

Cruising Through 3rd Year



A quick and dirty guide to the in's and out's of the
core clinical rotations

Updated by the AΩA class of 2007

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You Made it!

Welcome to the Third Year! This year will begin a whole new, memorable, rewarding, and challenging journey that is completely unlike your beginning years of medical school. Hopefully, by the time you begin reading this manual the boards will have been behind you, and you are well rested and refreshed for this upcoming year! This is the year many of you will decide the career paths you will eventually take. You will have the opportunities to see and do many of the things that originally brought you here. You will deliver a baby, learn how to sew up a laceration, and comfort a patient at the time when he or she is most alone and afraid. From bringing new life into this world to quite inevitably, observing patients die, this year will be quite memorable!

As wonderful and difficult as this journey is, it is not a guided tour. By June you will truly appreciate how important it is to be a "self-guided learner." Rarely will someone delineate exactly what is expected of you on the various rotations, what you should study to prepare for daily tasks as well as for the exam, or what it means to do well in your clinical rotations. This guide was first assembled in the late 1980's by medical students as a way of passing on accumulated practical tidbits in response to some of these concerns. It has been through several revisions, including one by Samer Najjar and Matthew Wang in 1995. The most recent revision, in 2002, by Elizabeth Yellen and her colleagues completely revised the Guide to make it more up-to-date, useful, and student-friendly. With the help of Dr. Wasserman, Dr. Malakoff, Dr. Sarani and the 2003 Class Council, the last edition of the manual was further made possible. The AOA class of 2007, decided to further revise the work of Elizabeth and her colleagues, so we bring you Cruising Though Third Year 2nd Edition. A copy of this Guide will remain on the AOA website, and another copy will reside in the Dean's office on disk in the event of a GW computing disaster (not impossible!)

Good luck!

Payal Amin
March 2007

How to Use This Guide

This guide is intended to provide an introduction to each of the clinical rotations in the third year. We hope that the information provided will be useful in approaching the first day of each rotation and will give some outline as to the expectations and practicalities of the various required rotations. Please note that we have tried to include the information that we feel to be most practical. We have included information that may be helpful for the first day or week of a rotation, and sample notes for each specialty. We have purposely formatted these sample notes so that they may be copied, cut out, and pasted onto 4X6 index cards to fit into the pocket of a white coat.

Some General Advice:

1. You will never have enough time to do all the things you want or think you should do for each rotation. Make a plan at the start of each rotation and do your best to stick to it. Take advantage of down time while on call, breaks between lectures, and especially any outpatient months to read, read, and read some more! Accept that you may never have more than 15 minutes in a row to do productive work. At least everyone is in the same boat.

2. Develop a comfortable wardrobe and BUY COMFORTABLE SHOES. This is a must! You may be standing for 8 hours at a time retracting during a surgical case or standing through 5 hours of medical rounds after being up all night.

3. Recognize the many sources of information and support in the hospital and make good use of them. The nurses, scrub techs, technicians, cafeteria staff and countless others become surprisingly important to your ability to get things done and function well within the hospital setting. Be nice to everyone! You are the lowest one on the medical and hospital totem pole! These people may have been taking care of patients since you were in diapers. The nurse who takes the time to show you how to draw blood may save you from getting yelled at later in the afternoon. Don't let your ego stop you for asking for help and advice. Don't forget basic niceties - "Please", "Thank you", and "Good morning" go a surprisingly long way in winning nurses over and thereby making your life on the wards significantly easier.

4. Be respectful, kind and professional in your interactions with patients. Imagine how you'd like your mother to be treated and act accordingly. Knock before entering a room and then introduce yourself to the patient and all family members. Look presentable no matter how terrible your night has been. Help patients retain some dignity while hospitalized. Close the door or curtain during examinations. Don't promise to do something if you don't think you'll be able to return and do it later in the day. Taking care of patients is an honor, particularly at this stage of training. On many rotations your tired and overworked residents and/or attending may be less than respectful towards patients. Be nice! No matter how mean, smelly, or rude a patient is it is your JOB to be professional and courteous. The doctor-patient relationship continues to play an enormous role in our jobs as healers.

5. During this year you will have the opportunity to get to know and work closely with many of your classmates. This is a great experience for most people and many find themselves making new friends. However, it is likely that you will have to work with an undesirable classmate at some point during the year. This unfortunate reality does not change the fact that succeeding in your third year will hinge upon your ability to work well in a team setting. Busy residents often seem to perceive students as a group. Thus making others in your group look good, while sometimes painful, makes you look good. Work together, divide the work evenly, be fair and flexible with the call schedule and don't be too worried about the students who are busy brown-nosing. The general consensus is that residents have enough experience to separate sincerity from posturing.

6. Remember that you are here to learn. Unfortunately, there may be times when your grade does not reflect your ability or the many hours of hard work that you put in. Although grades are important, you are ultimately out to be the best physician possible. Don't be discouraged. Your hard work will pay off! Remember that you are not a mini-intern or a mini-attending, but a student. Take full advantage of this unique and privileged opportunity. Although some nights seem endless, the year will fly by. This may be your last chance to deliver a baby, hold a beating heart, or have the luxury of taking a two-hour history from a fascinating patient. Relish it. And remember, as you are going through your clerkships, utilize the clerkship directors. They are there to help you with any questions, concerns, or frustrations you may have.

Advice from Above

In putting this guide together we solicited some information from clerkship directors and department heads in order to help balance your view on what those above you (at the attending level) expect, and what separates the outstanding students from the average ones.

For students on medicine (pediatric, internal medicine, psychiatry, primary care, neurology) rotations:

- Question everything all the time.
- Learn something actively every day.
- Actively participate in reducing medical errors. **Write clearly.** Check scripts carefully. Get all lab and X-Ray results. Don't get lazy, and never lie.
- Get/give/suggest help when necessary. Medicine is not a competitive sport.
- Be professional. Attendance, punctuality and appearance are important.
- Go to all conferences!
- Show respect for patients and colleagues.

For students on surgical(OB/GYN, Surgery, Surgical Subspecialties) rotations:

Surgeons, in general, are individuals who place great worth on decisiveness and hard work. Therefore, a sure way to do well as a medical student is to:

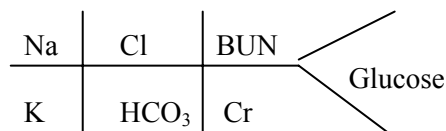
- Read and ask questions so you understand what is happening.
- You don't need to know all the details of a given surgical procedure, but you should be familiar with the anatomy involved in each case that you scrub on.
- Strive to formulate daily assessments and plans for each of your patients. Anyone can collect subjective and objective data, but it is the ability to formulate an assessment and plan on morning rounds that separates average from above average medical students. Give yourself extra time in the morning to synthesize your patient's physical exam findings, lab results, etc. Come up with a plan yourself and then have the intern look it over BEFORE rounds so you will be more likely to have a good plan for the day. The residents and attendings want to see that you are trying to take care of the patients and not just waiting for them to tell you what to do. Don't worry, in the beginning, formulating a plan may be difficult, but with time and practice, synthesizing the assessment and plan will become second nature.
- If you are not in the OR, page your intern and ask if you can help him/her. Often, the intern will tell you to go and read, but the fact that you have offered to help is noted.
- Be proactive and ask the intern to show you how to do basic procedures, such as starting IV's, drawing blood, removing chest tubes, etc. Such initiative is welcomed.
- Know everything about your patients. Often patients are admitted the day of surgery, so you don't have time to interview them at length before the OR, but you have plenty of time to do so after their operation. Also, know their x-ray and pathology results BEFORE the intern or residents does (i.e. don't wait for the results in the computer) and make sure to tell the intern and residents the results, otherwise, they will simply look up the results themselves and won't realize that you had gone out of your way to obtain them.
- Always be well dressed and shaven. It is to your direct benefit to wake up 10 minutes earlier than you otherwise would to shave and change your scrubs.
- Have fun, learn, challenge yourself, and remember the 3 rules of surgery, "1. Eat when you can, 2. Sleep when you can, 3. Never ever mess with the pancreas."

The Essentials

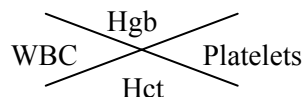
Essential Pocketbooks: Tarascon Pharmacopoeia, The Sanford Guide to Antimicrobial Therapy, and Maxwell Quick Medical Reference. Buy them all - you'll need them on every rotation.

Essential Abbreviations:

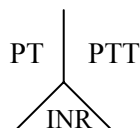
Chem 7:



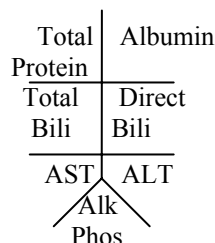
CBC:



Coags:



Liver Function Tests(LFTs):



Arterial Blood Gas (ABG):

pH/PaCO₂/PaO₂/HCO₃/O₂ sat/base excess

<u>Admission orders: ADC VAN DISMAL</u>	<u>How to Write an Order</u>
<p>Admit to: specific floor or unit, attending Diagnosis: May list several if unsure with "rule out" or "versus" Condition: critical, stable ...</p> <p>Vitals: BP, temp, etc. every ___ hrs/min or Q8° ... Allergies: PCN, ASA, or NKDA Nursing: record daily In's and Out's, daily dressing changes</p> <p>Diet: NPO, soft, liquids, diabetic ... IV Fluids: D5NS at ___cc/hr or NS at ___cc/hr etc... Special instructions: EKG, telemetry, venodynes Medications: list CLEARLY with clear dosing instructions Activity: strict bed rest, encourage OOB (out of bed) Labs: Chem 7, CBC, UA, or anything else</p>	<p>Make sure the order sheet has the patient's name, birth date, medical record number and weight (if pediatric patient)</p> <p>Write CLEARLY what you would like done</p> <ul style="list-style-type: none"> - PA and Lateral Chest XRAY - Heplock IV - Tylenol 250mg PO NOW and Q4-6 hours PRN for pain. <p>Sign legibly and DO NOT REPLACE CHART AT NURSING STATION UNTIL COSIGNED BY INTERN OR RESIDENT</p> <p style="text-align: center;"><u>How to Write a Prescription</u></p> <p>Penicillin VK 250mg Sig: i tab PO QID x 10d Disp: 40 tablets</p>

Pediatrics

I. Books to Buy

Text books:

1. Nelson's Essentials of Pediatrics- Good reference, worth buying if you are interested in pediatrics, otherwise try to check a textbook out of the library. Reality is that you won't have time to read this, use it as a reference on a case by case basis. It is a very large text book that essentially has every pediatric disease known to man. It is a great reference book that can help answer questions about complicated/rare diseases for both the shelf and on the wards.

Recommended Online/Multimedia resources:

1. 5 Minute Pediatric Consult – available on- line at the Himmelfarb Library that goes over different chief complaints and describes the differential diagnosis, physical exam findings, and pertinent lab tests.
2. <http://pediatrics.aappublications.org/> – website for Pediatrics, the official journal of the American Academy of Pediatrics. Can access the latest journal with full access to PDF and HTML versions of articles at Himmelfarb library (home access requires a subscription).

Review books:

1. Blueprints in Pediatrics- Brief review of major topics. Good reference in a pinch or to read prior to the test to make sure you haven't missed any huge areas. Not quite adequate to be used alone. It is easy to read this text cover to cover in combination with doing the questions from Pre-Test for Pediatrics. A great way to study for the shelf exam.
2. NMS- is very thorough, but long.
3. BRS- is shorter but outline format

Question Books:

1. Pretest Pediatrics- Questions are harder than those on the board exam. Similar to the rest of the Pretest series with very good review of ID, and thorough explanations. Definitely helps to fill in some of the information gaps in Blueprints.

Pocket Books:

1. Harriet-Lane- May not want to buy it unless you are going into pediatrics - can usually borrow from your resident or get from the library. A manual for pediatric house officers – this pocket reference book is a Pediatric Resident's best friend. It is a quick reference for major pediatric disease, but also contains information about developmental milestones, a reference for age appropriate vital signs, and most importantly, pediatric drug dosages. Especially great to have if you're interested in pediatrics.

