Introduction

The transition from the basic sciences to the clinics is naturally intimidating. You’ll soon be immersed in an unfamiliar environment that will demand greater responsibility and commitment than anything you’ve previously encountered in medical school. But fear not! Working with patients is (hopefully) what you went to med school for in the first place. Though your white coat may feel awkward, you are more than ready to begin navigating the corridors of HUP.

While your clerkship year will occasionally be anxiety provoking and exhausting, it will more often be exhilarating, exciting, and fun. You’ll interact daily and influentially with patients, become a valuable member of medical and surgical teams, see the practical application of the things you’ve learned, and finally sense yourself becoming a true clinician (it feels like a slight tingle).

This guide is intended to help ease your transition into the clinics. Each rotation and each site has its own distinct flavor. What is expected of you as a student will vary from one rotation to the next and from team to team. Rather than attempt to describe every detail of each rotation, this Survival Guide presents general objectives, opportunities, and responsibilities, as well as some helpful advice from previous students. Above all, your fellow classmates and upperclassmen will be a tremendous resource throughout this core clinical year.

Enthusiasm, dedication, and flexibility are the keys to performing well and learning in the clinics. Throughout your clinical experience, you’ll interact with an incredibly diverse group of attendings, residents, and students in a variety of medical environments. If you can adjust to these different situations and maintain your enthusiasm, curiosity, and integrity throughout, you will not only be a successful clerkship student, but you’ll also have a fun and fulfilling year.

Good luck and have fun out there. You’ll do great!
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•♦Acknowledgements♦•

This guide has been revised throughout the years and could not exist in its present form without the efforts of previous writers and editors, as well as the experience and advice of previous students (in fact, this entire acknowledgement section is copied verbatim from the previous edition). Special thanks goes to the Office of Student Affairs for helping to provide this information to students so that they feel better prepared as they enter the clinics. We hope you find this guide helpful during your transition into the clinics. Again, you are not expected to know everything, only to learn a little more each day. Trust that your comfort, confidence, and abilities will increase with experience. Maintain your enthusiasm and curiosity. And above all, don’t forget to relax and have fun.

Best of luck,
AOA and GHHS Class of 2018
Helpful Hints

- Having a good attitude and being a team player are as important as a strong fund of knowledge. Often they are more important.
- Get organized. Stay organized. Ask your interns, residents, upperclassmen, and classmates for ideas on how they organize their patient information.
- Don’t be afraid to ask for help. Don’t be afraid to ask questions. (However, better questions are ones that you couldn’t easily look up on your own.)
- Always brainstorm your own assessment and plan before asking your residents for theirs. You don’t have to be right, but thinking through your patients on your own first is a valuable learning experience that is regarded highly.
- Be friendly to nurses, clerks, and other staff—they can teach you a great deal about your patients and about how things are done in the hospital.
- Take some time to learn your way around the different parts of the patient chart early on. Do the same with the computer systems. You can be a big asset to your team if you can perform an efficient “chart biopsy.”
- Always be prepared and on time for rounds.
- Anticipate attendings’ and residents’ questions about abnormal lab values or other findings for your patients, and think about some possible explanations. You don’t need to be right, but you need to show you noticed and are thinking.
- Respect your residents and attendings, but do not kiss up. Insincerity is obvious.
- Learn how to say “I don’t know”—tough questions aren’t intended to evaluate you as much as they are expected to provide a starting point for teaching.
- Don’t be afraid to be wrong, either – people are usually interested in understanding how you think through a problem rather than just on whether you’ve memorized an answer.
- Ask for feedback at the end of every week from both attendings and residents to help you redirect your efforts if necessary and avoid surprises at the end of the rotation.
- Do not despair if you receive an unfair evaluation. Almost everyone gets at least one unexpected grade in the course of their clinical rotations.
- Do not show up or undermine a classmate or resident.
- Learn your place on the team – you can contribute positively to patient care, but medicine is a team-based sport, and it is best to learn this early and quickly.
- Don’t spend too much time on MedLine/OVID/Pubmed searching for the most recent articles. Concentrate on the basics. However, bringing in a relevant article once in a while related to a specific question the team had that week can be helpful.
- Consult your classmates. They are your greatest resource.
- As much as possible, try to anticipate the needs of your patients and your team. Be proactive. Don’t constantly repeat, “Is there anything I can do?” Pay attention on rounds – if it’s mentioned that someone needs to obtain old records or perform a Mini-Mental Status Exam, volunteer!
- No one expects you to know everything. That’s why you’re here.
The Team

A note on what to call people: interns and residents will definitely want you to call them by their first names, so feel free to do that from the start. Fellows will probably want you to call them by their first names too, but you could start with “Dr.” if you feel nervous. With attendings, always address them as “Dr.” unless otherwise instructed.

