Admission
Problem List
Past Medical History
Patient Presentation (admitting history and physical, pertinent details only)
Course in Hospital (include treatment, response, new issues procedures, complications)
Disposition (to home, nursing home, mention home care)
Discharge Medications (make it clear which meds where added/changed/stopped in hospital)
Follow Up and other Special Medical Instructions

"end dictation. Signed John Jacob Hingleheimerschmidt, clinical clerk meds three, dictating on behalf of Dr. Frankenstein FRCP(C), Internal Medicine, London Health Sciences Centre – Victoria Campus. Thank you."

You may want to write out notes for your first Discharge Summary before you dictate it the first few times. Don't be afraid to use numbered lists where appropriate – they are actually the preferred format for things like the Problem List and Discharge Medications.

A few quick notes on the dictation process. Be sure to speak clearly, so avoid eating or chewing gum during dictations. Don't worry about "uhms" and "aaahs" in between your text – the dictation service employs trained professionals. There is no need to say punctuation since transcriptionists will infer it from your tone of voice. When in doubt, spell out your words after saying them (ie: hiatus – H I A T U S – hernia). Remember you can always pause (press 2), rewind (press 3), listen to yourself, and correct mistakes if you have to. There is a real person typing your dictation, so don't forget that you can tell the transcriptionist "oops, please add this issue to the problems list I forgot to mention it 5 minutes ago" or "I'll start that sentence again". Work in a quiet area and remember that you are dictating confidential patient information, so make sure you have the appropriate degree of privacy. It's a good idea to review your dictations as soon as possible after completing them, via your "Message Centre" on PowerChart. You can make any corrections at this time, so long as your attending hasn't signed off on the dictation already! If you think critically about what you've done, your dictations will quickly be done faster and become more useful to others.

GUIDE TO WRITING ORDERS

Pre-HUGO clerks were in charge of writing paper orders and getting them co-signed. Now, everything is done electronically and it's variable whether or not you will be asked to do them. On HUGO, you can write orders and choose which physician to send them to (residents included) to get co-signed, but anyone with access to the chart can co-sign. If you do send them to a physician it will show up in their Message Center on PowerChart as an order to approve - make sure you tell the about it since this isn't always checked. This is especially important if you are on call and have an order that needs to be implemented fairly soon, since residents likely won't be checking their Message Center. On call it's easiest to introduce yourself to the junior early in the night (they'll often be in the back room off of emerg) and let them know you'll be bugging them for co-signs. Often residents end up putting in the orders because it's faster – if there's time ask the resident if they can review the orders with you as they put them in.

Here are the general principles to writing orders with more specifics to come.

Approach To Admission/Transfer Orders

Most people use the AD DAVID mnemonic:
Admit, **D**iagnosis, **D**iet, **A**ctivity, **V**ital Signs, **I**nvestigations, **D**rugs

ADMIT

Usually you will write: Admit to *(your service)* under *(your consultant today and your team)*
Eg. Admit to Gold team under Dr. Larocque.

DIAGNOSIS

This is what you suspect they have. It will be next to a patient's name on the team list.
Eg. Lower GI Bleed

DIET

The most common order you will write is **DAT** (*Diet as Tolerated)*. Patients who might need surgery should be **NPO** (*Nothing by Mouth)*. Other common diets you will order are: Diabetic Diet, Cardiac Diet, Clear Fluids, Full Fluids (Includes pudding, ice cream) and Dysphagia diet (thickened fluids, pureed or minced foods). Post-surgery patients will often have sips to DAT written so that the nurses can decide when to allow recovering patients to eat, but this is not always the case when the patient has had bowel surgery.

ACTIVITY

The most common order is **AAT** (*Activity As Tolerated)*. Orthopedics will use abbreviations like **NWB** *(Non Weight Bearing), or* **FWB** (*Feather Weight Bearing).* Obstetrics will sometimes use **BR**, or **BR with BRP** *(Bed Rest with Bathroom Privileges).* Patients who are mostly sedentary might have ambulation orders added to this section: "Up In Chair tid" "Ambulate bid." 99% of the time you will write **AAT**. This is also a good time to indicate if you want any limbs elevated etc.
Eg. AAT, NWB Lt leg, Elevate Lt leg.

VITAL SIGNS

The most common order is **VSR** (*Vital Signs Routine)*. VSR means the nurses will check vitals in the usual routine for this hospital or a particular floor, q12h (at shift changes) for most services, post-op

VSR is q4h x24 hours and then q12h. Generally HR, RR, BP, O2 sat, Temperature will be checked every 8 or 12 hours. If there is a particularly sick patient more frequent vitals may be necessary (VS q6h, VS q4h, etc). If special parameters should be monitored regularly (ie: postural vitals, neuro vitals), be sure to specify. Never write vitals more frequent than q2h. The nurses don't have enough time to do this on regular ward floors, and if you are this concerned about a patient, they probably should be seen by the ICU.

INVESTIGATIONS

This is the largest section you will write. In general it will be bigger than all the other sections combined. This section requires an approach of its own. A simple approach is to remember there are five basic investigation areas: Imaging, Consults, Hematology, Biochemistry, Microbiology. For each investigation start from the head and work down keeping in mind your patient's disease. For example, a septic 82 year old patient with confusion could be approached this way.

- **Imaging**: CT head, Chest X-ray, EKG (provide a reason otherwise radiology will bug you!)
- **Consults**: Social Work, OT, PT, Neurology?, Infectious Diseases?
- **Hematology**: Daily CBC with Differential, PTT/INR
- **Biochemistry**: Daily Electrolytes *(Na^+, K^+, Cl^-, HCO_3^-)*, Daily Urea, Daily Creatinine, Ca^{2+}, Mg^{2+}, PO_4^-, glucose, CSF cell count, CSF protein and glucose, albumin (always order albumin with Ca^{2+} to calculate the correction)
- **Microbiology**: Urine R&M/C&S *(Routine Tests, Microscopy, Culture, Sensitivity)*, Blood Cultures (always x2), CSF from Lumbar Puncture for gram stain, culture & sensitivity. Remember all the things you can culture: CSF, Sputum, Urine, Feces, Pus from wounds, Blood, Lines.

The above is not a complete list but simply an approach. The investigations to order will come with experience.

DRUGS

This is also a big section. Start out with IV fluid orders, especially if the patient is not able to drink. Use the 4-2-1 rule - 4cc/kg for the first 10kg, then 2cc/kg for the next 10kg then 1cc/kg after that. This means a 70kg man will get 10x4 + 10x2 + 50x1= 110cc/h. A simple approach is past, present & future. Begin by ordering all the medications the patient is already on (the past). Exercise judgment as to which ones the patient still needs. For example, a bleeding patient doesn't need Aspirin or Coumadin. Also, a patient who can't take anything by mouth due to nausea or impending surgery can't take pills. For the present, think about what the patient needs right now. They will likely need an IV but may also need antibiotics, diuretics, anti-arrhythmics, and so on. For the future, try to anticipate what the patient might need. Think about DVT prophylaxis, sleeplessness, nausea and pain.

A good mnemonic for this is to make sure you've addressed the "Patient P's" – **Problems** (specific medical issues), **Pain** (analgesia), **Pus** (antimicrobials), **Puke** (anti-nauseants, prokinetics, antacids), **Pee** (IV fluids, diuretics, electrolytes), **Poop** (bowel routine), **Pillow** (sedation), **PE** (anticoagulation), **Psych** (don't forget about DTs when on medicine!), **Previous Meds**.

ORDERING DRUGS AND WRITING PRESCRIPTIONS

Drugs have a specific nomenclature that you need to follow. The basic format is as follows:

DRUG DOSE ROUTE FREQUENCY DURATION/AMT

Lasix	40 mg	IV	q12h	X 24 hrs
Clarithromycin	500 mg	PO	BID	X 10 days
Ativan	0.5 mg	SL	qhs prn	20 tablets
Tylenol #3	1-2 tablets	PO	q6h prn	15 Tablets

Abbreviation	Meaning	Abbreviation	Meaning	Abbreviation	Meaning
PO	By Mouth	~~OD~~	~~Once Daily~~	BID	Twice daily
IV	Intravenous	qD	Every Day	TID	3 times daily
SL	Sublingual	q	Every	QID	4 times daily
PR	By Rectum	h	Hours	PRN	As needed
IM	Intramuscular	SC	Subcutaneous	qhs	At Bedtime

Prescriptions written to be filled outside the hospital use the same abbreviations but a slightly different format. Most prescriptions you will be filling out within LHSC come as a pre-printed form that you print from PowerChart. Sometimes handwritten prescriptions will be required, especially if you have rotations outside of the hospital. Formal prescriptions have the following structure:

Date
Patient name and Address – stamped with the blue card
Inscription (The Rx the appears in the corner, short for recipe or "take thou")
    Each drug, dosage, route and frequency of administration.
Subscription (Instructions to the pharmacist)
    Where you specify the quantity to be dispensed and any other special information.
    The abbreviation M: (Mitte = "dispense") is often used here.
Signature (Instructions to the patient)
    Basically what you want written on the bottle, if at all unclear from the inscription.
    The abbreviation S: (Sig, Signa = "write") is often used here.
Refill Information (number of refills, or no repeats… ALWAYS REMEMBER THIS)
Prescriber's Signature

September 1, 2000
Patient: Mr. John Doe
Address: 1234 Western Avenue, London, Ontario
(1) Lasix 40mg PO OD
    Mitte: 14(fourteen) 40mg tablets
    Sig: One capsule by mouth daily

Do Not Repeat
Dr. Jinglehiemerschmidt, MD.

The U.S.P. makes the following recommendations for avoiding prescription errors:

- All prescription documents must be legible.
- All prescription orders should be written using the metric system except therapies that use standard units such as insulin and vitamins. The term "units" should be spelled out rather than abbreviated as "U."
- The medication order should include drug name, exact metric weight or concentration, and dosage form

- A leading zero should always precede a decimal expression of less than one. A terminal or trailing zero should never be used after a decimal.
- Prescription orders should include a brief notation of purpose (eg. “for cough”) unless inappropriate.
- Prescribers should not use vague instructions (“take as directed”) as the sole direction for use.
- Prescribers should avoid potentially confusing abbreviations or Latin directions for use.

Common Order Pitfalls

1. Remember to **think ahead**. Anticipate problems with pain, sleeplessness and hydration. A simple order written at admission can save you or someone else a call at 2:00am.
2. Don’t abuse words like “now” or “stat” – check with your resident about these if you are unsure
3. Remember to ALWAYS have a drug reference with you (Pharmacopoeia or Micromedex) – you will use it in every rotation, sometimes when you least expect it.