Other: Carry a calculator! You will need to give urine output, feedings, and drug dosing in cc/kg. Penlights are also helpful for peering into little dark throats.

II. How to study

GRADE BREAKDOWN:

Exam = 20%

Clinical Evaluations = 70% (35% each)

Presentation = 10%

Make a plan early in the rotation for what material you want to cover and then try to read a little bit each day. Try not to get too far behind. Use your outpatient month to cover the bulk of your textbook reading - you will generally be more busy and tired during your inpatient month. On the wards, make sure you have a basic understanding of each of your patient's disease processes. The computers in the library and in the resident lounge at CNMC (research wing level 3.5) have internet access - use MD Consult! This is invaluable for finding review articles quickly and will keep you from lugging a textbook around. There is a great online pediatric board game that you might use in your review session with Dr. O, but it is loaded with board style questions and is more entertaining than texts. Couldn't find the link. Sorry, you can try to google it.

Exam: Currently, a multiple choice NBME shelf test is given at the end of the two-month rotation. This exam is similar to those you will take in Medicine, Surgery, and OB/GYN. Pretest questions are great but harder than the real test - don't despair. Blueprints is useful to cover topics you don't otherwise have time to read in depth about. Many questions will ask about a pathognomonic sign - know the most obvious ones (i.e. - cherry red spots, steeple sign etc...). Don't forget that you don't just need to know disease processes with kids, you also need to know something about normal development.

Presentation: A student case presentation on a core pediatric topic is a required component of this rotation. Groups are assigned at the beginning of the rotation. Teamwork is important here - all members of a group will receive the same grade. Dr. Ottolini appreciates a good presentation. Make the AV interesting. Rehearse your presentation so that it runs smoothly and the delivery is lively. Stress audience participation.

III. Expectations

Attendings: They generally want you to be interested, kind, and have some genuine concern for the experience of the child and his/her parents. Ask lots of questions. Subspecialists consulting on your patients are a great source of info for you and your team. NEVER make the other students look bad (you are not rewarded for petty adolescent behavior!) Most pediatricians are nice and want you to have a good experience even if you don't have great natural facility with kids.

Residents: Generally very friendly. Follow them closely for a few days until you figure out what they really want you to do. Often they will be very busy - it is OK to keep asking what you can do. Write a SOAP note on each of your patients every day, and write the admission H&P on each patient you admit while on call. NEVER do anything (procedure wise) to a patient unless you OK it with the resident. Neat handwriting is appreciated.

Food: Children's cafeteria is notoriously not good, but things are changing. The salad bar is not bad, the sushi is OK (so I hear-I always pack a lunch...microwaves are avail in residents lounge and in cafeteria if you are packing). Cafeteria closes at 7pm (and the pickin's are slim after 6pm) so if you are on call and didn't bring your dinner, get there early or you'll be eating out of the vending machines (also located in the cafeteria). If you have time, you can walk across the parking lot behind the ER (can be a challenge to find your way) to the Washington Hospital Center Cafeteria, which has better selection and much better food. Coffee carts are located on the north east side of the cafeteria and in the lobby but are only open during business hours (read: closed by 3pm).

Attire: Generally more relaxed than other rotations. Many attendings and residents will make the white coat optional - however the pockets tend to be useful. Having keys or something on your stethoscope/in your pocket to distract a child can make an exam much easier. Be prepared to get puked/popped/peed on. Get over it. Fact of life on Peds.

First Day: Parking has become an issue at Children's in the past year. Students used to be able to get parking passes for (\$50/month) for the on-site garage. No more my friend. On your first day just cough up the \$5 for visitors parking (you will NOT get reimbursed) and figure out the new system. The system may have changed since we were there but as of Fall 2006 your options were 1. pay \$5 every day and park as a "visitor" 2. Park in a way out lot in a sketchy area of DC and bus it in 3. Metro there (Catholic university stop on the red line) and take the shuttle from the metro to the site runs every 15 min or 4. (my personal favorite and what I did) Bike thru the ghetto at 5:30am every morning and pray that you won't get mugged on your way there. Orientation is at Children's (research wing level 3.5.) Page your resident or go to assigned site when finished. If you are beginning the inpatient month ask which patients you should follow and then read up on them in order to present competently the next morning. It may be helpful to go over the note template with your resident.

Computers: You will likely receive an email from Wilhelmina (the course admin assistant) regarding computer access prior to starting the rotation. If not, get in touch with her. Computer access is absolutely necessary for working at Children's. Labs, discharge summaries and orders are all done on the computer. You'll need to do some online training and then take an online test showing that you are competent. In reality, the test questions may or may not cover material taught in the online training. No worries you only need an 8/10 to pass and then Wilhelmina will give you your login and password on your first day.

IV. Daily Activities

Outpatient activities will vary slightly according to site. Be prepared for lots of well child visits and know the normal physical and developmental findings for each age.

Inpatient rounds (sometimes sitting) usually begin at 8 at Children's, and usually last until 10 or 11 or later depending on the patient load. Be prepared to present each patient and answer basic questions about their condition – always have a plan to present (ask your resident that morning if you are really unsure.) Don't worry that you may be wrong - if you don't say anything they will not have any clue that you were thinking about this patient's care!

Before rounds you will need to have assembled all of the patients information in a SOAP note (see notes section.) Check the computer for any AM labs drawn, but be aware that they are often not posted by the time rounds begin.

Between the end of rounds and noon conference you will have time to work on the plan you set out for your patients or admit new patients assigned to you and an intern by the senior resident.

At noon (at Children's) there is a daily conference in the resident's lounge (research wing level 3.5). They are occasionally above the medical student level but are generally excellent. Your senior resident is taking care of the patients while you and the interns are at conference. Bring your lunch.

After lunch there are planned teaching sessions a couple of times a week and this time is also used to admit new patients, follow up labs and do make sure orders are carried out (just b/c you order it doesn't mean it happens). Be proactive and be an advocate for your patient! Every extra day that they spend in the hospital b/c of your failure to take initiative will result not only in unnecessary costs for the patient's family but also in more patients for you to round on every morning.

Call: You will work out the call schedule with your fellow students so that you average about every fourth night on call (this may change if there are more students.) Work together to make the schedule tolerable for everyone. The last thing your senior residents want to hear is you whining about the unfairness of the call schedule. You will not have to come in on the weekends unless you are on call. When you are on call, sleep on the top bunk or further away from the phone so that the intern can deal with nocturnal events more easily.

V. Tips

Be nice! Work together! No one expects you to be naturally great with kids but trying to do things like playing games in your spare time on call may get you major brownie points and you may even find yourself having fun. Also, if you don't know something don't try to fake it - taking medical liberties with defenseless children is not appreciated. The nurses can be your allies and are invaluable to the interns (who will almost always side with the nurses in a nurse-medical student dispute.) Nurses tend to be very protective of their patients, respect this. Code pink means a kid is missing if you hear it on the overhead.

VI. No-No's

NEVER do anything invasive to a patient without consulting the intern. Don't leave unsigned orders in the chart.

VII. Sites

CNMC:

1. Pros
 - world renowned specialists, one of the top 10 pediatric hospitals in the US
 - good breadth of experience
2. Cons
 - middle of city, parking issues, big, busy place.

Holy Cross:

1. Pros
 - good bread and butter Peds experience (lots of bronchiolitis and rotavirus)
 - more independence and personalized attending contact since it is smaller
2. Cons
 - limited exposure to more specialized pediatrics- if you want to go into Peds and stay in DC, you don't get as much exposure to the right folks.

VIII. Sample Notes

History and Physical: No need to memorize - there are admission templates in the ER.

Peds Daily SOAP note: Similar to the SOAP note you memorized in POM. Be sure to include the following:

In the left hand margin of your note list all of the patients medications (in mg/kg) with the day number for all antibiotics (eg. Ampicillin, Day 6 of 10)

S: Important overnight events (and time of occurrence), events this morning. Pain. Eating and drinking vs emesis. Bowel and bladder events (number of wet diapers ...) Parent/s at bedside? Any questions?

O: VS: T- BP- HR- RR- Pulse Ox if pertinent with O2 requirements

In's over last 24 hrs calculated as cc/kg/hr and for babies/infants on formula- kcal/kg/day (should be around 100kcal/kg/day)

Out's (same calculation) If pertinent include breakdown (stool, urine, NG/emesis etc...)

Fluids: D5 1/3 NS at 50cc/hr (include cc/kg/hr calculation)

HEENT: look particularly for signs of dehydration in NPO children (dry mucous membranes)

CV: listen carefully for murmurs, you may be the first to pick one up

Pulm: no W/R/R (wheezes, ronchi, rales)

Abd: scafoïd, soft, nontender, nondistended, normoactive bowel sounds

Extremities: include cap refill (should be less than 2 secs) (skin turgor on abd best for assessing dehydration)

Include other aspects of the physical exam as pertinent (neuro etc...)

Labs: CBC, Chem 7, include which tests results are still pending

Study results: CXR, barium swallow etc ...

Assessment: Pt is 24 day old male hospital day #2 with suspected bacterial meningitis, improving,

Plan: Continue Abx, patient may begin breastfeeding, consult social work, etc.... For complicated patients you may organize the plan by system rather than by complaint (ID, heme, neuro rather than meningitis, fatigue, seizures.)

VIII. Miscellaneous

1. How to calculate fluids in pediatrics - based on the patient's weight maintenance:

4-2-1 rule

4cc/kg/hr for the first 10kg in weight PLUS

2cc/kg/hr for the second 10kg in weight PLUS

1cc/kg/hr for each additional kg in weight

If a child is dehydrated (or is NPO, or is minimally PO) you will need to give maintenance PLUS some extra depending on their condition or the extent of dehydration - ask your resident. There is some discrepancy on which fluids to use, so check with your attending for what they prefer. In general over 20 kg maintenance fluids use D5 1/2NS and under 20 kg use D5 1/4NS. For resuscitation always use NS!!!

2. Breast milk/formula has 30kcal/oz or 0.67kcal/cc.

Surgery

I. Books to Buy

Textbooks:

1. Essentials of General Surgery by Lawrence - Due to the comprehensive and dense nature of this book, it is difficult to get through, especially after long days and on-call nights. However, it is a necessary tool during this rotation as it is also the recommended book by the rotation director. This is the book to read to prepare you for your cases the next day or for Socratic rounds on student day.
2. Netter's- Hopefully you have still have a clean copy that you did not use in the gross lab. This book remains an excellent source for referencing the relevant anatomy for your OR cases. Attendings and residents love to ask questions about blood vessels, nerves, muscle layers, and their functions.
3. Atlas of General Surgery by Sabiston – another great atlas for the surgery clerkship. It has step by step illustrations of procedures with the pertinent anatomy clearly demarcated. Explanations are given at each step to walk you through surgical procedures before you even see them. Contains most operations you will see at GW.

Review books:

1. Surgical Recall- In comparison to Lawrence, this book is much easier to read as it is in question and answer form. It is a great tool for quickly reviewing important facts before the quizzes on student day or before going back on an OR case. Be warned that some of the information is inaccurate and that the rotation director frowns upon the use of this book.
2. First Aid for the Surgical Clerkship by Stead – similar to others in the First Aid series. This book contains many high yield topics, but don't expect much depth. Great for briefly covering surgical subspecialties you might not otherwise have seen before your shelf.

Question books:

1. Pre-Test Surgery - A good book for exam preparation. Has plenty of questions, especially the subspecialty areas to prepare you well for the shelf.
2. Appleton and Lange – can be easier, but still a useful book for shelf preparation.