Intern: The intern, also known as a PGY-1 (post-graduate year 1), is in his/her first year as an MD/DO and has primary responsibility for the day-to-day needs of the patients. He/she is often overworked and sleep-deprived and will gladly welcome any help provided by students. Many interns will return the favor with informal teaching sessions related to routine work on the floor. Expect to spend much of your time with the intern. They can be an incredible source of information in preparing presentations and caring for patients. While on some rotations they do not directly evaluate medical students, on others they do, and residents and attendings often ask for their input at the end of the rotation.

Resident: Residents are also known as PGY 2s, 3s etc. or sometimes JARs and SARs (junior and senior admitting resident). This person makes certain that the team runs smoothly, makes routine patient care decisions, and oversees the activities of the interns and medical students. Their responsibilities will vary depending on their level of training and specialty. Residents have had more years of experience and often have the most time and interest in teaching about various topics during your rotation. For many residents, teaching medical students is an expected part of their responsibilities. They are also the ones who will most often provide you with direct instructions on which patients to follow, surgeries to attend, etc. The resident evaluation is a major component of the medical student grade, along with the attending evaluation.

Chief Resident: Depending on the specialty, a chief resident is either a resident in their senior year of residency (OB-GYN, Surgery) or a resident spending an additional year before starting fellowship or becoming an attending (Internal Medicine, Pediatrics). These residents are “the best of the best,” selected by the program leadership. Their role varies from specialty to specialty, but usually they are involved in scheduling and overseeing all the junior residents in their program. In some cases, they may act as a “Junior Attending” and be the attending physician on a service.

Fellow: After having completed residency training in a general field, these individuals are pursuing specialty training as clinical fellows. For example, after completing five or seven years of training in general surgery, physicians may elect to spend three additional years of training as fellows in cardiothoracic surgery. The exact responsibilities of fellows depend on their position and field of interest. While your contact with fellows as a 200 student will be limited, you will undoubtedly encounter them when you consult subspecialty services, in the clinics, and in the operating room. If you are on a team with a fellow, they are unlikely to evaluate you.
**House Staff:** All physicians in training are collectively referred to as house staff or house officers.

**Sub-Intern (Sub-I):** A senior medical student who is taking an advanced course in which they take on many of the responsibilities of an intern. Depending on the rotation, the Sub-I or Extern will either take the place of an intern or function in addition to existing interns.

**Attending:** The attending physician has completed formal training and finally has a real job. Attendings have titles such as Assistant Professor, Associate Professor, and Professor, depending on their level of experience within the department. The attending is ultimately responsible for the care of patients on your service and accordingly will make all major decisions regarding patient management. He/she runs attending rounds and is the person to whom you will present your patients. The attending is often the person who asks you the most questions, and he/she is usually responsible for writing your primary evaluation for the team. While you should try to spend as much time with your attending as possible on the floor, in clinic, and in the OR, they are incredibly busy and often cannot be available for you. Realize that the degree to which your attending will teach you is very individual and discipline dependent.

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**Other Important People**

Allied health professionals are essential in the care of patients and can be extremely helpful to the beginning medical student. Many of the senior nurses, therapists, and clerks have been around for generations of students and residents and, by virtue of that experience, deserve a great deal of respect. Don’t forget that they’ve seen students make the same mistakes over and over again throughout the years, and you may have to earn the benefit of doubt. Always be respectful and pleasant with all members of the health care team and you’ll learn a lot from them.

**Nurses and Nurse Assistants:** Registered Nurses (RNs) wear Navy Blue scrubs, and Certified Nursing Assistants (CNAs) wear Maroon scrubs. Nurses are in charge of overseeing the routine, vital aspects of patient care. Among other things, they implement physician orders, monitor patient vital signs and activities, and administer supportive care. Some will insert IVs and perform routine phlebotomy. Charge nurses are nurses that supervise individual floors. Scrub nurses run operating rooms and maintain the sanctity of the sterile field. Nurse Practitioners have advanced degrees and are able to perform some of the duties of a physician. CNAs assist nurses in obtaining vitals and executing routine patient care activities. Staying on the good side of the nurses, particularly the charge nurse, is always a good idea.