Sample Orders

To demonstrate a typical set of orders let's assume we have a 63 year old man with bright red blood per rectum earlier in the day. Assume he is currently not bleeding and his hemoglobin in 65. Italics would not be written and are only for your explanation. Orders are fairly consistent between services and this list should be a good framework for whatever rotation you're on. With HUGO the order layout is a bit different since it's on the computer, but almost everything you might need is there and you just need to check it off or not.

Admit to CTU-2 medicine under Dr. Smith

Diagnosis: Lower GI Bleed
NPO (may take PO meds with sips),
AAT
VSR
Foley Catheter to urometer *(needed to measure accurate output)*
Accurate Ins & Outs (*Nurse to monitor fluids in through IV & Mouth and fluids out in urine, NG etc.)*
Alert MD if Urine output < 90cc over 3 hrs (*Low urine output is a measure of perfusion status and kidneys are often one of the first organs hypoperfused when dehydrated)*
Stool Chart (*Nurse will examine stool and write finding on chart)*

Keep 2 units Group & Crossed at all times

Daily Labs: CBC, BUN/CR, Lytes, PTT, INR

EKG, 3 views of the abdomen to assess for free air (*always put a reason for imaging)*

GI consult in AM (*always call in the consult yourself so the receiving resident can have a better idea of what's going on)*

CCAC consult (*paperwork to fill out)*

Transfuse 2 units of cross-matched PRBC (*packed red cells)* over 2 hrs
with 20 mg Lasix between 1st & 2nd Unit

2 large bore IV's (14 or 16 gauge)
IV D5W/.45 NS with 20 meq KCL @ 125 cc/hr
Saline lock second IV

Ranitidine 150 mg PO BID

Enalapril 20mg PO OD

Tylenol pl 1-2 tabs q6h prn

ECASA 325mg PO OD (HOLD)

Ativan 0.5mg SL qhs prn

Standard bowel prep as per GI

FREQUENTLY USED ABBREVIATIONS

AAT	Activity as Tolerated	
ABG	Arterial Blood Gas	
AKA	Above Knee Amputation	
AMA	Against Medical Advice	
AP	Antero-Posterior	
AXR	Abdominal X-Ray	
BE	Barium Enema	
BKA	Below Knee Amputation	
BRBPR	Bright Red Blood Per Rectum	
BRwBRP	Bed Rest with Bathroom Privileges	
BS	Bowel Sounds, Breath Sounds,	Blood Sugar
BUN	Blood Urea Nitrogen	
C/O	Complains Of	
CABG	Coronary Artery Bypass Graft	
CBD	Common Bile Duct	
CF	Clear Fluids	
CP	Chest Pain	
CVA	Cerebral Vascular Accident	
CVD	Cardiovascular Disease	
CVP	Central Venous Pressure	
CXR	Chest X Ray	
~~D/C~~	~~Discharge/Discontinue~~	
D5W	Dextrose 5% in Water	
DAT	Diet As Tolerated	
DVT	Deep Venous Thrombosis	
EBL	Estimated Blood Loss	
EF	Ejection Fraction	
EGD	Esophagogastroduodenoscopy	
ERCP	Endoscopic Retrograde Cholangio-	Pancreatography
FF	Full Fluids	
FFP	Fresh Frozen Plasma	
F/U	Follow Up	
FWB	Featherweight Bearing	
GCS	Glasgow Coma Scale	
I & D	Incision and Drainage	
IABP	Intra Aortic Balloon Pump	
IHD	Ischemic Heart Disease	
IVF	Intravenous Fluids	
L/E	Lower Extremity	
LAT	Lateral	
LGI	Lower Gastrointestinal	
LR	Lactated Ringer’s	
NAD	No Apparent Distress	
NEOM	Normal Extraocular Movements	
NG	Nasogastric	
NPO	Nothing Per Os	
NS	Normal Saline (0.9%)	
NSR	Normal Sinus Rhythm	
NWB	Nonweight Bearing	
NVC	No Voiced Complaints	
OB	Occult Blood	
OOB	Out of Bed	

ORIF	Open Reduction and Internal Fixation
PA	Posterio-Anterior
PEEP	Positive End Expiratory Pressure
PERRL	Pupils Equal and Reactive to Light
PICC	Peripherally Inserted Central Catheter
PRBC	Packed Red Blood Cells
PTCA	Percutaneous Transluminal Coronary Angioplasty
PUD	Peptic Ulcer Disease
PVD	Peripheral Vascular Disease
R/A	Reassess
RL	Ringer’s Lactate
RTC	Return to Clinic
SBO	Small Bowel Obstruction
SIADH	Syndrome of Inappropriate Antidiuretic Hormone
SOB	Shortness of Breath
SOBOE	Shortness of Breath on Exertion
TEE	Transesophageal Echocardiography
Tmax	Maximum Temperature
TPN	Total Parenteral Nutrition
U/E	Upper Extremity
UGI	Upper Gastrointestinal
UO	Urine Output
UTI	Urinary Tract Infection
VSR	Vital Signs Routine

QUICK REFERENCE TO THE LHSC/SJHC PAGING SYSTEM

TO PAGE A PAGER

In hospital: Dial the 5-digit pager number directly
Out of Hospital: Dial 519-685-8500, enter the 5 digit number + the # key.
After connecting, listen to the greeting, and the status of the pager. After the tone, key in your numeric message (the 5 digit phone number you can be reached at) and the # key. You should receive a confirmation of your page.
To correct a page before you send it, press [***]. Your message will be erased and you will be prompted to enter a new one.
To leave a second call back number (i.e. if you anticipate you might not be near the phone when they page you back), leave the 5 digit number of the phone you want them to page you back at , hit **, then put in your own pager number, then the # key.

THE CALL CONNECT SYSTEM

You can page someone and remain on hold until they answer. The procedure is similar to making a normal page, but during the personal greeting you can press [*4] to initiate a "personal conference call." Speak your name when prompted and press the [#] key. When the person you are paging connects, you will hear a tone and you will be connected.

If you are paged in this manner, your pager will display "U" and your five digit pager number (ie: U12345). Dial **YOUR** 5-digit pager number. During the personal greeting, press [**] to hear the name of the party trying to get in touch with you. To accept, press [3].

There are full instructions available at each hospital, with detailed instructions on the above as well as how to record greetings, sign over pagers, and enabling/disabling your pager. They're worth consulting.

SWITCHBOARD

Switchboard is your best friend – they can put you in contact with pretty much anyone in the hospital. Switchboard can be reached by pressing "0" twice. If a resident asks you to page Infectious Diseases, for example, to ask for a consult – just call switchboard and ask if they can page the ID resident to your number. If you want to follow up on the status of some bloodwork, don't waste time looking for the lab's phone number – just call switchboard and ask if they can forward you to the lab.

ROTATION TIPS:

MEDICINE - CTU

Every clerk has 6 weeks of CTU on their schedule. It's the longest single rotation of the entire year. You will learn a lot on this rotation: not only about internal medicine problems, but about situations that will come up no matter what specialty you train in. There is a lot of work involved in dealing with general internal medicine patients, but to get the most out of the experience, you have to be proactive. You will get a lot of teaching, but you can't rely on that…if you also reinforce your teaching with reading, practice, and feedback, you will come out with great diagnostic skills. At a minimum, make sure you ready around your cases. CTU is a chance to work with allied health professions (OT, PT, pharmacy, social work) who are also a great resource.

Preparation:
This is an extremely difficult rotation to prepare for, simply because the knowledge base is so broad. If you paid attention for years 1 and 2, you should have more than enough of a knowledge base. Don't expect to know the answer to every question you are pimped on. Just make sure you don't get the same question wrong twice.

High-yield topics to brush up on include:
- Fluids and electrolyte disturbances
- Acid/base disorders
- Anti-infectives

Many students find reading Casefiles prior to this rotation very good preparation. Using UpToDate and the Toronto Notes to read around cases is more than sufficient during your rotation. You might find an On Call book or a Pocket Medicine book a useful tool, especially if you plan to go into medicine.

Orientation

VICTORIA HOSPITAL:
A very confusing place, expect to be A&O x 2 for the first week!
Call Room: next to C-Entrance, near Ivey
C400 connects to D100 on levels 4 to 7
Only use the stairwell between D and C (all other stairwells may lock you in unexpectedly)
Good parking – covered lot near "A" back entrance
Cafeteria closed on weekends after 7 pm. Tim Horton's open overnight on weeknights. Vending machines open 24/7.

UNIVERSITY HOSPITAL
Call Room: 10th floor near epilepsy unit (4325*).
The cafeteria is closed after 6:30pm on weekdays. Vending machines open 24/7.
Scrubs obtained from vending machine on 2nd floor near radiology.
Get scrub card from laundry room on main floor – bring $20.

Radiology is on the 2nd Floor at UH and Vic.

The Basics:
There are three medicine teams at University Hospital (Teams 1, 2, and 3) and there are three teams at Victoria Hospital (Blue, Gold and ACE (acute care of the elderly)). Each team consists of an attending physician, a senior medical resident (usually a PGY-3), and 2-4 junior residents. The junior residents are a mix of on-service (ie. Internal Medicine Residents) and off-service (ie. Family Medicine, Neurology) PGY-1s. You will also have 2-3 clinical clerks and sometimes 1-2 keen elective students. Some of the teams also have a dedicated pharmacist. All of the teams have a patient care facilitator (PCF), who is usually a registered nurse, and who you want to become very friendly with. The PCF will help organize your patients' care, including coordinating care with other allied health professionals, planning discharges, and organizing family meetings.

You will be assigned a group of patients (usually 2-6) who you will be responsible for looking after in hospital. This means daily check-ups, following tests and bloodwork, dealing with active issues, talking with families, as well as writing discharge summaries. Each patient requires a daily progress note. You will need to get all of your orders co-signed by a resident.

A TYPICAL DAY IN CTU:

1. **Pre-rounding -** This is pretty optional. If there was something monumental that was going to come back over night (a patient is bleeding and they are having their hgb checked) then you can check it but otherwise pre-rounding isn't essential, especially since you often don't know who your patients will be. It is helpful to print off a new patient list for your team from PowerChart. Usually the first team member in prints copies of the list for everyone. Routine daily bloodwork is drawn at 5:00am, and will typically be on PowerChart between 7-8am.

2. **Morning report.** Clerks and residents who were on call the night before present a case and someone will get pimped. Important teaching points will be explored, with the chief medical resident usually guides the discussion. Coffee is provided.