II. How to Study

GRADE BREAKDOWN

Your surgery grade is based on a point system with points (including negative points) given for various levels of performance on each of the clinical rotations, the practical exam, weekly exams, and the NBME shelf exam at the end of the rotation. General surgery is the most heavily weighted component, followed by the NBME and practical exams, and then the sub-specialty rotations. Be aware that negative comments may deduct points from your grade, even if you received a Pass. The course director will explain the number of points needed to honor, high pass, and pass at the beginning of the rotation. Be aware that you must pass the NBME shelf in order to pass the course.

Weekly Exams: every week there will be an exam of 10 questions on material covered the week prior during student day. The best resource to use is surgical recall and the notes you take during the student days. Beware that doing well on these weekly exams can give you more leeway in terms of how well you can do on the shelf exam (ie if you do well on the weekly exams, you can get a lower shelf score and still do well on the surgery clerkship)

NBME Shelf: The surgical shelf is less about surgery and surgical procedures and is more about the medical management of surgical patients. It is very low yield to learn about the surgical procedures, cancer staging, and the surgical subspecialties. High yield topics include post-op care, post-op fevers, trauma, management and diagnosis of upper and lower GI bleeds, and diagnosing common conditions that would require a patient to need surgery.

Practical Exam: This exam consisted of 10-12 common surgical cases. You are presented with a clinical scenario and radiographic or laboratory data and are asked questions based on this information. The cases are common surgical issues that you should know as a student and are items that are usually covered in Socratic rounds on student day. The week before the test you will have a review session and a time to ask questions about anything that is unclear to you. The test can be a bit stressful as you have a limited amount of time at each case.

III. Expectations

Your expectations as a student include being on time, if not early to all activities, having your notes prepared before rounding begins, writing post-op notes, writing pre-op notes, doing post-op checks, and helping the intern with activities on the floor. You will be assigned patients to follow and will usually follow any patient who's case your scrub in on. It is important to know everything about your patient- labs, radiology reports, antibiotics, diet status, and fluids.

Each morning you will write a progress note on your patient and then present the patient to the attending/chief during rounds. When presenting your patient it is important to be as brief and concise as possible. Attendings do not like to have you just read from your note or hear about the patient's best friend's brother that came to visit.

Start by giving a brief synopsis of the patient- "Mr. X is 54 yo post-op day #1 for lap appy secondary to non-perforated appendicitis..." This single statement will give the residents/surgeons much to go on and start to think down a certain path. Follow this by the relative information in the subjective part of the exam followed by pertinent vitals and labs- temp, HR, BP, UOP, drain output, WBC count, Cr, and H/H. When discussing the physical exam only discuss pertinent findings. Everyone will assume if a patient has a murmur one day he will probably have it the next so you do not need to say it everyday unless it is a change from the patient's baseline. You also do not need to repeat the introductory statement of the patient "Mr. X..." before giving your assessment and plan.

You should in your presentation by stating a reasonable plan for the patient. In the plan you should explain all abnormal findings including why a patient may have a fever, elevated WBC count, stool in their drain, etc. You should also try to avoid words like continue, monitor, etc. Important things to think about include advancing a patient's diet, important radiological studies to obtain, pulling drains/chest tubes, continuing antibiotics, and other things that will help the patient get ready to move out of the hospital.

As a student, the most important contribution you can provide towards the team is a hard work-ethic, a positive attitude, flexibility, anticipating the needs of your patient, and self-initiative. The more interest and initiative you show your attendings and residents, the more they will teach you and allow you to do.

IV. Daily Schedule/Activities

Your day-to-day activities will change based on the team you are assigned to and the day of the week. You will be responsible to pre-round on your patients every day- including student day. Weekend rounding will be decided by your team. After rounds you will either go to clinic to see patients, go to the OR to scrub in on a case, or stay on the floor to help your residents with floor work. You finish your day by rounding with your team after the last surgical case.

Student days include ground rounds and M + M with the residents followed by student lectures in the morning. The afternoons are spent in Socratic rounds and more student lectures. After student day you are expected to meet up with your team for afternoon rounds.

V. Tips and No-No's

1. Bringing in lots of articles is generally not a useful way to show off. What is better is if you offer once or twice during the month to do a summary of a common/interesting illness that you can give as a small "talk" to the residents and other students (eg. a 5-10 minute review presentation on thyroid cancer with a small handout). [Not necessary at Holy Cross due to Dr. Cahan's sessions] This way you can learn something practical and the residents will appreciate your initiative.
2. Don't ask for breaks and time off during rounds. The residents work very hard and get annoyed easily with whining students.
3. Always be on time. Although residents and attendings will frequently be late or miss meetings, they should NEVER be waiting around for you.

VI. Sites

Holy Cross: This is a local community hospital located north of the beltway in MD. It is a good experience for those not necessarily interested in surgery. You will work with one resident and a smaller team. You will see more bread and butter surgical cases. You also have weekly student meetings with Dr. Cahan, a semi-retired surgeon dedicated to student and resident education.

Team 1: Vascular/Colorectal Surgery

Team 2: Hepatobiliary/Pancreatic/General Surgery: Dr. Lin and Dr. Abell are the main surgeons on this team. Dr. Lin does most of the hepatobiliary and pancreatic cases. He also does general surgical cases and gastric bypasses. Dr. Abell is a general surgeon that does mostly general surgery cases. For those interested in surgery this is a great team to be on. Dr. Lin is notorious for challenging you to think about things in a new way and asking you hard questions. He will be the one to write you a letter of recommendation if you decide to go into surgery. If you are on this team as a third year you will not be able to do your AI on this team so you might think about waiting to do a rotation with Dr. Lin as a fourth year

Team 3: Trauma/Breast: Dr. Lee, Dr. Teal, and Dr. Kelley are the main surgeons. Dr. Lee is the course director and an advocate for the students and residents. She is an excellent educator and loves to teach during rounds. Dr. Teal and Dr. Kelley do primarily breast surgery. Dr. Lee will also be important to those applying to a surgical residency. She would be a great person to write you a letter of recommendation and to talk about the application/interviewing process with. Most students will do an AI on her team if they had Dr. Lin as a third year student.

Team 4: General Surgery/Endocrine surgery

VII. Sample notes

<u>MSIII PN—Surgery:</u> HD#3, POD#2, Ceftaz D#1, Flagyl D#1	
S: Pt. c/o incisional pain. Pain well-controlled with PCA. +ambulation, +flatus, -BM, tolerating liquid diet.	
O:	Tm 38 ⁰ @ 2300 Tc 37 ⁵ BP 110/70 P 85 RR 12 O ₂ sat 99% on 2L NC
	24 hr I/O's= 2100cc/2000cc UOP 1500cc. NS @ 80cc/hr, JP output 15cc
	Pulm - CTA B
	CV - RRR nl S1S2, no M/R/G
	Abd - soft, slightly tender, hypoactive BS, dressing C/D/I, staples intact, no induration/erythema. JP with moderate serosanguineous drainage (<15cc)
Labs:	Chem 7: H/H:
Wound cx. Pending Ct scan, X-Ray readings	
A/P: 55yo AAF POD #2 s/p ex lap for SBO, doing well. Low grade temp most likely 2 ⁰ to atelectasis	
- cont. ABX	
- encourage OOB to chair, ambulation, and IS	
- consider D/C PCA and switch to PO pain meds	
- cont NPO, advance to clears with +flatus	
- D/C JP drain and foley cath	

Pre-operative H and P: Fill out the form on the patient's operative chart. This is a very quick exam. However, make sure you do a good exam of whatever is being operated on. Elicit as much of the pertinent history (especially diagnostic tests with date and results per the patient) as possible in the short amount of time you will have.

<u>Brief Operative Note:</u> To be filled out in the PACU or in the OR post surgery as you are waiting for anesthesia's OK to take the patient to the PACU
Pre-Operative Diagnosis: Appendicitis.
Post-Operative Diagnosis: Perforated Appendicitis.
Procedure: Laparoscopic appendectomy.
Surgeon: Dr. P. Lin, Assistants: Dr. XYZ Resident, Me the Medical Student MSIII.
Anesthesia: GETA (general endotracheal anesthesia).
EBL (estimated blood loss): 50cc (check with anesthesia).
Fluids: 500cc Ringers Lactate (check with resident).
Drains: none.
Findings: You may or may not include a few lines here - check with the resident about what exactly they would like to go in the chart.
Complications: none.
Disposition: The patient was extubated and transferred to the PACU without incident in stable condition.

Psychiatry

I. Books to Buy

Textbooks: Not really necessary, although you may want to buy the DSM IV for reference if you are interested in psychiatry as a career. Your Psychiatry textbook from second year can be a good reference for basic definitions and classifications of disease.

Review books:

1. Review for the New National Boards (Dr. Frank) However as of 2006, Dr. Frank no longer writes the cumulative shelf exam for the clerkship. The exam is a standard NBME shelf written by national testmakers. Thus, Dr. Frank's book may be useful, but in general would serve better as an adjunct or for those of you interested in pursuing psychiatry as a career.
2. First Aid Psychiatry Clerkship – excellent overview of the major subjects, but there are no questions. Better than many other first aid clerkship series. Especially good for small details/nuances differentiating the major diagnoses. 'A+' recommendation.
3. Psychiatry Case Files – this series is an excellent guide to any clerkship. Has key cases of importance and questions at the end of each case. 'A+' recommendation.
4. Blueprints Psychiatry – has a very good overview of all of the major subjects in psychiatry, including the major disorders and treatments. In addition, there are questions in the back which are a good review prior to the exam. Somewhat superficial in breadth and depth. 'B+' recommendation.

Question books:

1. Psychiatry Pretest – questions, questions, questions. Pretest supplies ample questions and detailed answers. Good questions to really challenge yourself, but use as a supplement to your review text. 'A' recommendation.
2. Blueprints Psychiatry Step 2 Question & Answer – a small, convient book to carry around with questions covering major diagnoses and treatments. Overall, a great supplemental question book. 'A' recommendation.

Pocket books:

1. Psychiatry 2005-2006 Ed. (Hahn) – good pocket guide with disorders and treatments. 'A' recommendation for pocket guides/something to have on hand.

Resources to avoid:

1. Kaplan and Sadock's Synopsis of Psychiatry – too detailed of a book for this clerkship. Good resource guide for researching specific topics for presentations. Available in the library.
DSM IV – although the "Bible" of psychiatry, there is no need to own one for the clerkship. Occasionally useful for a presentation/write-up, it is available in the library.

II. How to Study

GRADE BREAKDOWN

Clinical Evaluations = ~ 60-70% (split between sites)

NBME Shelf Exam = ~25-30%

Standardized Patient Encounter with written Note = ~5-10%

*Extra credit is given if you attend ALL lecture days and sign-in on the attendance paper. This is added to your overall grade at the end of the clerkship.

On Psychiatry you will generally have more free time than in other rotations. Remember that you will have to take a test at the end and try to use some of your free time to read. You do not need to memorize the DSM IV, but you will need to know the major diagnostic criteria for the most common diseases (SIG E CAPS etc...), the most common psychiatric drugs used to treat these disorders, and especially their side effects. In this rotation your personal characteristics (patience, empathy, ability to work well with others, and rapport with patients) are particularly important and contribute significantly to your grade. Read up on each of your patient's illnesses and be able to ask appropriate questions of your residents and attendings to show that you are interested. Although there are many different clerkship experiences (Child psychiatry, Consult/Liaison, etc) – the underlying themes are the same: empathy and appropriate fund of knowledge.

III. Expectations

Attending: You don't have to want to be a psychiatrist, but showing interest in and enthusiasm for psychiatry goes a long way. Know the basics of a mental status exam, the 5-axis psychiatric classification, and the main elements of a psychiatric history and physical. If you are on the consult service, be prepared to know and record the complete H&P, differential, workup, recommendations before presenting to the consult team. Usually, a resident will staff the patient after your initial consult is completed, so it's always to your benefit to be more thorough the first time around.