**PAs:** Physician Assistants have bachelor’s degrees and then 2-3 years of graduate-level training, usually leading to a master’s degree. At HUP they work mostly on the surgical services and may be part of the team of residents and med students, helping to do floor work or seeing patients in clinic. They often act in similar roles to residents on these services, except they do not usually operate.
Unit Secretary: Generally, clerks wear Khaki scrubs. Unit clerks handle floor business: they answer phones, schedule tests, complete paperwork, and generally keep things running smoothly. They typically sit at the nurse’s station and are an excellent source of practical information. Quickly learn which chair belongs to them, and do not ever sit there! They may also help with obtaining outside hospital records for your patients.

Patient Care Observers: Wear Brown scrubs. These staff, sometimes colloquially called “1 to 1’s”, provide individual and continual observation for patients. They are not clinically trained and provide no nursing care. They are ordered by the physician for patients who are a risk to themselves (either overtly suicidal or, more commonly, delirious and pulling at lines and getting out of bed). They will usually stay in the room when you interview the patient, but you can ask them to leave if you want to have a private conversation or exam.

Physical Therapy (PT): PTs and OTs often wear blue Good Shepherd scrubs. Physical therapists evaluate and treat patients suffering from physical dysfunction and pain resulting from illness. They emphasize motor rehabilitation training in order to help patients regain joint mobility, strength, and coordination. (Think of them as dealing with gross or macro motor function.) They also evaluate patients’ level of functioning and make recommendations for what level of care or rehabilitation a patient will need when he/she is discharged.

Occupational Therapy (OT): Occupational therapists also deal with physical dysfunction, but their goal is to help patients achieve independence in daily activities through exercise, fine motor skill repetition, and family education. (Think of them as dealing with micro motion.)

Respiratory Therapy (RT): Respiratory therapists administer nebulizer treatments, perform bedside pulmonary function tests (PFTs), and adjust ventilator settings in the Intensive Care Units (ICUs).

Social Work: Social workers act as liaisons between the patient and the patient’s care providers, both within the hospital and out in the community. They assess the patient’s care network outside the hospital, arrange for nursing home or chronic care placement as needed, and participate in family education and support.

Clinical Resource Management: Clinical resource managers coordinate care for patients who will be returning to their homes after discharge. They ensure that patients have needed equipment such as CPAP machines, oxygen, and mobility equipment when they leave the hospital for home.

Nutrition: A service staffed by both physicians and registered dietitians (RDs), nutrition staff address patient care issues such as intravenous nutrition, special diets, cachexia, etc.

Chaplaincy: This service provides inpatients with worship services and spiritual counseling.
While your responsibilities and opportunities as a student will vary a great deal from month to month depending on the clinical rotation and your team, the basic structure and general principles that direct your activities are consistent throughout the clerkships.

Your ability to get organized and stay organized will be very important in your future as a student, a resident, and eventually as an attending physician. Regardless of your rotation schedule, you will quickly develop a personal system for recording and accessing patient information.

Even though you will likely only be assigned 1-3 patients to follow closely and present on, having access to some information for all of the patients on your team will be helpful. This will allow you to follow along on rounds and write down any tasks that you can help out with later in the day. It will also demonstrate that you are interested in helping to care for everyone on your team, not just your own patients.

Most students and residents use printed copies of the day’s sign-out (a list of patients on the service with a one-liner, test results, active medications, etc.), accessed from Carelign or EPIC, to take notes on pertinent information for the patients they are following as well as keep a list of to-dos. Ask your interns and residents how to print the sign-out, and try out the different formats available to find which one you like best. Some carry a clipboard with a separate sheet for each patient, while others manage with loose, jumbled scraps of paper. Some students even opt to create their own sheets with pre-printed patient information templates.

Regardless of the specialty, all of your clinical rotations involving the care of inpatients will involve rounds. Rounds provide structure for the interaction between the patient and the health care team, and among members of the health care team itself. For some of your clinical rotations, you will be responsible for individual patients who you “pick up”. You will be most involved in the care of these patients throughout their hospitalization, and these will be the patients you present every day during rounds. Alternatively, on your surgical rotations, you will make small contributions to the care of all of the patients on your service as a team member and will not necessarily follow individual patients. Again, while your specific responsibilities will vary, the majority of your clinical experiences will involve rounds.
Pre-Rounds

This section applies primarily to rotations in which you will follow individual patients, such as in medicine and pediatrics, but the general principles apply to the majority of your clerkships.