3. **Team rounds.** Your team will "run the list". The team goes through each patient under your team's care and plans for the day. The person who was on call will update the team on any major changes for patients from the night before. At this time, all of the patients will be assigned to a specific member of the team. If a patient is assigned to you for the day, it is your responsibility to go see them, follow up on their tests and bloodwork, and monitor their active issues for that day. You will typically be assigned 2-6 patients. If you have looked up the bloodwork and pertinent investigations before the morning report for patients you regularly follow, you will be better prepared to ask questions about the plan for the day.

4. **Seeing the new admits from emerg -** This is variable depending on your attending. Some will round as a team, others will just go with the individual residents/clerks who are assigned to the patient. Get the chart for your senior as you are seeing each patient. Try to divide up duties when seeing patients as a team (someone write the note, someone input orders, etc). This is another time you will likely be pimped or asked to demonstrate physical exam skills.

5. **Doing the work**. You need to prioritize your day to make sure you get everything done in time. Highest priority is patient discharges and calling for consultations.

1. *Calling a consult*: Find out all the necessary information beforehand (patient's clinical presentation, relevant co-morbidities and meds, other related investigations, especially Cr if you are ordering a CT). Dial 0 (locating) and page the service. Have the patient's chart and Powerchart open in front of you for when they call back. Always keep in mind: why are we consulting this service? What question do we want answered? This takes practice. Fill out the top part of the consult form (diagnosis and clinical information) so it is ready for the consulting service when they arrive. In addition to the paper consult form, consults now also need to be entered into HUGO.

2. *Discharging a patient*: Ideally, the day before or earlier, you should have organized all the necessary consults (OT, PT, social work, CCAC). Prepare the face sheet (close to front of chart). On HUGO, a discharge order will need to be entered, as well as any follow up. Discharge medication reconciliation on HUGO will allow you to tell which medications the patient should continue after discharge and give a prescription for any new medications started while it hospital. This can be done the day before if there is a pending discharge the next day. Do not allow a patient's discharge to be delayed because you failed to do one of the above tasks. Discharging a patient on time is one of the clerk's most important duties on the service.

   e.g. Discharge orders:
   D/C home with scripts to go
   D/C IV, Foley, Telemetry (anything that is connected to the patient)
   F/U with family doctor, neurology, etc.

   Dictate the discharge summary the same day the patient is discharged. If you wait until the next day, the chart may be taken down to medical records and it could be more difficult to obtain. Press 6 to make the dictation STAT.

3. See your sickest patients first. History, physical, SOAP note. The most important part of the SOAP note is the plan. List the active issues in order of importance. For each issue, have a clear plan. Speak directly to the patient's nurse if you can; they are aware of all of the care a patient is currently receiving as well as the patient's current status.

4. Note: ECHOcardiogram reports have a habit of not appearing in your patient's chart, and they are not found on PowerChart. To get the result of an echo for your patient, go to the UH Echo lab on the 5th floor or the Vic Echo lab on the 2nd floor at the C-entrance near Ivey and they can print a copy for you.

6. **Lunch rounds.** Teaching plus free food. Don't be too intimidated to participate. Be early to guarantee lots of food. Being late may mean an empty plate. These are encouraged but not mandatory (if, for example, you are in the middle of a family meeting). Sometimes your team will be responsible for presenting at lunch rounds.

7. **Afternoon.** Finish up with whatever you didn't get done during the morning (which can be a lot if your team works slowly). Usually it's best to leave dictations for the afternoon. This is also a good time for reading around your cases if you have nothing to do. Asking residents if they need any help always looks good, but be careful not to over-commit your time.

8. **PM handover.** Update the team on your patients' active issues, what was done that day, the plan, and complications that may occur overnight for the on call person. Make sure every order is co-signed by the end of the day. The nurses keep a list of non-urgent issues about all their patients which is usually good to check before you peace out. Many of the consultants will fit in an end-day lesson right before you leave.

<u>ON CALL:</u>

While on medicine there are two types of call shifts:

1.**Buddy Call** – These call shifts go from 5:00-10:00 pm on weekdays and 8:00/9:00 – 5:00 on weekends. For weekday buddy call shifts your only job is to help with admissions. Most senior residents will let you go once you've finished one admission. On weekend buddy call shifts you help with rounds in the morning and then any admissions that come in during the afternoon. There is some variability in the schedule, but generally most people have six call shifts during their CTU rotation. Three of these are buddy call and three are solo call.

2**. Solo Call -** When on solo call you are responsible for new admissions to your team plus any floor issues that arise pertaining to patients on your team's list. The rest of the on call team will include a senior resident (the SMR) and two other junior residents from each of the other teams. The senior resident is responsible for taking emerg consults and dividing them amongst the three teams. They also provide support for more serious or challenging floor issues. The two junior residents handle admissions to their respective teams and any floor issues for their team's patients, however they are usually more than happy to help with any questions you might have about your patients.

For weekdays, call begins at 5:00 pm and ends the next day whenever your team lets you go. It is the stated policy of LHSC that clerks be able to leave by 10:00am. Early in the night, find the other junior residents and introduce yourself, get their pager numbers and warn them that you'll be calling them for co-signs. Weekend call generally begins at 8 or 9 am and ends the next day at around 9 or 10 am. You will round on all the patients as a team (senior, consultant, post-call clerk/resident, on-call clerk/resident). The notes and plans from these team rounds will be brief and succinct, so be ready to go quickly.

Take cues from your team for what is acceptable to wear during days on call. Many people start the day wearing scrubs and comfortable shoes, others get changed after the day's work is done, around 5:00pm.

CTU call is about **floor issues** and **admitting patients from emerge**.

<u>1. Floor issues:</u>

Unless your team's senior is the senior medical resident for that night, you are the only member of your team who is in the hospital for the night. Consequently, try to ensure that your team does a good job of communicating issues that could become a problem during the night for different patients on your service.

Answering Pages...

1. Write down the nurse's name on your patient list (that way when you go to see the patient or when they call you, you can say "hi [nurse's name]" and they will usually like that and be nicer to you).

2. Determine the acuity of the issue. Is the patient stable? What are vitals? Do I need to page my senior right away? Is this a new issue or one for which there is already an active plan? Is this an urgent issue that requires you to stop halfway through an admission? Is this an issue that can wait until morning?
3. Go see the patient. Assess. Generally, review the chart and gather all necessary info BEFORE paging your senior with your plan.
4. For routine, non-urgent stuff, you can enter the order in HUGO and send it to a junior resident, then either page them for a co-sign or wait until you run into one of them on call (the back room in emerg is always a good bet).
5. For urgent/serious stuff or any issues that significantly affect management, always consult the senior. Don't be afraid to page them. Be afraid to NOT page them! If it's not crazy urgent, you should go assess the patient first yourself before paging the senior. Have the chart and PowerChart open for when they call you back.

Common floor issues:
-"Mr. Smith needs some Tylenol"- usually pre-writing Tylenol and Gravol PRN orders on charts (typically on the admission orders) will save you a hassle call at 2:00am. Also, make sure all of your orders have been co-signed before your team leaves the hospital, or you WILL be called.

-"Mr. Smith has a potassium of 3.3 instead of 3.5"- You will frequently get called regarding slight disturbances in lab values, oxygen sats, etc... Sometimes this can be annoying, but remember: it is the obligation of the nurses to report certain perturbations in values, and it is better for someone to be hypervigilant than it is to be negligent. Generally, potassium 3-3.5 is not concerning in patients with normal cardiac functioning. This can often be solved with a banana for patients who are not NPO. Call your resident if you are unsure. Oral K repletion: K Dur 20, 40, sometimes 80 mEq po X 1. IV K repletion: KCl 10 mEq/hr X 3.

-"Mr. Smith is having trouble breathing"- Acute issues related to your team will likely be called to you first, rather than your SMR. Try and assess the situation as best you can (ABCs, vitals, etc...), but don't hesitate to call for help if you feel over your head.

-"Mr. Smith is agitated"- Lots of old, frail, and sick patients get delirious and confused, often overnight. This may be solved by talking to the patient, or it may be solved by drugs. Be careful using sedatives in people who are not breathing well. Common pharmacological solutions include lorazepam (Ativan) 0.5 – 1 mg po/iv q2-4h prn, and haloperidol (haldol) 0.5 – 1 mg po q1-4h prn (note: these are conservative doses, usually you start low). Needless to say, restraints are a last resort.

2. ER Admissions:
Your senior will page you with a new patient to admit from emerg. Here's an approach:
1. Write down exactly what the senior tells you about the patient. This will often be a succinct version of what the ER doctor has discovered and can guide your approach to the consult.
2. Read the emerge documents including the nurses and doctor's charts (if they're legible!). Review the investigations already done in the ER.
3. Log onto PowerChart and look up the patient. Old discharge summaries and consultations reports are an excellent method for getting PMHx and sometimes Meds information before seeing the patient.
4. Spend a few minutes coming up with a differential for the chief complaint and if you have time, look up an approach to make sure you don't miss anything.

5. Do a history and physical. FIFE when indicated. If you realize that you have forgotten to ask or do something, don't be afraid to go back to the patient and finish your Hx and Px.
6. Once you have completed your history and physical, try to come up with a differential, appropriate investigations, and possible treatment options. You will be wrong from time to time, but many residents appreciate the initiative and it will help you develop your skills as a budding internist.
7. If there is any uncertainty regarding important information (ie: what Meds is she/he taking, for how long, any recent changes, etc...), don't hesitate to call the pharmacy, their home, their nursing home, or anywhere you can to get what you need to do your job. ODSB has good records of drug claims and the Pod clerk can get this information for you. Some pharmacists clarify the medications the next morning and you can write an order for the pharmacist to clarify Meds in AM.
8. Your admission paper work will include (make sure it is all stamped):
    1. End-Of-Life Form (code status) – some residents will ask you to have the code status discussion with the patient or SDM and fill out the form while some prefer to do it themselves. This can certainly be a difficult conversation to have with patients so if you're not comfortable doing it, just tell the resident you haven't had many opportunities to have the code status discussion, you don't feel totally comfortable doing it by yourself and you would appreciate the opportunity to watch them do it so you can learn some tips.
    2. Admission Note (1-3 double-sided pages)
    3. SMR Note
9. Review with your SMR. Expect to learn tons.
10. Photocopy the admission note and SMR note so that you have this information to review with your team in the morning.