Residents: Expectations vary widely from site to site. Make sure you clarify what is expected from you early on so that you are not surprised when grading time comes around. Solicit feedback around the mid-way point of each month. At most sites you are expected to meet with your patients daily, write a note on each patient several times per week (this varies), and attempt to develop a therapeutic rapport with your patients.

Nurses: Psychiatric nurses generally have much more autonomy and authority than nurses in other specialties. This is a particularly stressful job, and you may find some nurses adversarial. Be nice, respect their authority, and don't get in their way.

Food: varies enormously from site to site. There is no food at St. Elizabeth's and the surrounding area is not safe. Bring your own lunch if you can.

Attire: Standard as any other clerkship – professional, neat, white coat. Though your physical exam will be very limited, you will still need to know the basics, especially for new admissions and on the consult service where you will need to differentiate psychiatric illnesses from organic causes.

First day: You are expected to show up at your assigned site on the first day of the rotation. Orientation takes place the first Wednesday of the rotation in the Psych Department of the ACC.

IV. Daily Activities

Will vary widely by site. At most sites you will begin the day with morning report during which your team meets to discuss the patient census. You may then have individual meetings with patients and attend group or individual patient therapy sessions. Usually the day is fairly fluid. It is often up to you to set up a time to meet with and interview your patients. Call takes place at GWU – generally 1 or 2 calls per month. If you rotate at Fairfax Hospital, you are expected to come in for one weekend day of call. You will also sit on the consult/liaison service at Fairfax for one week. You will receive your call schedule on the first day of GW orientation. You will not stay overnight for call and your resident will often send you home early if things are not very busy. If you are not on call your weekends will be free.

V. Tips

Due to the variety of experiences and numerous sites afforded to students during the psychiatry rotation, your learning is largely up to you. Ask questions, read in your free time, and talk to your patients. As you have learned, a percentage of your patients in ANY field will have psychiatric issues. Use this chance to learn about the mental health system and the difficulties your patients will face. This is a unique opportunity to discuss usually taboo and often fascinating subjects, and to perfect "the difficult interview." Maxwell's pocket guide has a great template for the mental status exam, you may also need to search the internet or use a review text to find template for the Beck's Depression Inventory, Anxiety ratings, etc depending on your clinical judgment of the patient's underlying mental state.

VI. No-No's

Be aware that psychiatric patients can be dangerous. Although really scary incidents are not common, almost all medical students witness some event that ends with a patient being restrained. You really cannot ever afford to let your guard down. When interviewing patients, choose an area where others can see you, let a nurse or someone else know where you are, and sit within sight of a staff member. Always leave the door open and let the patient sit near the door so he or she (or you!) can escape if the anxiety level begins to climb. If you have doubts about the safety of any particular situation - LEAVE! You can always finish the interview or physical exam later. Remember to remain calm under all circumstances and not to antagonize the patient or staff during any stressful encounter. The staff at any hospital are well equipped to deal with tense situations and are readily available to assist you.

VI. Sites

There are many sites for the psychiatry clerkship. Experiences are very variable given the ample sites and patient populations. A few key notes on each major site are provided below:

GWU 6th Floor South: acute adult patients with GW first and second year residents and faculty attendings, includes exposure to ECT.

GWU Consult/Liaison: consultation/liaison service, third year GW residents, faculty attendings. Medically ill patients who need psychiatric assessment; includes outside placements 1 day per week at a community mental health centers, an outpatient child psychiatry office, or the center for multicultural humans services. Amount of patient interaction varies day-to-day depending on the number of consults, keep pager on hand and always be readily available to take consults. Also weekly lectures by consult attendings. Pros: more flexibility because of the option of having your own pager and being paged as patients come in

Arlington: Virginia Hospital Center at Arlington, private hospital, acute adult inpatient ward, with GWU fourth year resident, private attendings, includes exposure to ECT.

PIW Adult: Psychiatric Institute of Washington, private hospital, adult acute inpatient ward. No GW residents. Voluntary faculty staff attendings. Pros- you get a lot of independence in seeing the patients. Cons: even though it is a little out there, it is metro accessible.

PIW child: same as PIW adult except patients are children or adolescents

NVMHI: Northern Virginia Mental Health Inst. Public psychiatric hospital on the grounds of Fairfax Hospital, mix of acute or longer term patients; GWU second year residents, voluntary faculty staff attendings.

Fairfax Hospital: Community hospital in northern Virginia. Car necessary for transportation. Mix of acute and long term patients, mix of pediatrics and adults. Includes 1 weekend day call during the month and separate lecture schedules/presentation requirements. Includes 1 week on

the Fairfax Consult/Liaison service and an additional ½ day in the outpatient detoxification program. First year residents and chief residents. Pros: you learn a great deal, great didactics. Cons: can be quite a drive out there—free parking is provided

CNMC: Child Children's Nat'l Med Center: inpatient adolescent and child patients, GWU second year residents, GWU faculty attendings, child psychiatry fellows

CNMC Day Treatment (Rockville, MD): Children and adolescents who are not in need of inpatient care but too ill to be in outpatient care. Work directly with child psychiatry attending faculty member.

St. Elizabeth's Hospital: Public psychiatric hospital with acute and long stay patients. Work with hospital based residents, voluntary faculty staff attendings. Pros: if you are interested in psychiatry this is a great place to be because of the acutely ill patients. Cons: can be intense at times because of the acutely ill patients

VI. Sample Notes

Psychiatric Assessment and Evaluation

History: Developmental, Adolescent, Adult

Family History, Psychiatric and Medical History, Current Problems and Stressors

Mental Status Examination:

General Appearance: neat, clean, disheveled etc ...

Attitude: Cooperative, negative etc ...

Speech: Rate, tone fluency, clanging, poverty of content etc ...

Thought Process: Blocking, flight of ideas, loosening of assoc's, circumstantiality, perseveration etc...

Behavior and Psychomotor Activity: Agitation, pacing, tics etc ...

Affect: External range of expression observed by viewer

Mood: Depressed, elated

Thought Content: Homicide, suicide, obsessions, delusions etc ...

Perception: Hallucinations, Illusions, depersonalization, derealization

Judgement / Insight:

Attention / Concentration: Digit Span, Spelling forwards and Backwards, serial sevens

Orientation to place, person, time

Memory: Immediate, short-term, remote

General Knowledge: Below average, average, above average

Mini Mental Status Exam

Beck Depression Inventory or other index as relevant

Vitals

Axis Diagnoses

I.

II.

III.

IV.

V.

Assessment/Impression

Plan/Recommendations

Obstetrics and Gynecology

I. Books to Buy

Textbooks:

1. Essentials of OB-GYN (Hacker and Moore)- Standard text for the rotation. Consider buying this book if you plan to go into OB/GYN. It is very comprehensive for the clerkship and exam. It is written for the level of third year med student, but is very long and detailed. It should be used as a reference text in this class rather than reading from cover to cover. If you don't understand something you read somewhere else or if you have a presentation to do, this would be a great place to start.

Review books:

1. Blueprints in OB-GYN- Brief review of major topics- Good reference on the wards prior to seeing new consults or OR cases. Not really adequate alone. Equally as good as First Aid, the only difference is format. This is more of a text book format. Just pick one of the two and read them. The test at the end of this book is a pretty representative of the shelf exam, so if you don't use this for reading, borrow it from a friend to do the test.
2. First Aid for the Obstetrics and Gynecology Clerkship – similar content to Blueprints, but with an outline format. Pick whichever style you prefer.
3. NMS: OB-GYN- Good if you like handout/outline format. A quick read, and covers all topics, but not enough depth to be used alone. Has a good practice test at the end.
4. Case Files: OB/GYN- good adjunct to prepare for the shelf exam. This book is very easy to read and hits on all the important points that are needed for the shelf exam. It utilizes case based teaching, emphasizes take home points from each case, and has a few multiple choice questions at the end of each case. The questions are easy, but a good review.

Question Books:

1. Pretest: OB-GYN- Questions are pickier than on the board exam. You will learn a lot by doing these questions, but don't be upset if you are only getting half correct. Great explanations. Use this book as a learning source and don't keep track of your score. Similar to the rest of the Pretest series.
2. NMS: Step 2 board review- The OB-GYN questions from this book are very good.
3. Blueprints Q&A Step 2 Obstetrics & Gynecology – these books are hidden gem! They are short and can be finished in about two days (that's if you study a few hours a day). They can be checked out from the library and they fit in your pockets. The only negative of this book is that the explanations are not the greatest, but they are good enough.

Pocket Books:

1. Obstetrics, Gynecology and Infertility, AKA “The little red book” This book will be provided to you on the rotation. Try to get it as early as possible. It has a very helpful Spanish primer in the back, as well as many useful graphs and lists. The only things you need in your pocket (other than your instruments) are this book and a pregnancy wheel.
2. SOAP for obstetrics and gynecology (Uzelac) – small, thin pocketbook with sample soap notes for common complaints. This book is very helpful for writing your notes when doing triage, in clinic, and on rounds.

Other: Carry a pregnancy wheel. A few palm programs are also available that calculate dates etc. Also, carry templates of different types of notes (see below), as the residents tend to be a bit picky on this rotation about content.

II. How to study

GRADE BREAKDOWN

Clinical Evaluations = approx. 34% (~17% each site)

Preceptor Evaluation = approx 16%

NMBE exam = 50%. You need >70% to maintain clinical honors, >75% to bump HP to H.

Try to stick to a regular reading schedule, although this will be tough at Fairfax. At GW and Holy Cross you should have at least a few hours per day to read – use them! Aim to cover most of basic obstetrics and antepartum stuff as early as possible, as these are the topics you will get most pimped on. Make sure you have a basic knowledge about the disease process and medical history that each of your patients have. MD Consult is a good tool for finding articles, although they do not play a big role in this rotation, as rounds are quick and work-oriented.

Exam: NBME shelf exam similar to those you will take in other rotations. Practice questions are usually harder than the exam itself. Questions are case-based and usually focus on common vs. uncommon presentations. Hint: In the last few years, there seems to have been an increase in the number of breast feeding, breast cancer, and thyroid disease questions appearing on the exam. These are topics not generally covered in the standard texts, but make sure to read a little about them.

Small Groups: You will meet once per week in a group with 6-7 other students with a faculty preceptor. You will be expected to give 1-2 presentations on a topic (e.g. ectopic pregnancy). You may also have an oral exam at the end of the rotation. Be sure to contact your preceptor at the beginning of the rotation, otherwise you may be penalized.

The TR: One resident, usually a 3rd year, will be designated as your Teaching Resident. He/she will meet with you routinely to cover core topics, and is also the person responsible for your overall resident evaluation. Try to do a call or cover a case with the TR, so he/she will remember you when it comes time to give you a grade.

Student Day: Student day is on Wednesday. If you are at GW, you are still expected to round on your patients in the morning. Do not be late to grand rounds! It will be noticed. Students on night float are excused from student day, but must still attend grand rounds (either at GW or via teleconference).

III. Expectations

Attendings: They will vary a lot on this rotation, but in general, they are interested in teaching. They do expect you to be prepared, especially in the OR. Make sure you have met the patient before a case, and know their medical history. Read about pertinent anatomy and physiology the night before, don't worry about management. Make sure you know the key blood vessels and ligaments involved in a hysterectomy – you WILL be asked about them at some point in the rotation.

In clinic, you will be expected to see patients and take basic obstetric/gyn histories. You will also have many opportunities to perform pelvic exams. Try to learn as much as you can here. Feel free to ask a lot of questions, as you may not get another chance to practice these skills.

Residents: Infamous on this rotation for being tough, cranky, and unfair. In reality, they are tired, overworked, and want to be efficient, so they can get home when they are not on call. The faster you realize this, the better off you are going to be. Always be on time for rounds or cases, have your notes

on the chart exactly when they ask for them, and always be willing to help out on call, no matter how menial the task may seem. Know everything about your few patients and have the info accessible at any time. These traits will top even the most well-read student in the eyes of the OB-GYN residents. That is not to say reading is not important. In fact, how well you answer a few basic questions may determine whether you or the intern will deliver the baby or whether you will get to close fascia in the OR. Try to write all of your own notes and orders on the patients you admit, deliver, or operate on. Follow the templates for all notes, or you will find your text crossed out and replaced. Make sure all orders get co-signed.