On most services, you will begin a typical day by “pre-rounding” on your patients. The goal is to find out what happened with the patient since you left the night before so that you can update the team on the patient’s progress. Here’s what information (generally speaking) you are expected to gather and where to find it:

- Subjective assessment of the patient: how your patient has been doing since the previous day in the patient’s own words. For example, how has their chief complaint been doing? If they were admitted for a COPD exacerbation, is their shortness of breath better or worse since they’ve been started on medications? You’ll want to ask if they have any new complaints or concerns as well.
  - A note on waking patients up: many medical students feel anxious (naturally) about waking patients up in the wee hours of the morning. However, it is expected that you will have spoken to your patient before rounds begin, so it is best to just go for it and empathize with your patient about how tired you both are. The only exception to this is on your pediatrics rotation, where it may be acceptable to just talk to the patient’s family members without waking a child from sleep.
- Perform a brief, directed physical exam: This always includes four basic systems (heart, lungs, abdomen, extremities) as well as relevant systems for that patient (e.g. surgical wounds).
- Vital signs: temperature at the time (Tcurrent) and maximum temperature overnight or over the past 24 hours (Tmax), BP, heart rate, respiratory rate, and pulse ox (always record the level of oxygenation – e.g. “on room air”, “2L nasal cannula”), total intake and output (I/Os) over the previous 24 hours, weight if appropriate, drainage from any surgical drains/ chest tubes, etc. In the electronic medical record, this information can be found in multiple different places and displayed in multiple different formats. If vitals ever look wrong or unexpected, definitely check them again yourself and look for trends. Vitals are often presented as the range of values over the past 24 hours (“heart rate ranged from 75 to 115 in the past day”), and sometimes it is useful to note when any abnormal values occurred (“the heart rate was within normal limits except for when it reached 115 during the fever at 6PM yesterday”). The most recent values will often be imported automatically into electronic notes, and you will be able to import ranges and graphs, as well as refresh values, relatively easily.
- Check for new results, including lab values and radiology reads. Medview and Carelign may serve as helpful adjunctive tools for checking and confirming results.
- Review any new progress and consultant notes. Consultants and attendings will often round after you’ve left for the night, and you’ll want to be up to date on all new activity in the chart. Also look for notes or updates written by the on-call resident overnight in
both the EMR and in Carelign. When you start a new rotation, you should check with the intern to see if they would like you to get signout from the overnight team or if they want to do it themselves. Signout is a process in which patient responsibilities are handed off from providers who are leaving to providers who are entering the team. Signout is key in getting overnight updates on your patients, but the intern may prefer doing all of their signouts at once and then passing the information on to you. Review orders to see if there have been any major changes or if any consultant recommendations have been implemented.

- Quickly checking in with your patient’s nurse can be a great way to get the inside scoop on any issues with the patient overnight. Of course, don’t interrupt the nurses’ signout!
- Don’t be surprised if the intern knows things that you don’t: they were either the one there all night, or they got a quick morning report from the on-call intern. (Try to ask the intern if there is anything you should know about your patient before rounds so that you can present the information to the attending instead of having the intern report the updates. But don’t be offended if the intern forgets to touch base with you before rounds, they’re just busy and are not trying to make you look bad.)

Don’t be discouraged if you miss information early in your rotations. You’ll get better and faster every day, and each patient will only take about five minutes with practice (early on, be sure to leave yourself about half an hour per patient). Since each patient is also the intern’s responsibility he/she will usually also pre-round on your patients, and your resident might as well. If there’s time before rounds, the intern may kindly review any important developments with you before your presentation.

On surgical rotations, expect to pre-round on more patients, but in MUCH less depth. Your intern and residents will let you know exactly what information they like to hear on rounds.