Other on-call tips:

- Bring plenty of fluid. Eat when you can. Stay hydrated. Carry around a snack.
- Think of an approach to a patient's problem before going to see them.
- Always have a plan before calling the senior.
- If patient's code status is unclear when you're on call, clarify it. Things can change quickly and not knowing code status can make it more complicated to make decisions.
- Read about your cases before presenting them at morning report.
- 1 hour of sleep may be worse than none at all.
- When you are on-call, avoid making major changes to a patient's management. It's often better to wait till the morning to discuss with the team (especially for chronic issues like insulin management in DM).
- Bring a toothbrush, discover where the on call room is, pick a pleasant beeper alarm sound.
- Have a piece of paper and write down pager #, nurses name and issue, so if you are in ER doing an admission you don't forget by the time you get to the floor issue.
- Go to the floor before sleeping and check if they have any outstanding issues to make sure they won't page you 2 min after you fall asleep.
- **Sometimes, call will be terrible (non-stop admits and floor issues). Other times, the floor will be silent and the senior might do an admission for you to let you get sleep. Enjoy the breaks when you can but don't be shocked if you have to work all night.**

<u>Morning Rounds</u>

After a night on call, you will be required to present an admission from emerg to the team. The more thorough you are during your admission, the more likely you will be able to answer your team's questions in the morning. Report the case like your admission note: ID, Chief Complaint/Reason for Referral, PMHx, Medications, HPI, Social Hx, FHx, ROS, Physical Exam, Investigations, Assessment, and Plan. Aim for under 5 minutes. People will often lose patience if you start including extraneous details. It is very helpful to bring a photocopy of your admission note to morning rounds for reference. It's also useful to put the pertinent positive/negatives in the margin so that you know what to include in your brief synopsis.

For Past Medical History and Medications, group medical issues/meds together. For example, Patient X has a history of {condition} for which he takes {medication and medication}. List them in order of importance to the chief complaint. Also make sure you include qualifiers for any chronic diseases. (Diabetes- include HbA1C, CHF- include most recent ejection fraction, COPD- include most recent PFTs, CAD- include CCS stage)

For Physical Exam, always report vitals first. For physical exam and review of systems, the first few times you report a case, be thorough. After that it's usually enough to stick to *pertinent* positive and negatives – or you can just very quickly say no cough, no shortness of breath, no chest pain, no palpitations, etc.

For investigations, list abnormal lab values, pertinent negatives and always include imaging findings (like "Chest X-Ray was unremarkable, EKG showed normal sinus rhythm").

The most important part is the assessment and plan. In assessment, you can include a differential. For plan, list all active issues, in order of importance. It's often good to state what supports the diagnosis. For instance, issue 1) Acute MI – ECG with ST elevation and inverted T waves, elevated CK and Troponin. Then say what you're going to do or already did. "We started them on Morphine, Oxygen, Nitrates and Aspirin, we ordered an echo, etc."

End each plan with code status and disposition. Everyone should get a code status. Disposition means discharge planning. Does the person need CCAC/OT/PT/Social Work before discharge? Will they be going home? To a nursing home? Discharge planning is extremely important on CTU. Inadequate discharge planning is a frequent cause of delayed discharge from the medicine units.

SELECTIVES

Details for each selective are beyond the scope of this guide. As a rule, spend some time reviewing the subspecialty's material prior to the selective. For example, read the relevant Toronto Notes Chapter, review the relevant Case Files, or practice the specific physical exam skills you will need for that subspecialty. If you're really trying to impress, ask classmates who have done the selective before for advice on how to succeed.

EMERGENCY ROOM

- You will have a relaxing 2-day training session prior to your first ER shift. There will be sessions at both hospitals which will go over approach to a few common conditions and run through scenarios as a group. This is one rotation for which you will have adequate orientation/preparation.
- In the ER, the major objective is to rule out life-threatening causes. When you are reviewing cases with the consultant, demonstrate that you directed your history and physical to determine to rule out or raise the index of suspicion towards life-threatening causes.

- A lot of your shift is dictated by who your consultant is and their preferences. Some preceptors like you taking initiative and signing up for patients yourself while others prefer to assign you patients based on learning opportunities and acuity. Ask the doctor at the start of the shift how he/she wants to do things. Usually they'll tell you to sign up until the last 1-2 hours of the shift.
- Keep a running list of patients, what tests/work up was being done and what the results were. You can create a customized PowerChart list of patients that you are following during that shift.
- The nurses on emerge could be your best friends if you put in a little time to say hello to them and give them your name. If you want to do IV's and blood, just tell them!
- For a trauma or code, if you stand back you'll get to see but not do. If you want in on the action, put on some gloves and stand just out of the way enough to not be annoying but close enough that when the trauma resident needs you to pass her something, you're right there and able to jump in. The nurses will also help you get in if they know you're interested.
- Don't forget to eat!

Important topics to review for ER:

- Approach to:
  - Abdominal pain
  - SOB
  - Cough
  - Lower GI Bleed
  - Suicide/psychosis (Vic)
  - Lacerations
  - MSK injuries (wrist fractures, knee pain, etc.)
  - Toxicology and withdrawal
- Wells criteria, Canadian CT Head rules, Ottawa Ankle Rules

Grand rounds are on Thursday morning from 9-10am, but resident teaching is from 8-9am and that may be more useful. It's typically Jeopardy style and they were open to clerks attending. They cover material that you get pimped on during shifts. They are "mandatory" but no attendance is taken.

<u>THE NBME EXAM:</u>

This exam is pretty rough. Take heart in the fact that everyone's in the same boat. Often, there is an extremely long question stem for a quick, seemingly-unrelated question. Reading the question before the stem is a useful strategy. The last part is especially rough because as brain power diminishes they give you MCQ's with 10-15 choices on the last page. They really don't give you very much time (3h), so time management is probably the most important aspect of this exam. No amount of studying will guarantee success (but studying never hurts). It has a standardized marking format so even though everyone feels like they fail, the majority will finish with around 70% (any you only need a 35% to pass!).

<u>Format:</u>

100 multiple choice questions.

No penalty for wrong guesses. Most have 5 choices (A to E). Approximately 12 questions will have > 10 choices. The vast majority of questions have a chunky paragraph (100-150 words) which is mostly symptoms

and signs with perhaps some lab values. All of the lab values are in **American units**, and a list of normal values is included at the front of the test.

Time:
3 hours
Be disciplined and try to stick to 1-2 minutes per question. Don't let yourself get too far behind.

Content:

Cardiovascular 15–20%	Respiratory 15–20%	Reproductive 10–15%	Digestive 10–15%
Hematology 5–10%	Dermatology 5–10%	Rheumatology 5–10%	Endocrine 5–10%
Neurology 5–10%	Immunology 5–10%	General Principles 1–5%	Gynecology 1–5%

Establishing a Diagnosis 40–45%
Understanding Mechanisms of Disease 20–25
Applying Principles of Management 20–25
Promoting Health and Health Maintenance 10–15

How To Prepare

i. Study common diseases - Much of what is on the exam is what you will see on the ward during your CTU rotation. A good way to prepare is to read around your patients, because odds are they will have common conditions. Most of the 'Management' questions were about common diseases.
ii. Know important presentations - When you're on your medicine rotation, you will notice that the residents are spending a fair bit of their time ruling out important presentations, even though they are rare. As a general rule, if you notice your resident sweating a condition, reading about it will help you for this exam.

Resources:

1. Casefiles: a good way to prepare for your medicine rotation overall, but not detailed enough to cover everything you will need to know for the NBME
2. MKSAP: a great way to practice multiple choice questions with well-explained answers
3. USMLE World: multiple choice questions with well-explained answers that are similar to NBME questions
4. First Aid for the Medicine Clerkship: useful if you want a thorough resource that will cover pretty much everything you need to know for this exam, definitely not a quick read

THE BOTTOM LINE:
Be there and work hard. Think about management and long-term planning from the beginning. Keep on top of your patients. Talk to your residents and learn from them. Value your allied health professionals. Take advantage of teaching from your consultants. Be a team player.

FAMILY MEDICINE

- Family is a pretty laid-back rotation. There is an exam, but it's really easy. It is a clicker-style exam done in a group. Its purpose is to stimulate discussion regarding guidelines and common presentations in family practice.

- In London, you are responsible for presenting on a topic of your choice during your two week academic rotation. This is a 15 minute PowerPoint presentation, usually directed towards residents and staff at your centre. Academic family practice is very laid back (1 per 15-30 min).

- On the rural/community portion of the rotation you may spend time in the office, ER, OR, etc. It will show you how varied family can be. Days tend to be longer and busier in the rural portion.

- In general, practices use SOAP style notes. Most practices will have an electronic medical record. These take a while to get used to, and no two types of EMR are the same. Sakai offers modules on how to use Nightingale (used in the academic teaching centres in London).

- Try your best to not only do the history and physical (this is expected of you), but also to come up with an assessment of what you think is going on and a plan. Even if your answer is a bit off base, it helps a lot to learn from your mistakes and it helps the family doctor to teach in areas that you are a bit weaker in.

Topics to Review:

Pharmacology

- hypertensive and diabetic medications
- antibiotics
- common infections: ear infections, strep throat, pneumonia, STIs, UTI

Guidelines (cancer screening, hypertension, diabetes, vaccines)

Chronic disease management

- vasculopaths (previous MIs, strokes, diabetes)
- asthma
- COPD

Know everything you can about diabesity. It will come up 50 times per day.

Approach to:

- headache, SOB, abdo pain, syncope, weakness/fatigue
- URTI – cough, sore throat, ear-ache / popping ear drums
- smoking (know co-morbidities and how to counsel)
- vaginal bleeding/discharge/pain
- Addiction (alcoholism, opiates, benzodiazepine dependence/withdrawal)

Derm: actinic keratosis, seborrheic keratosis, basal & squamous cell carcinoma

MSK

- approach to knee pain/injury (sprains, ligament and meniscal tears)
- approach to wrist pain
- approach to back pain
- approach to shoulder injury

Be aware of the psychosocial component of many illnesses, especially anxiety/depression.

If your preceptor does Pediatrics or Obs/Gyn, read up on newborns and know antenatal assessments and labour and delivery.

Useful Resources:
Toronto Notes, especially the family medicine chapter
Sanford's Anti-infective Guidelines for Community-Acquired Infections
Canadian or Ontario guidelines for screening for/management of specific conditions

> (NOTE: The Toronto Notes take 1-2 years to update guidelines for screening and management, so going to the primary source will ensure you are up to date)

Other Tips:
Truly, do not sweat about the exam. If you saw a variety of patients and read up on first line treatment of the big topics (HTN, diabetes, COPD, chest pain, etc.) you'll be fine. You automatically pass the final exam by showing up.