Food: GW is well... GW. Holy Cross has a smaller, but slightly better cafeteria, and the pizza is the best in DC (hospital-wise). Fairfax is practically 4-star dining, with the most variety and freshest food, and with a 30% discount, also very cheap. The tradition at Fairfax is that the attending will buy dinner for the on-call staff (including students). This is HIGHLY unusual amongst specialties, and should be appreciated. Additionally, meal vouchers are provided at Fairfax (you may be tired, but at least you are well-fed).

Attire: At Holy Cross and Fairfax, scrubs are OK all day. At GW, you should always come dressed for clinic, and you can change for call and the OR. Don't forget to shave (guys) and button your coat if you will be working with Dr. Larsen.

First Day: Orientation with the TR and Dr. Macry. You will receive info on your small groups, your site assignment (may be different than you expected!), a syllabus, and sample notes. You will be directed to your sites from there. Be prepared that you may be assigned to night float beginning your first day.

IV. Daily Activities

You should pre-round and have notes written on all patients you admitted, delivered, or operated on by 6:30 AM. These are focused SOAP notes, but should include overnight events, vitals, and any lab results that are available, so give yourself enough time. With practice, this should take no more than 15-20 minutes per patient.

Board signout begins at 6:50 AM sharp (you may find yourself locked out if you are late), and is over by 7. Be prepared to present each patient you admitted from call and be able to answer basic questions about why certain management decisions were made overnight – go over this with your resident on call if you are not sure. Don't worry that you may be wrong – state your answer and stick with it.

Clinic will vary from site to site: You will generally be seeing routine OB visits and basic GYN complaints. Be prepared for lots of Spanish speakers at Holy Cross and Fairfax. Every routine OB patient should be asked the 4 cardinal questions (see below), and you are expected to learn to ask these in Spanish as well. Ask questions here, as this is frequently the only setting where there is any free time.

You will also be assigned to various cases in the OR. Make sure you see the patient at least 30 minutes before the scheduled case time, so that you can introduce yourself to the patient (you will be their primary post-op caregiver), familiarize yourself with their history, and do an H&P if there is not one on the chart. Be present when the patient is taken to the OR, and ask the OR nurses how you can help.

“Special” Services: You may be given the opportunity to spend a week working with antepartum (high risk pregnancy) or GYN-Oncology. They tend to be a little more work, but are highly recommended. You will get much more 1 on 1 teaching, and you will have a few residents who will know you much better come evaluation time.

There will be various conferences and talks throughout the rotation. Attendance is supposedly required for Honors on the rotation, so keep them straight and be on time. Attendance may be taken several times during your student day, so don't skip out after the first lecture!

Call: You will work out the call schedule with your fellow students so that you average about every 4th to 5th night on call (this may change if there are more students). Two students are on per night, one as OB call, the other as GYN call. Work together to make the schedule tolerable for everyone. The last thing your senior residents want to hear is you whining about the unfairness of the call schedule, and they may take over and make it for you. OB call is a 24 hour event, and you will likely spend most of the day and night without leaving L&D. If you do get to lie down, be prepared for Mg checks – typically considered a medical student job. Stick with your resident and try to deliver at least 1 baby yourself per call. GYN call is more laid back, and you will usually get to sleep for most of the night. You will not have to come in on the weekend unless you are on call. All hospitals have separate call rooms for students, make sure you have a pager so the resident can grab you. In the past, the call room at Holy Cross has been freezing, so bring extra clothes or a blanket.

V. Tips

Work together! This is a challenging rotation that will seem even harder if you are fighting with each other. The residents really are approachable and are willing to teach if you show interest. Always be respectful of your patients – remember you are dealing with very intimate topics and exams, and a little bit of empathy goes a long way here. L&D nurses are very protective of their patients, respect this, and they will provide you with a ton of teaching and information that will only make you look good. When you are on OB call, gather a gown, your size gloves, boots, a mask, and eyewear together before the patient starts pushing. If you are floundering around trying to get gowned, you may miss the delivery entirely. Answer to “how long do I scrub”: 30 seconds longer than your resident.

VI. No-No's

NEVER do a breast or pelvic exam without a resident and chaperone (for guys) in the room. Do not guess at management plans. If the patient asks and you are unsure, wait for the resident. Do not complain about being overworked. This will only result in a painful lecture from the residents about how good you have it compared to them (they are right). NEVER touch anything in the OR or labor room unless you are sure it is not sterile.

VII. Miscellaneous

4 cardinal questions for every OB clinic patient

- have you had any contractions?
- have you had any vaginal bleeding?
- have you had any leakage of fluid?
- have you felt the baby moving?

VIII. Sites

You will rotate at two sites during this rotation. Each site has its pros and cons.

GW:

1. Pros:
 - You may have a lot of time to study.
 - You get to work with GW attendings, who can be very influential when it comes to your grade. Getting to know GW attendings is especially important if you plan to do OB/GYN.
 - You have more time to get to know your patients.
2. Cons:
 - If you like to stay busy, you may get bored at GW.
 - Distribution of work tends to be less well-organized than at the other sites.
 - You must pay for parking.

Fairfax:

1. Pros:
 - These days are busy, which make them fly by.
 - You will get to deliver many babies.
 - Free food and parking are provided.
 - This rotation is highly structured and well-organized.
2. Cons:
 - You may find it difficult to connect with your Spanish-speaking patients (unless you speak Spanish!)
 - You are expected to work very hard.
 - Night float rarely sleeps.

Holy Cross:

1. Pros:
 - You will get to deliver many babies.
 - Parking is free
2. Cons:
 - You may feel ignored during morning rounds and feedback is hard to come by.
 - Night float rarely sleeps.
 - You may find it difficult to connect with your Spanish-speaking patients.
 - You are prohibited from counseling your patients about contraceptives or abortion.

IX. Sample Notes

L&D H&P (And first OB Clinic note):

HPI: Pt is a XX y.o. (ethnic) female, G_P____, LMP __. EDC ___ by dates is consistent with sono @ __ weeks on mm/dd/yy, now at ___ wks EGA. Pt c/o _____. ALWAYS ASK: +/- GFM, +/- contractions, +/- vaginal bleeding, +/- loss of fluid.

ROS: fever, abd pain, vaginal D/C, N/V/D, constipation, dysuria.

Pregnancy Complicated by: diabetes, HTN, thrombocytopenia, tobacco/drug use, advanced maternal age, etc.... If pt desires post partum tubal ligation ask if she still wants it and NOTE this in the chart.

Prenatal Labs: blood type and Rh, Rubella, HbsAg, HIV, STS, Glu, PPD etc....

POBHx: For each past pregnancy note: year, type of delivery, # wks, M/F, hrs of labor, wt, complications.

PGYNHx: menses, menarche, how often and duration, STD, contraceptives, PID, GYN surge, Pap smear.

PMH: DM, HTN, lupus, sickle cell.

Psurg Hx: all procedures and note any bad rxns to anesthesia.

Allergies: PCN - rash.

Meds: Prenatal vitamins.

SocialHx: EtOH, IVDA, tobacco use, married.

L&D H&P continued ...

Fam Hx: DM, HTN, cancer, twins, birth defects.

PE: VS: HR BP T RR Fetal heart tones

Gen: WDN gravid female in NAD/mild distress etc...

HEENT: Thyroid mass

Lungs:

CV:

Abd: +/- BS, gravid, fundal height = __, soft, NTND, presentation by Leopold's maneuvers.

Pelvic: speculum: check for ROM:fern/nitrazene test, if pt is preterm and rupture of bleeding check cervix by visualization only.

Bimanual: effacement/dilation/station/consistency/position of cervix/presenting part.

Extremities: Edema, DTR's, clonus.

Labs:

Sono:

Assessment: Pt is ___ y.o. G_P____ @ __ wks presenting in/with (active labor, ROM, or anything else)

Plan: Admit, IV hydration, monitor, labs, epidural, AROM, anticipate NSVD etc....

Vaginal Delivery Note:

NSVD of live female.male infant from an ROA position over an intact perineum (or midline episiotomy) under epidural anesthesia. Infant was bulb suctioned over the perineum.
Weight 3000gm. APGARS 9,9.
Spontaneous delivery of an intact placenta with a 3VC. Cervix, sulci and vagina were inspected and found to be without lacerations.
Episiotomy was repaired using 2.0 chromic suture. Rectum intact.
EBL (estimated blood loss) 400cc.
Complications: none.

CS Note: same as surgical Operative Note, but include:

Pre-operative Dx: Gestational age of pregnancy and indication for C/S: IUP, arrest of dilation etc...
Post-operative Dx: same + delivery of viable baby boy/girl.
Procedure: Primary/repeat low transverse/vertical C/S, post partum tubal ligation.
Surgeon (attending) and assistants (resident and medical students).
Anesthesia: MAC, general, epidural.
Estimated Blood Loss: check with anesthesiologist.
Fluids given: check with anesthesiologist.
Drains: none
Findings: check with your resident: Delivery of a viable female.male infant from ROP position, wt 3000gm with APGARS 9, 9. Manual delivery of placenta with 3 VC, nl tubes and ovaries visualized bilaterally.
Complications: none
Disposition: Pt was transferred to the PACU in stable condition after extubation.

Postpartum SOAP note:

Same as other progress notes, but be sure to include:
S: breast feeding, lochia, flatus, BM
O: Abdomen: fundus firm at uterus -2 etc...
Assessment: PPD# ____ . Pt doing ... well, afebrile, good UOP, tolerating regular diet.
Plan: D/C to home on (vitamins/Fe/pain meds). F/U in 6 weeks for PP visit.

Primary Care

I. Books

Reference Texts:

1. EKG reading by Dubin. Highly recommended. Takes a few hours to get through, but worth it.
2. The Only EKG Book you'll ever need- quicker read than Dubin, and you actually learn to read EKG's by the end of the book!
3. Harrison's Principles of Internal Medicine – “the” textbook for all of medicine written by the leading authorities in their various specialties. This text includes the pathology, pathophysiology, and treatment of disease states. This is not a required text, but is a worthy study/resource guide to supplement your studying. It is also available on the e-text portion of the Himmelfarb library web page.
4. Principles of Ambulatory Care (Barker) – the definitive text for physicians seeing ambulatory patients. This is a comprehensive reference for patient care and preventive medicine. As for Harrison's, this is not required, but consider it a good supplemental resource.

Online references:

1. www.uptodate.com – as with all clerkships during the third year and beyond, UpToDate is invaluable for the latest information and treatment guidelines for most diseases. This resource is especially useful for topic presentations to faculty.

Everyday reading:

1. Primary Care Packet – although there are no required texts for this course, this packet of articles put together by the course director is required reading. The packet includes recent evidenced based medicine, review articles, and national guidelines for the diagnosis and treatment of common diseases encountered in the primary care setting. For the primary care exam, **this is the only source you will need to study from**. Consider all other texts supplements.

Pocket books:

1. Pharmacopoeia/ PDA equivalent
2. Sanford Guide to Antimicrobial Therapy- great quick reference on any antibiotic therapy you need
3. Washington Manual- bulky, but very resourceful

II. How to study

GRADE BREAKDOWN

Final Exam = 15%

Clinical Preceptor Evaluations = 75% (~37% each)

Presentation = 10%

Must pass experiential assignment (pass/fail)

Daily: Keep track of the patients you see during the day and read up on those diseases every evening. Review articles in journals such as *American Family Physician* and *New England Journal of Medicine* are excellent sources of pertinent information.

Exam: The exam is written by Dr. Mintz. It is REALLY basic primary care. Go to all of the lectures and pay attention. Study from the handouts on Blackboard. There are no specific books other than reference medicine texts to prepare for the test.