{ Work Rounds }

After pre-rounding on surgical rotations, the housestaff team (usually without attendings) will review each patient’s progress and plan basic care for the day. (On non-surgical services, there generally aren’t separate work rounds, just one set of rounds with the attending.) Work rounds are usually done as “walk rounds” or “bedside rounds” where the entire team moves from room to room to see each patient. Occasionally teams may have “sit-down rounds” in a conference room prior to seeing the patients. When the team gets to one of your patients, briefly summarize the pertinent data from your pre-rounding, including your ideas for a daily plan. Use the SOAP format (subjective, objective, assessment, plan) that you will also use for the written progress note (see sample notes for more details). Presentations should be concise but complete, noting patient name, age, current problems, vitals, pertinent exam findings, study results and assessment/plan. For example:

P.D. is our 67 year-old gentleman with colon cancer, now post-op day #2 status post left hemi-colectomy with end-colostomy. Yesterday he finished his course of peri-op
antibiotics. He reports no new problems overnight, states he tolerated ice chips yesterday without any nausea or vomiting. He was afebrile with a T\textsubscript{max} of 99.6°, BPs ranging from 130s – 140s over 90s, heart rates in the 80s, respiration rates 14 -16, and pulse ox of 98% on room air. I’s and O’s yesterday 1500 cc/2000cc, with 100cc from his JP drain, for net 600cc negative. On exam, his incision is clean, dry, and intact, and the swelling and erythema around his ostomy stoma is decreased. Bowel sounds are now present. Plan is to advance his diet to clears, encourage ambulation, and follow-up on the heme/onc note.

Work rounds are highly chief resident or fellow dependent. While the above model is a good start, mold your presentations to her/his preferences. With practice you will likely start work rounds with a mostly pre-written daily progress note/SOAP note for each of your patients that you can complete as your team agrees on an assessment and plan. Again, this will vary. Occasionally you may be directed to have signed the note in the chart before rounds. However, these notes are very brief and get much easier to write with practice. The amount of teaching you will receive during work rounds is variable, depending on the style of the resident and the number of patients on the service, as well as their level of acuity and complexity.

{ Attending Rounds }

Attending rounds are generally held soon after work rounds, but again, this varies with the service. On non-surgical services, there generally aren’t work rounds, and everyone rounds together with the attending after pre-rounding. Attending rounds provide an opportunity for the team to present and discuss old and new patients with the attending.

If you have admitted a patient the day before who is new to the team, this is the time when you will give the entire formal H&P. You will likely have discussed your patient with the admitting resident the night before or in the morning before rounds. Many interns and residents will volunteer to listen to a practice presentation prior to attending rounds. Take them up on it! They will undoubtedly have invaluable advice on content and style, especially early in the rotation. This is often your only contact with the attending, and a well-rehearsed presentation will make a great impression. **Do not sacrifice completeness early on because you feel compelled not to read from your notes or because your presentations are longer than those of the interns.** At this stage in your training you should focus on being thorough. Your attending will likely want to hear more detail from you than from the interns to make sure that you are obtaining all the relevant data and thinking through the differential clearly. Over time, try to do more of the presentation without notes. Start by delivering some of the HPI from memory and gradually add more and more components of the presentation. Feel free to ask your attending or resident about style preferences for the presentation; most will tell you if they have something else in mind, so be flexible. Don’t be upset if your attending or resident interrupts you to ask questions, add information, or discuss a teaching point – this is not a reflection on your presentation, but is meant to help the team learn and understand your patient better.
For patients who have been in the hospital for a while or don’t have many active issues, the presentations can typically be brief. Try to adhere to the SOAP format as much as possible, however, and do not give the entire formal H&P unless asked – only touch on the new information (day before and overnight) and don’t rehash the social and past medical history from admission, even if this is first time you are presenting the patient. A great way to figure out what should be included in SOAP presentations is to spend your first day of rounds on a new rotation noting what the interns and residents include in their presentations.

You should have read enough about your patient’s disease the night before to be able to answer some of the questions that your attending will inevitably ask. Read for your own education and understanding with some anticipation of likely questions, and you’ll do very well. Think about the little things as well. Try to be familiar with the patient’s medications and why they’re taking them, even if it is not relevant to their current presentation. Think about why a patient may have an abnormal lab value or physical exam finding, even if incidental to their current disease process. Often, especially on the medicine rotation, your resident will sit with you the night before to discuss the patient and prepare you for questions that the attending will likely ask. Remember, you are absolutely not expected to have an answer to every question. Attendings will often use a line of questioning to lead off a teaching session and even the hardest questions of the morning are directed to the most junior person in the room first (always you) before it trickles up to the chief resident. Look at it as a chance to show what you’ve learned, to have fun thinking on the fly, and, above all, to learn in the process.