Enjoy the pace of family medicine... the more you ask to do, the more you will.

PSYCHIATRY

This is a very consultant-dependent rotation. There also isn't a lot of resident contact so the consultant will do most of the teaching. The more you get involved, the more interesting it is. Sitting around interviewing inpatients at a long-term care facility can be coma-inducing, so show some initiative and you will do more interesting stuff. Acute care is more exciting, especially when you can interview. It's intimidating at first, but try to interview as much as possible, as psychiatry offers the BEST opportunity to develop interview skills that will be useful when dealing with patients (especially the difficult ones) on ANY service. If you feel like you're getting a tunnel-view due to the staff you work with, you can always ask to work with other consultants as long as you do a little detective work.

Sitting back and just doing the bare minimum may likely be far more boring than taking charge and initiative. Showing interest will endear you to staff and residents, thus increasing the likelihood that they'll do more teaching, as well as giving you more interesting work.

"Rounds"

Rounds on psychiatry aren't usually as formal as on other services as it is often just you and the consultant. You will divide tasks for the day and talk about your patients.

You will get to talk to the patients and find out how they are progressing. This format can vary quite a bit from site to site, as well as with individual psychiatrists. Do your best to present your cases in an organized fashion, as this is more difficult than it sounds, given that your interviews will not progress in a linear fashion. A general outline is shown below under "On call", based on a case write-up in emerg. You can leave out some information depending on how much time you want to spend in rounds. At a minimum, you should prepare a good impression, as that is the summary of the patients' situation. Adding CC, an HPI, psych history, and other pertinent positives in family/medical/social history will make it more thorough, depending on what they'll want from you.

Teaching Seminars

Usually Wednesday mornings from 8:30-11:30 at Victoria. These are variable, but cover the topics to be seen on the exam. Some of the lectures are interactive, but lots of didactic teaching as well. Some lectures are identical to what was presented in 2nd year and others build off the lecture on a similar topic given during 2nd year.

On Call

You are in-house (required to stay in the hospital) until midnight except on weekends. Call starts at 5pm on weeknights and at 9am on weekends. You are always entitled to a post call day no matter how busy the night is except for call shifts before weekly teaching. These shifts end at midnight and you are expected to show up at 8:30 and have a full clinical day as well.

You will be called to see patients in the emergency department as they are referred. The only purposes of the interview are to decide if the patient should stay or go home and to gather information laid out on a form. No treatment is started in the ER.

You will be performing a comprehensive interview. Here's a general outline (this outline is taken from a psychiatric interview sheet that you must complete with every emerg consult –it's very useful to help you remember all the components at 3am!):

ID: Include patient's age/name/marital status/source of income/how they presented to hospital/Form status/competency status. This information is CRUCIAL. E.g. if you can remember to always mention how someone presented (e.g. ambulance, self, police), you will look REALLY organized, as this is ALL important.
Chief Complaint: in patient's own words
HPI: not only what has led them up to this point, but their symptoms in relation to specific mental illness. A good acronym to make sure you don't forget anything is MOAPS: Mood (Depression/Mania), Organic (Drugs, Neurocognitive), Anxiety, Psychosis, Safety (SI, HI, ADLS).
Past Psychiatric Hx:
Past Medical Hx:
Medications:
Allergies:
Substance Use:
Family History:
Social History: (childhood, development, life events, prior trauma, forensic history)
Mental Status Exam: (the psych admission sheets will prompt you to remember the parts of the MSE) NEVER forget about suicidal and homicidal ideation!
Impression: A paragraph or so to summarize the patient's presentation. Include their ID, brief psych history, CC, and most important details (e.g. actively suicidal/homicidal, psychotic features, etc…). If you can get good at summarizing patients like this, you'll look like a pro star. Critical is that you show here the basis of your reasoning on whether to admit or not, their risk to themselves/others, etc…
Multiaxial diagnosis: DSM stuff – you'll learn this from books. You need to ask diagnostic questions in relation to the main +/- associated mental illnesses in order to make your diagnosis. This requires some memorization of DSM criteria, which can be skirted by using a DSM app, or a little handbook. The diagnosis will guide your decision to admit – if they're psychotic, and unable to care for themselves, they need to come in. If they're borderline personality disorder with chronic suicidality and no new plans, then they shouldn't come in, and likely will regress and do worse if they come in to hospital. Always think about Axis II diagnoses.

You are usually not responsible for filling out the impression and multiaxial diagnosis sections (the resident does this), but it is good to think about what you would put in these boxes. The resident will often ask you what your thoughts are regarding whether to admit/diagnosis/etc.

On the floor:

When following patients on an inpatient ward, sometimes it's hard to determine what you want to do with an interview (usually done every day). Don't worry, it takes time before you can get a good handle on what exactly needs to be asked. Here are some things that you might want to ask about:

1. Follow the patient's progress in hospital – how have they improved/worsened subjectively/staff reports (look at chart first!), asking about old/new symptoms (e.g. suicidal ideation, hallucinations, delusions, etc…)
2. Ask questions about information missing in the original assessment (there is a LOT of vital data, and it's hard to remember to ask it all)
3. Cover their understanding of why they're in hospital – this may change during the course of their hospitalization, especially if they're psychotic

4. Check their insight and judgment – e.g. if this is improving, they might change from involuntary to voluntary status.
5. Discuss treatment – goals, side effects, patient's beliefs in efficacy, their own objectives, etc…
6. Discuss long term follow-up - critical for discharge planning.

Get to know the affiliated health staff, as they can play an important role. People often assume that someone else is following the patients' care, but this is often untrue, and lots of them lose out on services that would be really beneficial (SW, OT, etc). If you can look out for your patients, and suggest services/alternative housing/addictions counseling/etc…, not only will you look like a superstar, but you'll make a huge difference in helping someone get better. No matter where you're located, you have a HUGE potential in psychiatry to do a whole lot of good by following your patients and treating them with respect.

General survival tips:

1. Study the big money conditions first. You'll see MUCH more patients with schizophrenia, bipolar, depression, and borderline personality disorder than anything else, so make sure that if you know anything, know these conditions. Prioritize your studying by what you'll be experiencing on the ward. Also, study the medications that are used to treat these conditions (typical/atypical antipsychotics, anticonvulsants, antidepressants, anxiolytics). If you know this bare minimum, you should get by most of your rotation.

2. Show interest, even if you have to fake it. Tell them you want to keep an open mind if they ask you, unless the staff/resident wishes to customize your learning to your specialty of choice. This should apply to ALL of your clerkship rotations. People will automatically treat you better, teach you more, and give you a better evaluation if they think you really want to be there.

3. Get to know the format of the mental status exam, the new patient write-up (see emerg note), and follow-up notes. If you have an approach before seeing someone, it makes remembering which questions to ask MUCH easier, and less stressful. This is the only thing that you should really look at before starting your rotation (unless you know nothing, then refer to #1).

4. The exam has a history of poorly written or off-the-wall questions, but the rotation director is making serious attempts to improve it since it's made by the department. Despite some obscure questions, it's still fairly easy compared to Medicine.

5. What you need to know may vary from consultant to consultant. Some are all about the pharmacology (including side effects, doses, mechanisms), others about their area of research, while others focus on the DSM diagnoses. Be flexible if you want to shine, or don't if you just want to pass. They won't mind too much if you know the most basic stuff.

6. Enjoy psych. Even if you don't find it interesting, look forward to getting off early, easy call, and something quite different from anything else in medicine. The more you make an effort to enjoy psychiatry (or any rotation for that matter), the better time you'll have. Even surgery keeners have enjoyed their psych rotations, so chances are you will too as long as you keep an open mind.

The Exam – What to Expect

The exam is written by the department and taken from a bank of questions. There doesn't seem to be a pattern to the questions they ask. Some groups had questions about sleep disorders, others somatoform and conversion disorders. Basically, if you understand depression, anxiety, psychosis, bipolar and their treatment as well as Axis II and suicidality you have learned a great deal from this rotation. Below is a guide for studying, but the exam is not too bad. Reading the Toronto Notes section on psych will get you well on your way.

Topics to Review:

-Mood Disorders

- MDD, dysthymia, bipolar disorder, cyclothymia, mixed episodes, rapid cycling
- SIGECAPS, DIGFAST

-Anxiety Disorders

- GAD, Panic Disorder, PTSD, OCD, SAD, Phobias

-Psychotic Disorders

- criteria for Schizophrenia
- definitions of delusions, hallucinations, illusion
- types of delusions (reference, control, thought broadcasting, grandiosity)

-Suicidal Ideation

- risk stratification (SAD PERSONS)

-Substance Abuse

- criteria for substance abuse disorder, substance dependence
- management of alcohol, cocaine, heroin withdrawal

-Personality Disorders

- know the core features (not necessarily all criteria) for personality disorders / clusters
- facilitators will commonly ask you if you noticed anything unusual or if something "stood out" about a patient. This often indicated they have personality traits/disorder. If you're unsure which one, try to think of a cluster.
- Cluster A = psychosis. Cluster B = mood. Cluster C = anxiety.
- Borderline is the most common personality disorder you will encounter.

- Paeds Psych:

- ADHD criteria and common meds
- Autism and Mental Retardation criteria for developmental disabilities day
- Look at Pervasive Developmental Disorders before you do your Developmental Day!

Know the **Mental Status Exam** well. Be able to rhyme off all the important points (ABC STAMPLICKER: appearance, behaviour, cooperation, speech, thought content and form, affect, mood, perception –auditory or visual or other hallucinations-, level of consciousness, insight & judgment, cognition, knowledge, endings -suicidal and homicidal ideation-, reliability).

Pharmacology (most important drugs to know: indications, side-effects, doses)

- SSRIs, antipsychotics (typical and atypical), mood stabilizers, TCAs, benzos

You will find out that pretty much every drug in psych is used to treat every problem (many psychiatrists use these drugs off-label).

Useful Resources:

Toronto Notes, especially the section with diagnostic criteria
Year II Notes + lectures notes from the rotation
Case Files Psychiatry

On-Call Tips:

When you're on call you'll be in emerg and basically EVERY patient will be a risk of suicide assessment! (Learn the SADPERSONS risk factors from Toronto Notes, you'll use it a lot!). Psych assessments are quite thorough. Write notes as you talk to the patient. Consults can take 2-3 hrs depending on the resident – approx. 1 hr for the interview and 1 hr to review with the resident.

Bring a stethoscope (you are responsible for a very basic physical exam if the patient is admitted) and food. Prepare to be there for a while.