III. Expectations

Third year Primary Care is not just PCA. Don't just follow the attendings from room to room. More is expected of you now. Simply going in a room and reporting back the patients' problems will not earn you a high pass or honors. This is your opportunity to learn how to quickly make an assessment and plan that is practical in the outpatient setting.

You will be working with different attendings, generally 2 days at one site and 2 days at another. Wednesday/Thursday is student day. On the first day at each site, ask specifically about their expectations. How long do they expect you to take with patients? Are there time limitations? Ask them how far on the physical you may go on your own. Remember that you need to be supervised while doing certain exams (breast, pelvic, rectal or anything else invasive) for your own protection. Ask them specifically how they want presentations to be delivered. Most attendings want presentations with a brief history and physical. Don't simply restate what the patient said to you, but synthesize, prioritize, and organize the information. Concentrate on formulating an assessment and plan that is based on a problem list.

IV. Daily Schedule/Activity

Morning clinic begins between 8:00am and 9:00am depending on location. Generally there is a short lunch break at the attending's discretion, and the day ends between 5pm and 6pm, depending on how far behind schedule the attending runs. This is one of the few chances you will have to see what life is like for attendings in private practice.

V. Tips

Remember this is the only rotation where you work one-on-one with attendings all of the time. Take advantage of it. Tell your attending your learning objectives for the rotation (e.g. learning ECGs, understanding HTN or DM management) and ask them to discuss these topics with you.

If you are interested in family practice, pediatrics, or geriatrics, you should request (or try to find yourself) a provider in these fields.

Health maintenance is important. Go over the appropriate guidelines for each age group. A good resource is www.aafp.org/exam. Look through the chart and ask the patient pertinent questions about screening exams to make sure he/she is up-to-date. You'll look like a star if you pick up a missed pneumococcal vaccine or colonoscopy.

VI. No-No's

Don't spend an hour with a patient (unless you're at Bread for the City). Unless it is an annual physical, you will be seeing focused visits. Even an annual physical should have a brief exam of all systems. If the patient comes in with a million complaints, focus on the few most important. Have the patient help you prioritize his or her concerns. Remember the attending is under great time pressure and you want to help, not hinder.

Don't just tag along! Mostly watching for the first few days is fine, but eventually you'll need to be evaluating patients on your own.

VII. Sample Notes

Problem focused first Clinic Visit/ Physical Exam (tailor depending on degree that visit is focused!)

CC: Acute back pain

HPI: This is a 30 year old male complaining of acute lower back pain x 3 days. Pain began abruptly after he moved a piece of furniture and remains constant in intensity. Pain does not radiate to buttocks, thighs, or legs. He is not having any bladder or bowel incontinence. It is partially relieved by rest and Tylenol. No previous history of this pain. No other complaints, other than nasal stuffiness x 1 month. No ear or sinus pain. No cough. No fever/chills.

PMHx: allergic rhinitis since moving to DC from Arizona last year

PSHx: none

Meds: took Claritin last year, none currently

Allergies: NKDA

SocHx: no drug use, EtOH use, tobacco use. Has never been sexually active.

PE: T BP HR RR

HEENT: pale, swollen, nasal mucosa, nl TM bilaterally, no sinus tenderness

Lungs: CTA bilaterally no W/R/R

Heart: RRR nl S1/S2 no M/R/G

Abd: soft NT ND NABS

Muskskel: full range of motion in lumbar spine with pain on extension

No tenderness to palpation over spinous processes

Bilateral lumbar paraspinal muscles spasm with tenderness

Neuro: negative straight leg raise bilaterally

2+ patellar and ankle reflexes bilateral

lower extremity sensation grossly intact

A/P: 30 year old male with lower back strain and allergic rhinitis

1. lower back strain: naproxen 500mg BID, flexion and extension lower back exercise, F/U in 2 weeks if not improved
2. allergic rhinitis: flonase 2 sprays qD
3. Health maintenance: No physical or testicular exam in 5 years. Schedule physical.

Internal Medicine

I. Books

"Medicine" is a vast field, and unlike other rotations there is no particularly tried and true way of approaching studying for the test. Spend some time in the bookstore seeing what texts you find helpful. Choose a combo that includes a textbook, an everyday reading book, a question book, and an EKG book. We give some suggestions below.

Reference: Use for in-depth topical knowledge. Not for everyday reading.

1. Harrison's Textbook of Medicine (also a good sleep aid!)
2. Cecil's Essentials of Medicine - Cecil's full text is also available on the web at www.mdconsult.com.
3. Lange: Current Medical Diagnosis and Treatment (CMDT). The CMDT test is presented in a well organized fashion, and each disease or pathologic process is broken up into sections such as presenting symptoms, differential diagnosis, appropriate labs, and treatment.

All three have very different styles. It is worth a few extra minutes in the bookstore to see which format is best for you. Most texts are available in the library, and residents often have at least one core text in the call room or in the internal medicine office (located in the hospital, on the patient floor). Always ask first!

Online references:

2. www.uptodate.com – online resource that will give you an immense amount of information on any topic in medicine. All of the computers in the hospital have access to UpToDate. Easy to use, will give you more information than you need, and it is good place to start when you want to learn more about any medical topic.

Everyday Reading: to cover core topics in preparation for the exam

1. Stobo's Essentials of Medicine. In paragraph form.
2. First Aid for Medicine Rotation. Many find this book helpful. Beware of blatant mistakes in this new addition to the first aid series—if you suspect an error, you're probably right!
3. NMS Medicine. In outline form. Generally too detailed and somewhat tough to read.
4. Fishman Medicine. Easy to read but a little outdated.
5. The Only EKG Book You'll Ever Need by Thaler. Explains EKG's much, much better than does Dubin's.
6. Dubin's EKG book. THE classic EKG book.

Question books:

1. MKSAP – excellent resource for Medicine shelf exam, composed of questions and explanations of all major illnesses. Best question book available for this shelf, and very tough!
2. Pretest Internal Medicine. Good question book to use if you use it with another question book like MKSAP. Alone, the questions are too easy compared to the actual shelf exam and do not cover enough material.

Crash Course: Thin, quick review books to read a week before the exam include the following.

1. Blueprints in Internal Medicine. Some people used this as their primary source of info. Use when pressed for time.
2. Underground Clinical Vignettes for Internal Medicine
1. High Yield Internal Medicine. Has nice pictures of CXR's, etc....

Pocket books: You need only one.

1. Washington Manual of Therapeutics- the medicine bible, kind of bulky to carry around in your white coat, but a great resource.
2. Internal Medicine Handbook for Clinicians (a little red book)
3. Pocket Medicine (Sabatine) – best pocketbook to carry in your lab coat. This little book is comprehensive and is a quick reference for formulas, which medications to use and provides a differential diagnosis for all major disease processes.

II. How to Study

A Preface: As is true for any rotation and hopefully all of medical school thus far, if a study technique works well for you maintain it—don't try to change from rotation to rotation. Internal medicine is a broad topic, however unlike some rotations during the third year you will have learned or seen much of the material before (i.e. the first two years of medical school).

GRADE BREAKDOWN

Rather vague combinations of evaluations from all aspects of clinical sites, plus NMBE exam - see below.

Read up on patients case by case. Review articles from MDConsult and Up-to-Date can be extremely helpful and information on current diagnosis and treatment may be more pertinent than the paragraph in your textbook. Read daily if possible. Try to squeeze in at least 15 min/day. Ask questions!! Not only do you learn more, but you also show your residents and attendings that you care and you are thinking.

III. Expectations

Be enthusiastic, neat and always on time for rounds. Know your patients well, gather data and present as succinctly as possible (this is your major job as a third year.) Although your residents and attending may cut you off as you present Mr. Smith's lengthy medical history, you should have this info down cold and be able to answer any questions about him. Read up on the symptoms and disease processes and try to start developing differential diagnoses (even if no one asks.) Attendings and residents like to know that you are thinking! Remember you are a member of team and contribute, even if you have to perform errands like running for labs. There is a lot of "scut" out there and much of it actually is appropriate for you to do (getting a resident's coffee is not appropriate.)

Written Evaluations: You will receive these from pretty much everyone - interns, residents, your didactic attending. These give you a composite preliminary grade of P, HP, H, which can then be modified up or down by the shelf exam.

Didactic Teams: At GWUH, you will be assigned to a small didactic group. You will present and discuss cases and write H&P's. This counts towards your written evaluation.

Shelf Exam: Like the board exams that you will have in Peds, Surgery, and OB/GYN. This will be given at the end of your Medicine/PC block (every 4 months.)

IV. Daily Schedule/Activities

Prerounding: Rounds will begin at 8 or 8:30am so give yourself a half hour per patient to preround. This includes gathering subjective data (from the patient), objective data (physical exam, vitals, ins, outs, labs) and formulating an assessment and plan. Always review quickly with the intern before rounds to make sure you haven't missed anything major. *With the advent of the Danny system at GW, morning notes have become a lot easier. Every time you admit a patient, you put in their history, physical, and other pertinent info. The info you put in will make a template in the "progress note" format below, so all you have to fill in every morning is the pertinent physical findings, and the plan! Medicine rounds are notoriously lengthy. You may be standing from 8am until noon conference. Try to eat breakfast or bring a small snack to eat if there is some down-time (there usually is). You may be able to get away with eating on rounds and you may see some residents doing the same. As a generalization (from service to service) this is extremely inappropriate and you should avoid it. You can usually finish or amend your notes during rounds. Notes need to be in the chart and cosigned by noon - the earlier the better. Regular work rounds will be punctuated by teaching rounds 2-3 times per week. Your teaching attending will assign you topics to look up and report to the group. After rounds you will begin to complete the "to do" list you have generated for each patient on rounds.

There is a noon conference every day. At GW, attendance is mandatory and food is always provided (except Thursdays). Selected lectures for third years will be announced and those take priority over all other commitments. Let your resident and intern know where you will be at these times, and what remains to be done for your patients. At the end of the day when you have finished your work, ask your intern when it is appropriate to leave (try not to look too eager!!). Even better-if you're done with your tasks for the day, help them with their work. The residents want to go home as much as you do and they will appreciate the help. If the entire team functions in a smooth manner this will reflect well on the students and leave extra time for teaching—this is a GOOD THING.

There is no overnight call at GW. When you are "on call" you stay until 11pm and present your patient's H&P the next morning.

V. Tips/No-No's

Have respect for the chain of command. If you have a question or a problem report to your intern first. If she/he cannot help you, page the junior, then the senior resident, and so on. Don't ever page the senior for a patient problem unless it can't wait and you can't get a hold of your intern. Residents and attendings value teamwork so always work with other med students on your team to get things done - making other students look bad is tacky and not viewed pleasantly by attendings and residents or other med students. What goes around comes around eventually. HELP EACH OTHER OUT!

Carry a penlight, Maxwell's, Tarascon's Pharmacopia, Sanford's Guide to Antimicrobial Therapy, and a pocket guide in your white coat. Be ready to study or read up on a patient's condition whenever you have 10 minutes of down time. Scrubs can only be worn the day of call after 5pm and post-call. Don't complain for the sake of complaining. On the whole, residents work much harder than you do, you just have to suck it up. However, if you really do have a major issue with an attending, resident, staff member, or another student (which you perceive to be abuse) always speak to a senior resident, then to the attending. If you don't report it, it will not be corrected.

VI. Sites:

GW: Everyone has a mandatory month at the GWUMC mothership.

1. Pros:

- GW internal medicine is known for hard work, noon conferences and scut scut scut. For anyone out there who is thinking "I should have been a nurse", you will be doing plenty of nursing at GW (your own blood draws, vitals, clean-ups). This is probably a

good thing, and may depend on how heavy the census is during your month at GW. For anyone out there who's thinking "I should have been a secretary" you will be doing plenty of secretarial work at GW (faxing, copying, calling nursing homes, looking up phone numbers). This may or may not be a good thing. JUST REMEMBER: If you are working hard and doing endless hours of manual labor, you are part of a team. Chances are very good that your residents are doing the same work, only more of it. If you want to complain go into the snack room and complain to the juice machine.

- You will learn to multitask, and you will probably have the opportunity to do some procedures (like a thoracentesis, an LVP or a lumbar puncture).
 - The didactics are good and you will definitely learn to operate as a team.
2. Cons:
- You are on Call every 4 days with your team. Call is until 10 pm, however you may go home early if nothing is going on. This is up to the residents. You still have to come in the next day for a full day. Remember, work hard, it's worth it.

VA:

1. Pros:
- People who end up at the VA generally have an excellent experience.
 - It known for autonomy, a great computer system, and procedures. While you may have to personally walk downstairs to order an ultrasound in person, you will likely be functioning independently. There is no overnight call.
2. Cons:
- There is no overnight call. Like GW you have call every four nights. With call you stay until 10-11, and come the next day for a full day.

WASHINGTON HOSPITAL CENTER:

1. Pros:
- This hospital dwarfs GW in terms of patient capacity and operates like a small city in itself.
 - Students who rotate here have few complaints about the work required of them, and boast about the didactic experience.
 - Each student is given a text pager for the month, which may minimize phone calls or unnecessary trips to the patient floor. Again, there is no overnight call.
2. Cons:
- There is no overnight call. Like GW you have call every four nights. With call you stay until 10-11, and come the next day for a full day

FAIRFAX:

1. Pros:
- Excellent nursing staff, a large ER, enthusiastic faculty and clean facilities all make Fairfax a desirable location to rotate.
 - Students and residents meet once a week for team didactics with an attending. All students meet at scheduled afternoon times to discuss cases with faculty, as well as at noon on a daily basis.
 - Fairfax DOES have overnight call every four nights with their team, however most students do not find this to be a disadvantage (many students report sleeping through the night on many occasions, although this likely changes from month to month depending on the census). Students who are post-call leave after noon conference following the night of call.

- Parking is provided for free, as are pagers, and meals. You are given breakfast at 8am, a snack at 10am during didactics, and during every noon conference. You are also given 13-14 meals cards of \$5 each to be used when on call (most students have extra left over, and never have a problem of too few meal cards). The cafeteria is also great.
2. Cons:
- While Fairfax may require a slight commute for most students, the experience seems to be well worth it.

VII. Sample Notes:

History and Physical: Students present the H&P to the team the morning after call. Note should be thorough!

CC/HxPI: 65-year-old AA female with hx significant for hypertension presents with acute onset of chest pain... 7 dimensions including location, quality(dull, sharp), timing(onset/frequency), duration, associated events (lifting heavy boxes), aggravating/ relieving factors. Pertinent positives and negatives. Occurred in the past? Past dx or treatment? Medication compliance, sick contacts...etc.

PMHx: general state of health, DM, CAD, HTN, CA (with date of diagnosis) past hospitalizations, past surgery.

MEDS: Prescription, OTC, herbals, vitamins. Include dose & frequency.

ALLERGIES: To medications and what reaction occurs. For example, PCN-rash.

FHx: Age and health status of immediate relatives, causes of death. Hx of DM, CAD, HTN, CA.

Soc Hx: Marital status & sexual orientation/sexual activity if relevant to health. Occupation. Tobacco use (smoke & chew (pack years)). IV drug use. EtOH consumption. Recent travel.

ROS: List only pertinent positives and negatives that will help to rule in/rule out diagnoses that you are considering.

Gen: recent weight change, fatigue, appetite.

Skin: rashes, pruritis, pigmentation.

Head: headaches, trauma.

Eyes: visual changes, blurriness, photophobia, diplopia.

Ears: tinnitus, hearing loss, vertigo, discharge.

Nose: epistaxis, nasal congestion, sinusitis.

Mouth/throat: sore throat, mouth lesions.

Neck: pain, lumps, swelling.

Breast: nipple D/C, changes in size, pain, mass, self exams? Last mammogram.

Respiratory: cough, wheezing, chest pain with breathing.

Cardio-vasc: chest pain, palp's, orthopnea, dyspnea w/ exercise, leg pain w/ exercise, relief w/ rest.

GI: changes in bowel habits, abdominal pain, nausea, vomiting.

GU: dysuria, inc urinary frequency, difficulty voiding, hematuria, D/C, LMP.

Musculoskeletal: arthralgias, weakness, swelling.

Endocrine: Hotter/colder, wt changes, polydypsia, polyurea, polyphagia.

Neuro/psych: tingling, numbness, weakness, seizures, anxiety, insomnia, depression.

Medicine H&P continued ...

PE:

Vitals: T- BP- HR- RR- (if dehydrated do standing, sitting, lying for BP & HR)

Gen: AA female , well nourished, alert and oriented, appears stated age.

Skin: Skin is warm, dry, no rashes, petechiae, purpura.

Lymph Nodes: cervical, supraclavicular, axillary.

HEENT: HEAD- NCAT (normo-cephalic/atraumatic).

eyes: PERRLA. EOMI. Conjunctiva - non injected. Sclera anicteric.

ears: Normal appearance. Tympanic membrane intact.

nose: Septum-non deviated. Mucosa- pink, without discharge. Sinuses non-tender.

mouth/throat: MMM (moist mucous membranes), no pharyngeal erythema /exudates.

Neck: supple. No JVD (jugular venous distention). Carotid pulses equal bilateral; no bruits.

Chest: : CTAb (clear to auscultation bilaterally) No W/R/R (wheezes, rales, rhonchi).

CV: RRR (regular rate/rhythm) nl s1,s2. No M/R/G (murmurs, rubs, gallops)

Breast: Symmetric; no nipple D/C, no skin retraction/dimpling/masses. (For masses: describe size, mobility, tenderness, change with menstrual cycle)

Abd: Soft; NT/ND (non-tender/non-distended); normoactive BS (bowel sounds). No guarding; no masses; no organomegaly.

MSK: Range of motion, strength 5/5 in all extremities.

Extremities: No C/C/E. Dorsalis pedis pulses 2+ bilaterally.

Neuro: Cranial Nerves II-X intact. A and O x 3 (place, person, time). Reflexes-Normal in all extremities. Sensation to light touch intact. Cerebellar signs.

LABS: CBC wbc\hgb/plt CHEM 7: Na| Cl | BUN/ GLUC
/het\ K |HCO3 | Creat\

CULTURES:

DIAGNOSTIC TESTS: ekg, cxr, ct scan...etc.

ASSESSMENT & PLAN: 65-year-old AA female with hx of HTN presents with chest pain.

Likely diagnosis is MI given risk factors, duration and type of pain Other possibilities in the differential dx for chest pain include: angina, pneumonia, PE, musculoskeletal...etc.

1. Pain- Will give Morphine...
2. IV Fluids- Will give...
3. R/O Pneumonia- will do chest xray, blood cultures...

Medicine SOAP/Daily Progress Note: Done every morning on each patient.

S: Overnight Events- patient developed pain and received Morphine at 4am.

Morning events- Pt has no complaints. Denies chest pain, s.o.b.(shortness of breath), n/v/f/c (nausea/vomiting/fever/chills)

O: V/S: Tmax / Tcurrent / BP / HR / RR / Pox

F.S. (finger sticks, include time and if insulin was given)

Physical Exam: Usually includes General, Pulm, CV, Abd, & Extr. Include other sections as relevant.

LABS: all new labs in last 24 hrs

A/P: Brief synopsis of patient with overall assessment of how pt is doing: 56 y/o female with MI, doing well this morning, pain improving. Plan should be done by problem list:

1. Pain- Continue Percocet to manage pain.
2. Fever- Unknown source. Blood and and urine cultures, chest chest xray and start empiric antibiotics.
3. Leg Pain - Doppler U/S of lower extremities to rule out DVT.

Complicated patients with multiple problems may require the plan to be in an organ system format.

With the advent of the Danny system at GW, morning notes have become a lot easier. Every time you admit a patient, you put in their history, physical, and other pertinent info. The info you put in will make a template in the format above, so all you have to fill in is the pertinent physical findings, and the plan!

Radiology Primer

Although you will not receive any formal training in reading radiographs, you will be expected to pick up the basics of how to read a chest x-ray and how to approach reading CT's and MRI's. Below, we give a basic approach to these techniques. When you check your patient's film results, **GO TO THE READING ROOM** and try to read the films yourself. Spend a few extra minutes practicing a systemic approach. There is no substitute for practice here, and it will take many, many films to gain an appreciation for the variations around normal, particularly regarding chest x-rays. The radiologists are excellent resources here - attending and residents will appreciate your interest, and your subsequent understanding of the finer points of a film will be appreciated by your team.

General Points:

1. Is it the right patient, and is the film hung correctly?
2. Is there an old film for comparison?
3. What type of film is it (position, contrast used, etc)

Scan quickly for obvious problems, then use a systematic approach (when you have time), looking at each system in order of *increasing* importance (helps you catch the subtle *and* the obvious)

MRI Types:

T1:

BRIGHT (high signal): fat/marrow, blood (subacute hemorrhage), proteinaceous fluid, melanin, gadolinium contrast,
DARK (low signal): bone, air, flowing blood or bowel contents
gray matter signal < white

T2: think H2O- watery stuff is high-signal

BRIGHT: CSF, bile
DARK: bone, flowing blood, hematoma, air
White matter signal < gray

GAD- vessels, inflammation, & nasal mucosa bright

Body CT/MR:

Follow or scroll down once for every organ, vessel, or structure that you want to assess, rather than shotgunning each frame once. This is especially important in spiral CT's for PE and nephro/ureterolithiasis

Chest Film:

(this model is from outside in, you'll hear a hundred ways to do this, so just pick one you like and stick with it)

- 1- PA (standard view) or AP (portable - lines on chest usually mean AP)? You can't judge heart size on AP.
- 2- Rotation? - Check clavicular/vertebral symmetry, gastric bubble on left.
- 3- Full inspiration? - 10 posterior ribs visible.
- 4- Tube/line placement - ET tube should be 3-5 cm above carina, NGT in stomach, PICC in R atrium, Swan deflated and in PA.
- 5- Pneumothorax present? Check early!
- 6- Soft tissues OK? - Look for breast shadows, foreign bodies, SQ emphysema.
- 7- Scan bones for fracture/abnormality.
- 8- Pleural thickening or effusion present? Subdiaphragmatic air?
- 9- Lung irregularities visible? - Infiltrates, increased interstitial markings, masses, absence of normal margins, air bronchograms, or increased vascularity, and "silhouette" signs.
- 10- Pulmonary vasculature enlarged?
- 11- Lymphadenopathy present? - Convex instead of concave hilar "bumps."
- 12- Mediastinum too wide?
- 13- Heart size normal? Cardiomegaly if width > ½ of rib cage on PA.
- 14- Trachea midline? Caliber normal?

Look at lateral film for: confirmation and position of questionable masses or infiltrates, size of retrosternal air space, anteroposterior chest diameter, vertebral bodies for bony lesions or overlying infiltrates, posterior costophrenic angle for small effusion.

Head CT:

- 1- Use bone windows to check for skull fractures
- 2- Acute blood is bright on a non-contrast study
- 3- Biconvex collection, confined by suture lines = epidural hematoma
- 4- Concave, often crossing midline = subdural hematoma
- 5- Collecting in CSF cisterns = subarachnoid bleed
- 6- Inside parenchyma and pushing out = intra-axial bleed
- 7- Assess symmetry, mass effect, edema or atrophy of gyri, size of cisterns and ventricles

C-Spine X-Rays:

Lateral (most helpful view)

- 1- Can you see all of C1-C7? If not, order swimmer's view.
- 2- Check thickness of retropharyngeal soft tissue space. Should be <5mm at C1-C3, <20mm at C4-C7 in adults
- 3- Check for any deviation from the 4 parallel lines.
- 4- Does the clivus point at the dens?
- 5- Anterior atlantodental interval should be <3mm in adults, <5mm in kids.
- 6- Any widened or narrowed disk spaces?
- 7- Any vertebral fractures?