Get the run-down from the psych-assessment nurse before seeing the patient
-always check past medical records for previous ER/admissions for psych reasons
-glance over the urine tox screen

Make sure you can defend your risk assessment

Paediatrics

Kids are funny! They will make this rotation fun, but when they cry they can ruin your day. You need to be prepared to make kids cry. They can't understand why you're doing whatever you are doing, and the hospital seems like torture when you have to wait and you are ill. Remember, they have a short memory.
Your exam should be from least uncomfortable to most uncomfortable (finish up with throat and ears). If you know the kid is going to be cranky then the best bet is to go for where the money is on exam. Go straight for the part that you think is causing the problem.

Residents and nurses in this rotation can be pretty protective of their kids. You may feel like you don't have a lot of responsibility, but that just allows you lots of time to think about your patients. Still, this "step back" can be pretty frustrating.

Teaching Rounds

There are typically three 1 hour lectures on various topics presented in an afternoon. Some lectures are didactic and others are interactive. These lectures are helpful but not directly related to exam questions.

Paeds CTU

This is kind of like a scaled back version of adult CTU. Prepare to do a lot more group rounding (often all morning) and it is attending dependant whether you write notes on rounds or afterwards. In the afternoon you'll be given 2-4 patients to follow throughout the day, including a physical, following up tests, consulting other services etc. This is one area where the residents expect you to preround every morning, which includes having bloodwork, vitals (including Tmax overnight) ins and outs and any prn medication use overnight (eg ventolin). The senior resident generally will give you some time in the morning to pre-round after morning report before rounding on patients as a team. There's resident teaching at lunch that you're welcome to go to but not obliged.

Paediatric Emergency

This is a great opportunity to see a lot of different issues arising in the care of children. If you don't learn a lot of pediatric medicine you will at least come out better prepared for parenting. Make sure that you take the time to follow the patients while they are in the department, and if you can read about every case that you see to make the experience more rewarding.

Topics to Review:

- ASTHMA! – chronic management and exacerbations
- Ear infections
- Pneumonia + empyema
- H1N1, RSV
- Pediatric fractures
- Developmental milestones
- Febrile neutropenia
- Approach to fever of unknown origin
- Febrile seizures & epilepsy
- The septic work-up
- The thorough pediatrics history (milestones, immunizations, etc.)
- Newborn exam

Commonly seen in Paeds ER: asthma, croup, viral URTI, MSK injuries especially wrist and ankle (always assess neurovascular), gastroenteritis, babies with a fever (have a good ddx), abdominal pain. Head injury and C-spine post hockey games presents a LOT (so know what to do to clear a c-spine).

Commonly seen in Paeds CTU: asthma exacerbation, ingestion (jimson weed, tylenol, etc.), neonatal sepsis, meningitis, neonatal jaundice, UTI in a baby <3 mos...and some rare stuff which is not worth preparing for in advance. If you start on paeds CTU, understand what a baby's daily intake requirements are (total fluid intake), how to do a newborn exam, and especially what the normal range for vitals is in a neonate, 3 mos old, 1 yr old, 6 y old, etc.

Useful Resources:

UWO Paediatrics Handbook created by the class of 2014 and continually updated annually – distributed by email for free at the beginning of the rotation
Case files: Paediatrics
Pink book of drug doses (given to you)
Nelson's Pediatrics ("nice to buy" but not a "must buy")
Oxford American Pediatrics Handbook

On-Call Tips:

- Always go when they call you (some of the residents are too nice and won't wake you up unless you ask them to - just go...you'll learn a ton)
- Have your admission note with you when you go to present the admission in the morning at handover. Also check around 6-7am for any test results that may have been ordered overnight.
- You only have to do admissions. You are not responsible for floor issues. Don't expect sleep but get it when you can.
- The residents/consultants expect a very thorough history. Expect it to take a while if you're called down to emerg. Always write down the vitals.

Other Tips:

- Babies are a lot less fragile than they seem.
- Sepsis is on the differential for a neonate with ANY complaint.
- Bribery with stickers or popsicles is a failsafe way to get kids to cooperate, and is considered fully acceptable.
- Paeds ER will be the fewest hours/week you will work for the entire year. Enjoy the free time!

For the exam:

You will have an oral exam and a written exam.

The oral exam is two cases selected from a list of ~30 they will give you. You will be given a presentation and expected to know what to ask on history, what to look for on physical, appropriate investigations, a broad differential, and appropriate management. Run through their list of cases at least once to make sure you won't blank on the oral exam.

The written exam is somewhat easier than an NBME (department-written). The exam covers topics listed in the objectives, so if you take the time to go through all the topics you should have no trouble. Make sure you know your rashes and viral syndromes. The UWO pediatrics handbook is an excellent resource for exam preparation.

Sample Admission Note: Pediatrics

ID: 18 mo F, previously well

CC: Fever x 8 days

HPI: May 4: onset of fever (38.5 C)
May 5: onset of bilateral, non-purulent conjunctivitis and generalized erythematous rash; visit to family MD → prescribed Amoxil for ?scarlet fever
May 6-10: continued fever, increasing irritability, decreased appetite, decreased fluid intake, conjunctivitis resolved
Today: bilateral hand and foot swelling, feet > hands (mother unable to put patient's shoes on)
ϕ diarrhea ϕ vomiting ϕ cough
ϕ recent travel
ϕ sick contacts

PMHx: Previously healthy

Meds: ϕ

Allergies: NKDA

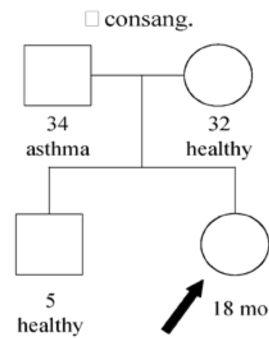
Perinatal Hx: uncomplicated pregnancy
SVD at term
8 lbs. 4 oz.
Apgars 8/9
ϕ resusc. necessary ϕ antibiotics
ϕ significant jaundice discharged home with mom after 36 hers. in hosp.

Development: appropriate; more advanced compared to siblings

Immunization Hx: uTD
MMR given March 14

Feeding Hx: 8 to 12 oz. homo milk by cup per day; good intake of all other foods incl. meats, fruits and vegetables

FHx: Paternal aunt: congenital deafness
Maternal grandfather: osteogenesis imperfecta



SHx: lives in Oshawa with mom, dad and two sisters
mom stays at home with children
dad works as computer programmer
lots of family supports
ϕ financial concerns

O/E: irritable, ϕ toxic
Weight: 10.8 kg (50th %ile)
Length: 83 cm (75th %ile)
HC: 47 cm (50th %ile)
VS: T = 39.2 C ax, HR 140, RR 36/min, BP 70/P
HEENT: ant. Fontanelle closed, N TM's, + red reflex, ϕ conjunctivitis
lips and tongue swollen/erythemaatous, ϕ ulcers, generalized cervical
Lymphadenopathy neck supple
CVS: N S1S2, ϕ S3 S4, PPP, cap. refill < 2 sec., well perfused
RESP: good A/E bilaterally, ϕ crackles, ϕ wheezes
ABDO: + BS, soft, non-tender, ϕ HSmegaly, ϕ masses
GU: normal external genitalia
DERM: generalized erythematous maculopapular rash, esp. in groin
palmar and pedal erythema bilaterally
ϕ peeling of fingertips
MSK: generalized non-pitting edema of feet > hands
ϕ dactylitis
NEURO: PEARL, reflexes symmetrical, 2+ bilaterally

Investigations:

Na: 126	Hb: 126
K: 4.2	WBC: 16.4
Cl:32	Plt: 486
Polys: 9.8	ALP 430
Lymphs: 4.3	AST 86
Monos: 0.8	ALT 42

EKG: N sinus rhythm, ϕ ST changes

Imp: 18 mo □ previously well, presents with 8 day Hx of fever and 4/5 criteria for Kawasaki disease

Plan:
1. Admit to ward
2. IV 2/3 1/3 with 20 mEq KCl/L @ 50 cc/hr
3. High dose ASA
4. IV Ig
5. Rheumatology consult
6. Echocardiogram tomorrow

Signed Super Clerk, M3

OBSTETRICS & GYNECOLOGY

The Basics:
This rotation is divided up into three 2-week blocks:
Delivery Room, with call
OR (Gynecology & Gyne Onc), with call
Outpatient Obs/Gyn, without call

At the start of your OB/GYN rotation, you should be provided with a small pink booklet. Treat this book like gold. It will help you with notes, orders, and save you at 3AM when you haven't slept and writing your 5th admission note of the night.

Preparation:
→ Casefiles is absolutely essential for preparation and the exam
→ Read the two relevant Toronto Notes chapters for a more in-depth preparation

Delivery Room:
Deliveries are highlight of the rotation. Opportunities vary depending on location and time of year. You might have to be somewhat aggressive to get your opportunity. Senior residents are less interested in low risk births, but the junior residents are trying to deliver as many babies as possible. If you're on call with an R1, they'll try their best to steal your delivery opportunities. The best thing you can do is be nearby when a delivery is imminent. Nurses will sometimes forget to call you in the middle of the night, so you can't always rely on a page to get you there in time.

The two weeks of delivery room are highly variable. Sometimes the floor will be packed with labouring patients and you will barely have time to eat. Other times, you will be able to study for hours each day (make sure you bring study materials). You will be responsible for admission notes and for helping with OB triage (which is essentially an ER for pregnant patients). You will also have the opportunity to assist with C-sections, and often will be offered a chance to suture.

Each morning you will round on post-c-section OB patients. You will be able to see patients on your own, write a brief note, and analyze labwork. Key points to ask: pain?, sleep?, flatus?, eating/drinking?. Don't forget to look at vitals, check labs on the computer (especially hemoglobin), and look at the wound site.

Two important sensitivity points to mention:
1) You will sometimes notice that a door to a patient room has a small crocheted colourful butterfly on the door. This symbol denotes a perinatal loss. Thus, be sensitive when entering a room like this.
2) Also be sensitive if a new mom has her baby in the neonatal intensive care unit. You are not expected to answer questions regarding the baby's status.

Operating Room:
You will spend one week doing gynecology operations (usually urogynecology). You will spend a second week doing gynecologic oncology, which tend to be more varied surgeries. You will round as a team in the morning, and clerks generally serve as the scribe for the team while senior residents do the history and physical. Make sure to label notes clearly (with ID, POD#, and type of surgery). In the OR, you will be responsible for cutting knots, retracting, and not interfering with the surgeon. If you show an interest most of the gynecologists will

indulge your curiosity. When there is no OR scheduled, you might spend time at the Cancer Centre doing outpatient visits. These two weeks will be the longest hours of the rotation (~7AM to 6PM).