AP

- 1- Check for asymmetry, esp @ C1 (compression fracture)
- 2- Check AP odontoid view for fractured dens.

Common Disease Processes on the Medicine Wards

CHF: Heart failure is the inability to maintain an output to meet the demands of the body.

Types of heart failure:

Systolic Dysfunction: CAD, HTN, cardiomyopathy (idiopathic, ETOH, doxorubicin)

Diastolic Dysfunction: HTN, Cardiomyopathy: hypertrophic, restrictive (amyloid, sarcoid, hemochromatosis), constrictive pericarditis.

High Output Failure: Chronic anemia, A-V shunt, thyrotoxicosis, Paget's Dz, pregnancy, beriberi.

Sx: Dyspnea on exertion (climb how many stairs?) orthopnea (How many pillows at night?), paroxysmal nocturnal dyspnea, fatigue, lethargy, vague abdominal complaints.

PE: Left Sided Failure: Pulm Rales, tachypnea, S3 Gallop, cardiac murmurs

Right Sided Failure: JVD, peripheral edema(dependent: legs sacrum), congestive hepatomegaly, ascites, pleural effusion (R>L). The most common cause of R-sided failure is L-sided failure!!!

Dx: CXR-cardiomegaly, pulmonary venous congestion, pleural effusions 2D Echo & MUGA Scan: show both global and regional LV function and estimate ejection fraction. Cardiac Catheterization.

Tx:

- Identify precipitators (anemia, infection, arrhythmia, Na overload, non-compliance)
- Decr work of the heart (bed rest to chair with bed side commode).
- Na restriction
- Diuretics: Lasix IV!!! Much more potent than a thiazide. If switching from IV to PO, must double dose to get the same effect. Monitor electrolytes (hypokalemia!!)
- ACE Inhibitors: Shown to decr morbidity & mortality. Decr preload and afterload.
- Digitalis: + inotrope. Does not decr morbidity/mortality but can decr rate of hospitalizations. Always check Dig plasma levels (.9-2ng/ml)
- Vasodilators: Hydralazine/Isosorbide). In addition to ACE or if ACE is contraindicated. Decr afterload, no venous effect.
- Avoid B Blockers in acute CHF, but effective in management of chronic CHF!

Pneumonia

Typical vs Atypical:

Typical is caused by bact from nasopharynx.

Common Typical pneumonia pathogens include **Strep Pneumo, H. Flu, Klebsiella, Staph Aureus**.

Atypical pneumonia is caused by organisms inhaled from environment.

Features of atypical pneumonia:

- a) It is not visualized on gram stain
- b) Produces a non-productive cough
- c) Not susceptible to Abx that attack the cell wall (i.e. beta lactams). Use macrolides!
- d) Pathogens include **Mycoplasma, Chlamydia, Legionella**.

Other unusual pathogens of pneumonia: TB, Nocardia, Coxiella, Aspergillosis/other fungi, viruses

H & P:

Typical: Rapid onset of productive cough (yellow-green sputum or hemoptysis), fever, chills, dyspnea, pleuritic chest pain. Decreased breath sounds, dullness to percussion, egophony.

Atypicals: slower onset, dry cough, extrapulmonary manifestations: pharyngitis, myalgias, headache, fatigue, nausea, vomiting, diarrhea.

Dx. CBC- leukocytosis with left shift (Bands>5%)

Sputum Gram Stain & Culture.

Blood Cx's

CXR (Lobar vs patchy infiltrate)

Bronchoscopy with washings (immunocompromised, and serious refractory infections)

Tx: Empiric Abx. Abx often change when culture and sensitivities return.

<u>Empiric Abx Tx of pneumonia</u>	Child	Adult	Immunocompromised	Nursing Home or Hospitalized	Other
Pathogen	RSV	Strep Pneumo Mycoplasma Chlamydia H. Flu, virus	TB PCP (CD4<200) Nocardia Fungal	Gram neg's Pseudomonas (always double cover)	COPD/smoker – think moraxella b/c can't clear mucous. ETOH - think Klebsiella and aspiration
Empiric Choice of Abx	1. Cefuroxime Or Ceftriaxone 2. Azithromycin	1. Moxifloxacin 2. Ceftriaxone & Azithromycin	1. Moxifloxacin & Bactrim (PCP) Moxifloxacin & Pentamidine (Bactrim allergic)	1. Piperacillin/Tazo bactam/ Linezolid (pseudomonas coverage) 2. Ciprofloxacin/ Cefipeme/Linezolid (if penn allergic)	COPD/ETOH: Pip/Tazo OR Cipro & Clindamycin (if penn allergic)

Diabetes Mellitus:

Extremely common. You'll see all complications of DM in the hospital as well as initial presenting symptoms. While you will be tested on the basic concepts of DKA, these patients are placed in the intensive care unit, and therefore you will not get much actual exposure until 4th year (unless you are at Holy Cross!)

Know the long term complications including retinopathy, peripheral neuropathy (paresthesias, mononeuropathy, GI disturbances (gastroparesis), GU disturbances (neurogenic bladder, impotence), autonomic instability (orthostatic hypotension), nephropathy, common infections impaired wound healing (foot ulcers), inc incidence of coronary heart disease and stroke.

Blood Sugar Regulation in the Hospital: Most patients are placed on a sliding scale of insulin initially whereby additional units of insulin are given depending on the serum glucose. For example:

<u>Blood Glucose</u>	<u>Regular Insulin (units)</u>
200-250	5
250-300	7
301-350	10
351- 400	12

Diabetes continued ...

From the sliding scale, an insulin regimen can be devised using the following method. Add up the insulin requirement used for one day. 2/3 of total insulin is given before breakfast. Of that 2/3, 2/3's is NPH and 1/3 is regular insulin. 1/3 of the total insulin to be given at night can be divided as 1/2 of the 1/3 as regular insulin before dinner, and 1/2 of the 1/3 as NPH given at bedtime.

For Example: if a patient's total daily insulin dosage is 36 Units
24 U is given before breakfast

- (1) 16 U NPH
- (2) 8 U regular

6 U regular insulin before dinner

6 U NPH insulin given at bedtime

Somogyi effect: 3 am hypoglycemia followed by rebound hyperglycemia in morning. The hypoglycemia is seen b/c of the evening NPH insulin. Check a 3am glucose level! Tx is to reduce evening NPH dose.

Dawn Phenomenon: Hyperglycemia between 4am and 7am with absence of the somogyi effect. Due to endogenous release of growth hormone. Tx: increase the pre-bedtime dose of NPH or Lente insulin.

Oral agents (i.e. sulfynureas, metformin, troglitazone) can be used alone if non-insulin dependent or in addition to insulin to help reduce amt of insulin required.

HONK (Hyper Osmolar Non-Ketotic Acidosis):

Non-insulin dependent DM with extreme hyperglycemia, serum hyperosmolarity, marked dehydration (due to osmotic diuresis), absence of ketoacidosis b/c basal insulin requirements are met.

Precipitating Factors: Infection - UTI, pneumonia...always search for an infection w/ HONK

Stress- MI, CVA, recent surgery

New Presentation (30-50%)

Non-compliance/ Inadequate medication

H&P: Mental obtundation, seizures, reversible hemiplegia and other focal neurological signs.

Hx of polydipsia, polyuria

Dehydration (dry MM, poor skin turgor, orthostatic hypotension, tachycardia)

Dx: Serum Glucose >600 mg/dl. (higher than DKA)

Hyperosmolarity >340mosm/L.

OSM= 2Na +GLC/18+ BUN/2.8 or 2Na + GLCS/18

Dehydration: (signs as above)

Na: Can be low, medium, or high. Must correct Na for elevated glucose, which brings fluid out of cells to produce false hyponatremia. To correct: for every 100mg/dl inc of glucose, estimate that you are seeing an additional 1.6 mg/dl false elevation of Na.

K: Lab value may be high, normal, low but total body K is low.

Ph is usually >7.2. BUN & creat are elevated (Azotemia). Ca, Mg, PO4 are all decr.

HONK continued ...

Tx:

- Fluid replacement. Fluids are bolused for first 1 to 2 L (i.e. 1L/hr infusion.) Then decrease infusion to 500 ml/hr and monitor urine output and BP. Isotonic fluids (0.9% NS).
- Electrolyte replacement: total body K depletion and K will go back into cells with insulin tx so initial K <5.2 requires K replacement. Replace other electrolytes as needed
- Correcting glucose: IV hydration will help decr serum glucose by 80mg/dl/hr. For glucose>600, give 5-10U regular insulin IV. Then give low dose insulin infusion until serum glucose is 250 to 300, then give SQ insulin.

DKA treatment: insulin is required to remove ketones from the body as well as to decr glucose. Therefore, although glucose may return to normal range, insulin drip is continued while dextrose is given in order to decrease ketones while remaining euglycemic.

Hypoglycemia: Plasma glucose < 50mg/dl. 3 criteria are necessary:

1. Presence of symptoms:
 - a. adrenergic: sweating, anxiety, tremors, tachycardia, palpitations
 - b. neuroglycopenic: sz's, fatigue, syncope, headache, behavioral changes, visual changes
2. Low Plasma glucose level
3. Relief with ingestion of carbs.

Dx: the following tests should be ordered in a pt admitted for hypoglycemia:

1. Plasma insulin level. – incr free insulin suggests exogenous insulin injection.
2. Insulin Antibodies - present with exogenous insulin use (if 1st insulin infection)
- 3 Plasma & urine sulfonyleureas
- 4 C-peptide: only found with endogenous insulin secretion.

	Insulinoma	Exogenous Insulin	Sulfonyleureas
Plasma insulin level	Inc +	Inc ++	Inc +
Insulin antibodies	None	Present	None
Plasma/urine sulfonyleurea levels	Absent	Absent	Present
c- peptide	Inc +	NI/ --	Inc

How to Get There

Holy Cross Hospital -- 1500 Forest Glen Rd. Silver Spring, MD 20910 (301) 754-7000:

I-66 or GW Parkway to I-495 North

I-495 to the Georgia Ave/Wheaton exit 31A

(You can also take 16th Street to Georgia Ave. all the way out of the city)

At first stop light turn right -- Forest Glen Road

Hospital is 1/2 mile on right.

PARKING IS FREE!!!

Fairfax Hospital -- 3300 Gallows Rd. Falls Church, VA 22046 (703) 698-3591:

Take I-66 to I-495 South

I-495 to Exit 7 (Gallows Road)

Bear to the right off the exit circle onto Gallows Rd.

Hospital is on the left.

OR

Take Rt. 50 to the Gallows Road exit (passing under I-495)

Bear to the left on the exit and turn left onto Gallows Rd

Hospital is on the right.

On first day, park in the Blue Parking visitor lot and get your ticket validated inside. The rest of your rotation you can PARK FOR FREE in whichever employee lot they tell you to use.

Children's National Medical Center -- 111 Michigan Ave., NW (202) 884-5000

From GW:

K Street to 16th Street -- turn left on 16th.

16th to Harvard -- turn right on Harvard

(You will see signs to Children's and Washington Hospital Center)

Bear to the left once Harvard dead-ends at the lake.

Bear to the right onto Michigan Ave.

The hospital and entrance to the parking garage are up on the left. You have to pay to park (approximately \$44/month).

Note: The VA Hospital and the Washington Hospital Center are part of the same hospital complex as Children's.

VA Hospital & Washington Hospital Center

From GW:

K Street to 16th Street -- turn left on 16th.

16th to Harvard -- turn right on Harvard

(You will see signs pointing the way to Children's and Washington Hospital Center)

Bear to the left once Harvard dead-ends at the lake.

Bear to the right onto Michigan Ave.

Go past Children's Hospital on the left.

At next light, turn left.

VA Hospital is on the right and the Washington Hospital Center is on the left.