Outpatient Clinics:
Most clerks find the two outpatient weeks highly enjoyable and somewhat relaxing. You will get very familiar with the prenatal 1 and 2 sheets and get comfortable with standard prenatal visit very quickly. You will get to find the fetal heart, measure SFH, and perform Leopold's maneuvers at each prenatal appointment. You will also get lots of one-on-one time with consultants, so take advantage of the teaching.

You will also spend a little bit of time in gynecology clinics. Although many clerks find assessing incontinence and prolapse unpleasant, these clinics usually have the most variability and teaching opportunities.

In most clinics, you might see the patient on your own, have the consultant trust your exam without repetition, and then do a dictation if necessary. Some physicians will do dictations for you. Some will repeat your prenatal physical exam and let you know how you're doing. Enjoy these two weeks, especially the lighter hours (expect ~9AM – 4PM except when there is morning lectures).

The Pelvic Exam:
It is important that clerks become accustomed to the speculum and bimanual exam. During the second year OB/GYN clinical method session there is much “hoopla” surrounding this often awkward and anxiety ridden part of the clinical exam (for both patient and medical student alike!). Many students (particularly male students) often comment that they feel intimidated of this whole examination process following this session. While it is very important to be cognizant of the feelings of your patients (remember FIFE!), it is equally important that students do not just skip this important part of the clinical examination. That being said, it is always important to:

1. ASK PERMISSION OF THE PATIENT.
2. ONLY DO A SPECULUM/BIMANUAL EXAM IF THE CONSULTANT OR RESIDENT IS PRESENT IN THE ROOM WITH YOU!
3. SPEAK TO THE PATIENT AS YOU ARE PERFORMING THE EXAM.

Often the consultant will want to confirm your findings and it is awkward and inconsiderate to ask a patient if you can repeat a pelvic examination. By having both of you in the room, the patient need only go through this process once. You will find that the majority of patients, particularly women who have already had children, will consent to having the student be part of the examination process.

On the gynecologic surgery part of the rotation, it is often standard practice for a bimanual pelvic exam to be performed in the O.R. prior to surgery (i.e. once the patient has been put to sleep). While this is often done by the surgeon in order to better delineate the anatomy he/she will be dealing with in the surgery, it is often also a time when all the residents and students who will be attending the O.R. also perform the bimanual exam. If you feel at all uncomfortable examining a patient who is not awake and/or whom you have not met before and therefore who has not consented to you performing an exam, don't feel shy about stepping back and not participating. However, if you feel this way, a better tactic is to get to the O.R. with time to spare so that you can meet the patient before she has been wheeled into the room and put to sleep. At this time you can ask her permission to participate in the pre-surgery examination.

Tip: If a woman is obese and the vaginal vault walls are caving in on the speculum (obscuring your view of the cervix), try putting a condom on the speculum and cutting a hole in the end of it.

On Call:

There is usually 2 clerks on call (one red team, one blue team), which starts at 5PM and ends at 7AM the next morning. Obstetrics call consists of admitting patients for labour and delivery and following them while they are progressing through labour. This can be very busy, so don't count on a great sleep. Gyne call requires you see patients in emerg and decide their proper treatment, although don't count on a lot of exposure to this. You will have the opportunity to scrub-in for emergency C-sections. Additionally, you will be asked to see patients in OB triage for your team. Unfortunately there often isn't a lot of room for independence on OB/GYN call and you may feel like you're just following your resident around all night.

If you want to get the most out of your night on call, which may include more opportunity in doing deliveries, make sure you follow the patients closely. Ask the nurse to tell you when she will be performing the next cervical check so that you can do one at the same time. The more times you peek your head into the birthing room to see how your patient's labour is progressing, the more comfortable she and the other staff will be about letting you take more responsibility during the delivery. Generally, it is not considered great form to rush in when a patient is 10cm dilated and ready to push and expect to be allowed to do the delivery if you have not even so much as introduced yourself to the patient prior to this point.

Tips:

- Get involved in deliveries done by family doctors. These patients are not seen by the obstetrical service unless a complication develops, and thus the ob residents are not usually involved in the case. This means there will be just you and the GP and this often means you will get more hands on experience. Introduce yourself to the GP, ask if they would mind you assisting and offer to do the admission history.
- Prewrite as much of the admissions history as possible; most information is often available in the charts. Women with contractions have to wait for your history before they can get an epidural, so if you can complete most of the history before seeing them, verify it, and only spend 5-10 minutes talking to them, they'll appreciate it.
- Be proactive and volunteer to do triage workups and to go for ER consults. If you don't get up in the resident's grill about doing stuff, you won't be called for anything. You have to be assertive with the residents if you want to do anything, suturing or delivering.
- Always remind the nurses/residents to page you if someone starts delivering...otherwise they forget to sometimes. And when they do page you, RUN, just in case. Sometimes babies come fast....really fast.
- Get sleep early - babies love to come in the middle of the night and all at the same time. You will regret not taking that nap at 6 pm when you had the chance.

For the exam:

The NBME reflects the more general primary care practice of Obs/Gyn in the U.S., whereas Canada is more subspecialized. So, read up on STIs, UTIs, ER cases, delayed puberty, and female health maintenance.

As with all NBMEs, expect to walk out feeling like crap. It's belled. You'll pass. Just ensure you manage your time properly.

Study from Casefiles. It is all you need for the exam. Focus on the clinical pearls and you will be more than adequately prepared.

SURGERY

General

The surgery rotation really gives you a chance to become a part of a team and feel like you're "making a difference" in the hospital. You will have quite a bit of responsibility on this rotation – make the most of it! That includes helping with rounds in the early morning (writing progress notes on patients), seeing patients in the ER, consulting on the wards, and taking care of problems on the ward. Sometimes this can leave clerks feeling overwhelmed, but your resident is always there to help you out in a bind. Don't be afraid to call them. Just know your limits and stretch your wings a bit.

At the beginning of the rotation you will receive a surgery 'cheat sheet' book that will fit in the pocket of your scrubs. This has lots of concise information about writing notes, common drugs, orders, procedures and presentations.

Don't take things personally. Surgeons can be an 'interesting' bunch and may dispense with the normal social pleasantries that we are all accustomed to (on the whole though, most are very nice, pleasant people). Be friendly to the nursing staff and to your team members and things should go pretty well.

If you are ever not sure of where to go … go to the OR!

Rounds

Rounds are fast, and you're expected to keep pace with the notes in the morning. Get there about 10 minutes before the residents and print lists for each team member (you may, for some services, have to ask a resident to proxy you to the consult list on the first day). Always try to have the next patient's chart open and ready to write a quick note. It is team dependant whether the team rounds with a computer to put orders into HUGO as they go or at the end. Either way, feel free to ask the residents if you can put the orders in (on their account even) and have them sign it at the end. See the example below for an idea of the minimal content of a surgical progress note.

Teaching Seminars

Clerk teaching is really good in surgery. The best way to get a lot out of these sessions is to read the night before. You don't have to read a textbook's worth of information, just skim a concise text or get previous student's notes. If you know the content of the lecture you'll look good for the consultant and learn more in the process. These are small seminar sessions. Sometimes there will be a Powerpoint presentation, but often it is a discussion around the table. Questions are always welcomed.

Grand Rounds

Sit at the back for grand rounds and morbidity & mortality rounds. You will see the residents get grilled and you don't want to be in the line of fire. There is often a schedule of topics. It's good to read up since the material may be over your head, and it's easy to fall asleep if you get lost. For grand rounds (occur once a month), you are expected to wear business clothes. Double check with your residents the day before if you're not sure! For the rest of the rounds, scrubs are perfectly acceptable.

On Call

On call, you are responsible for seeing emerg consults. Consults will be paged to the resident, and the resident will then call you and tell you to see the patient and page them back when you're done. Unlike most internal medicine consults, gen surg often doesn't admit patients that they are consulted on so check with

your resident before you talk to a patient about admitting them unless it's something obvious like an appy. It's a good chance to develop your own skills and learn from your mistakes. Always think about what and *why* you want to order it. You may also be in the OR if you have a really sick patient overnight.
There are call rooms for your Gen. Surg. rotation and Ortho. Most other specialties are home call - you go home and return if you need to see someone. During your core gen surg rotation, each clerk does an average of four call shifts. For the ortho selective you are asked to choose two nights to be an call (one weekday and one weekend day). For all other selectives call is not mandatory but feel free to ask to help out with call if you're feeling super keen.

Bring food/money while on call. Vic has a Tim Horton's and some food available all night at the cafeteria on D3. They will also make French fries between 12-2am each night … dangerous. At UH, the Tim Horton's in the lobby is usually open with some basic food to buy.

In the OR

This can be a daunting time at first for a lot of clerks, but after a couple of days it will seem more natural.

- Always remember to wear the OR cap (either the poufy bouffant hat if you have longer hair or the tighter cap if you have short hair) when you are anywhere in the OR hallways, and to wear a mask once you enter an OR.
- If you are scrubbing, there are a few things you should do before washing your hands. Go into the OR (with cap and mask on!) and introduce yourself to the nurses. Write your name on the white board (or sometimes a scrap piece of paper by the nurse's computer) with your status (M3) and glove size. Remove your pager/stethoscope and leave these on the desk by the nurse's phone. Remove all jewelry/watch on your hands and arms. Grab a pair of gloves in your size (usually in a cart) and hand them to the nurse who is not scrubbed. If a Foley catheter is required, you can ask for the nurses to get the kit ready for you, or better yet, ask them where to find the kits so you can get it yourself the next time. If a Foley is required, you will put this in before scrubbing. You can also write the outline of the OR note (see below) and orders if you have time. Obviously you won't be able to fill in sections like 'post-op dx' or 'findings' before the surgery, but doing what you can prior to scrubbing will save you time afterwards.
- Despite all of the practice scrubbing you will have before the first day, you will probably still feel lost. If you wash your hands thoroughly, wash for longer than your most junior resident, let the water run from your hands towards your elbows, and don't touch anything before gowning and gloving you should be good! First scrub of the day always requires one of the washes that use water, after that you have the option to use the self-drying scrub.
- Once in the OR, wait your turn (you will always be last) to get a towel to dry your hands. Put the gown – which comes in the green reusable and blue disposable varieties - on (takes some practice) and wait in line for the scrub nurse to help you get gloved. Wait patiently and don't ever take anything off the scrub nurse's table (even a towel!). Ask your resident where they would like you to stand and then try not to break sterile field (best bet is to keep your hands touching the patient). If you see sutures or ties going in, ask the scrub nurse for scissors and be prepared to cut when asked.
- Try to know the procedures that will be happening the next day so you can read up on the cases. Lists are available at the OR Communications desk the previous afternoon that list the next day's surgeries. Read up on anatomy (Surgical Recall is a great resource for this) and also read up on the patient. If you don't have time to read the night before about the particular patient or if it is an emergent surgery, sneak into the OR (with mask and cap on!) and read the patient's chart (age, past medical/surgical history, presentation, etc).

THE SURGERY ADMISSION NOTE

THIS IS A COMPARISON TO THE MEDICINE ADMISSION NOTE FOR THE SAME PROBLEM.

Patient ID: 65 yo male presenting today with 1 day hx of BRBPR.

PMHx CHF, COPD

PSHx Appendectomy (1999)
Cholecystectomy (1986)

MEDICATIONS

1. ECASA 325mg PO OD x 5 yrs
2. Ranitidine 150 mg PO BID
3. Tylenol #3 1-2 tabs PO OD
4. Ventolin MDI 1 to 2 puffs QID PRN
5. Atrovent MDI 2 puffs QID

ALLERGIES

Morphine – GI Upset
Pencillin – Rash

SOCIAL HISTORY

1-2 ETOH per month. 40 pack/year smoker

FAMILY HX

Father Colon CA 56

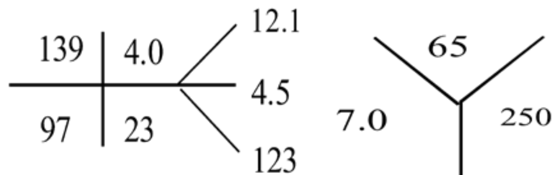
HPI

3 episodes of BRBPR in 24 hrs. First epsiode 0200 last night. Awoke from sleep w/ LLQ *(Left Lower Quadrant)* crampy pain. Large bowel mmt mixed with BRB "4-5 cupfuls". ∅ N&V(*Nausea & Vomiting)*, ∅ dysphagia. Constant LLQ Pain 3/10 w/ ∅ radiation. Never had pain previous. ∅ abd distention. Loose stools last 2 wks but ∅ blood. ∅ melena. 2 episodes since @ 0600 and 1100. Presented to ER, at urging of wife, @ 1300 with c/o "weak & dizzy". ∅ LOC *(loss of consciousness)*. ∅ CP (*Chest Pain)*. ∅fever, ∅chills, ∅night sweats, ∅weight loss. Decreasing energy last 2 mos. ∅ bleeding problems. + Aspirin use x 5 yrs. 1-2 ETOH per month. Last meal 2300 yesterday.

Physical Examination:

HR 90, RR 22, BP = 140/86 lying, 136/80 standing, Sat 100% on RA, T=37.0
RESP: Good BS bilaterally, mild expiratory wheezes, ∅ crackles, ∅ indrawing
CVS: N S1S2, ∅S3/S4, ∅ peripheral edema, PPPX4 *(peripheral pulses palpable)*
ABD: Soft, Mildly tender LLQ, ∅rebound tenderness, ∅masses/organomegaly, +BS*(Bowel Sounds),* ∅ scars, Normal tympany
RECTAL: Normal Tone, Prostate Soft Mildly enlarged, BRB present, ∅masses

LABS



Calcium = 2.04 Albumin = 35 INR / PTT = 1.1/60
ALT = 15 AST = 20 Group & Type = O+
GGT = 20 Alk Phos = 60 Lactate = 1.2
Cap Gas: pH=7.4/PO2=96/PCO2=37/HCO3=23
Cardiac Enzymes: CK 85 & Troponin I < 0.5

Imaging: 3 views Abdomen: ∅ free air, ∅ dilated bowel loops, Diverticuli Left colon
CXR: Normal Cardiac Silhouette, Clear Lung Fields
EKG: Normal Sinus Rhythm @ 86 bpm, Normal Axis, ∅ ST-T changes

Assessment

Stable 65 yo man with 1 day Hx of BRBPR. Mildly dehydrated
DDx: 1. Diverticulosis 2. Angiodysplasia 3. Colon Ca 4. Volvulus

Plan

1. Admit to Surg team 2
2. Rehydrate (2 large bore IV's)
3. Keep 4 units grouped & crossed @ all times
3. Transfuse 2 units PRBC
4. For colonoscopy tomorrow

The Surgery Progress Note

Date/time Gen. Surg. POD#1
No new complaints, +flatus, No BM

O/E: AVSS
Abdo soft, non-tender, BS+
Wound clean and dry

Plan: Advance diet
Mobilize
Continue to follow

The Surgical OR Note

In surgery, you will also be required to write OR notes. This is the only record of the operative procedure between the operation and when the dictation service finally distributes your consultant's detailed operative note. Some consultants/residents prefer to write these brief notes for themselves, but at the very least you should know the format. Most of the time it is the clerk's job to write this note, especially if you aren't scrubbed in on the case. Your help with this is appreciated. A mnemonic to help you remember most of the info required is PPP-SAFE. Below is a sample:

Sept 1/00 – 2300h - OR Note
Pre-op Dx: cholecystitis
Post-op Dx: same
Procedure: laparoscopic cholecystectomy
Surgeon: Dr. (staff)
Assistants: Dr. (resident) PGY _/ (clerk) M3
Anesthesia: GA by ETT (general anesthesia by endotracheal tube), Dr. ___
Findings: none
Specimens: gallbladder with stones
EBL: minimal (estimated blood loss)
Compl.: None

Drains: None
Counts correct
Disposition: To PACU, extubated in stable condition.
Plan: Discharge home when able.

Procedure notes should be added to the clinical record after anything significant is done to the patient (eg. suturing in the ER, chest tube insertion). The format is similar to that of the operative note, but not as detailed. Who was there, what was done, what you found, and how was the patient after the fact.

Specialty-Specific Tips

Gen Surg

Topics to review:

- Acute abdomen, peritonitis
- Small Bowel Obstruction and Large Bowel Obstruction – including x-ray findings
- Ddx: for RUQ, RLQ, pain
- Ddx: for upper GI bleeding and lower GI bleeding
- Appendicitis
- Diverticulitis
- Gall bladder – know the differences between cholecystitis, biliary colic, choledocholithiasis, ascending cholangitis and various management
- PUD
- Hernias
- IBD
- Colorectal cancer
- Perianal disease
- Hemorrhoids
- Hernias
- Ileus
- Liver – causes of jaundice
- Breast (if you're on the Brackstone team) how to differentiate breast cancer from benign lumps and what are the most common kinds, management – mastectomies, lumpectomies, sentinel node biopsies, etc.
- Thyroid dysfunction and cancer and parathyroid dysfunction
- GERD

Helpful Resources):
1)Toronto Notes
2) Surgical Recall
3) Case Files
4) NMS Casebook
5) Pestanan's Notes

Anesthesia

- Use the book that they give you in the beginning (Anesthesia for Medical Students) but keep in mind some sections may be out of date. Read as much as you can ASAP so you will have a better idea of what is going on.
- Review cardio and resp physiology.
- Show enthusiasm and be prepared to ask questions.
- Be proactive, if you want to practice IVs ask if you can do that for the next patient, ask if you can do the pre-OR interview and assessment. Arrive early (approx. 30 min before the OR starts) so you can read up on the first patient and get a start on the pre-op assessment.
- If you can get in the vascular room you'll see a lot more, but these tend to be fairly long procedures
    - Note – you don't really have a choice of what room you'll be in for the day but you can request rooms with a high turnover (short procedures) however, the drawback is that these procedures are often done with a LMA instead of a ETT

Common topics: malignant hyperthermia, anti-emetics, MAC (mean alveolar concentration)

Common drugs: propofol, midazalam, fentanyl, morphine, the inhaled anesthetics, succinylcholine (know how they work and if they have an antidote how that works)

- Anesthesia is a nice break, some people will let you out after the last induction and there are no rounds in the morning.
- There will be lots of time for teaching during the cases, so if you have any anesthesia questions don't be shy
- You just have to be at the OR on time or else you'll miss out on an induction.
- You can also ask to stay longer with a resident to see some OB stuff, but there's no mandatory call.
- Just remember - some days on Anesthesia can be rather boring (i.e. you get stuck in a room with a 10 hour long procedure and an Anesthesiologist that doesn't let you do anything, etc.) - just don't get discouraged ... other days will be better.
- Help out – offer to draw up the drugs, prep the LMA/ETT, record data during the procedure, etc.
- Know your stuff (i.e. read the book) so that the Anesthesiologist will feel comfortable letting you do this (with their Supervision of course)
- When injecting a drug, just give 'er, Anesthesiologists like quick, decisive drug administration

Specialty	Topics to Review
Ortho	Anatomy! (bones, ligaments, nerves, vessels, pulses), MSK exam, common fractures
Vascular	Types of ulcers, types of claudication, AAA, arterial system anatomy, carotid artery dz
Urology	Male GU anatomy, prostate/bladder CA, BPH, UTI, types of incontinence
Thoracics	Lung/esophageal/stomach CA, chest CT imaging, chest tube insertion (NEJM videos)
Neurosurgery	Increased ICP, shunts, brain tumors, types of hemorrhage, spinal stenosis, head imaging
ENT	Nerve anatomy/function, neck dissection zones, layers of scalp
Plastics	Anatomy, burns, wound healing, lumps and bumps, breast surgery, hand anatomy (if at St. joe's)
Cardiac	CAD, valvular dz, heart/lung anatomy/physiology, restenosis rates

Surgery Exam

As of 2015, the surgery exam switched from the NBME exam to a department written exam. The exam is 50 multiple choice question and you are given 2 hours.

How To Prepare:

i. Study common diseases – there is a large emphasis on presentations you will encounter on your general surgery rotation

ii. Know surgical and medical management for diseases. Make sure you understand why your residents order certain medications or therapies. Consider calls to ward, consults and initial orders as practice for your exam and remember to read up on these components of disease management.

Surgery Oral Exam

You will be asked 3 questions based entirely on morning seminar topics. There will be two surgeons and yourself. Remember to always say the obvious things, such as complying with universal precautions, checking ABCs, vitals as these are important and they will buy you time in your answer. For each question you are given a clinical scenario, then asked to discuss what you would ask and do on history/physical, what investigations you would order, your differential diagnosis and management plan.

How To Prepare:

i. Attend seminars (they are mandatory and attendance is checked to help you out) – these seminars are probably the most useful resource when it comes to the oral exam.
ii. Every day is practice when you are getting pimped
iii. Study with a group – brainstorm potential questions, then practice answering out loud.