Attending rounds are variable from specialty to specialty, and formal attending rounds may not exist on some of your rotations. Surgical attendings often walk round between or after cases with only the chief resident or fellow, or they may round with the entire team at the end of the day. While you may have the opportunity to give bullet presentations on these rounds, you will likely not give lengthy H&Ps. Alternatively, you will have many opportunities to present new patients directly to the attending during clinic hours. While these presentations will be more directed, the usual style and general format apply.

{ Topic Presentations }

You will often be asked to give at least one brief prepared topic presentation during the course of a rotation. Seek advice from your residents about the length and degree of detail expected in these presentations. In general, focus on basic principles rather than minutiae, and remember that a concise and complete discussion of a focused topic is better than an exhaustive dissertation. If the attending specifies that he/she wants to hear a 5-minute presentation, be sure to keep it to 5 minutes. It helps to practice the talk and time it the night before. A one-page handout (one- or two- sided) is also a nice touch and adds structure to the presentation. Here is a general outline of how to approach a topic presentation:

- Try to pick a topic relevant to either a patient you are following or another patient on the service.
• Narrow your topic as much as possible. For example, if you choose to do a presentation on heart failure, narrow it to a specific cause (e.g. amyloid cardiomyopathy) and then narrow it even further (e.g. heart transplant in amyloid cardiomyopathy). It is often easiest to do an “Evidence-Based Medicine” presentation, discussing the evidence supporting a new therapy or diagnostic test, since the information is likely to be limited and easy to find. These presentations are also likely to be about new research, so you will likely be teaching your residents something, and maybe even the attending!
• Start with a 2-3 sentence presentation of your patient, if relevant to the talk.
• Cover the BASIC epidemiology, pathophysiology, clinical presentation, and diagnosis.
• Include a discussion of one or two relevant papers or review articles. You can find papers of interest by doing a PubMed search for your key terms (or via UpToDate – see below).
• UpToDate is a great starting point for a presentation to orient you to the topic. The references at the end are also an excellent way to quickly pinpoint the most recent and relevant literature on a topic without having to sift through all the results on PubMed. However, you’re definitely going to want to look at some primary literature and not just rely on UpToDate for your entire presentation.
• Have this information on a one-page handout (one-sided or two-sided) that you will distribute to your team. One good technique is to make a more detailed handout for yourself as you are researching your topic, then cut it down to make the handout you will give to your team. You’ll present from the more detailed version so you’re not just reading the handout that people have in front of them word for word. Having a figure or table or illustration is always a nice way to make your handout more interesting. Check out some example handouts from past AOA students in the “Sample Topic Presentations” section.
• Always put your name on the presentation and include a list of references at the bottom (try to include primary literature and not simply UpToDate).
• If you can make the entire presentation rhyme everyone will be very impressed.

{ Call }

As a student, your call schedule and corresponding responsibilities will vary from rotation to rotation. On medicine and pediatric services, your primary objective will be to help admit one or two new patients that you can present to the attending the next morning. While waiting for an interesting admission to come to your service, you should help your resident with the more routine duties of patient management. Once your new patient has been admitted and settled for the night, you should get home to work on your presentation and do the appropriate relevant reading. (Note: when you are at home you should also shower, eat, sleep, and if relevant, take care of your pets and/or children). Alternatively, during some surgical specialties (e.g., trauma), you may be expected to take some overnight call and/or be on call from home (e.g., transplant services). During your Ob/Gyn rotation, you may have a week of “night float” where you’ll work from approximately 7pm to 7am to have the ultimate middle-of-
the-night labor and delivery experience. Although it’s tiring, call is usually an incredibly rewarding and exciting experience for students. Because you’re one of the few people in the hospital, you have greater responsibility and opportunity in the care of your patients. Furthermore, you’ll get to see the initial presentation, work-up, and management of patients. The specific call responsibilities for each clerkship are detailed in the individual clerkship sections later in this guide.

•♦ The Chart ♦•

The exact organization of a patient’s charted medical record is dependent on the hospital and ward in which that patient is located. It may be stored at the bedside, electronically, at some central nursing station, or in some cryptic combination of places. Most rotations occur at HUP, Penn Presbyterian, CHOP, and related outpatient facilities, where information is exclusively disseminated through EPIC. Fortunately, the essential components of any patient chart are consistent; they all contain sections for physician’s orders, administered medications, vitals, progress notes, lab and radiology results, etc. You’ll quickly learn where best to look to find or record information that is important to you. Ask residents, nurses, or the unit secretaries for help early in the month. Navigating patient charts is an essential skill that you’ll develop with experience. The chart is an important medical and legal document, so everything you write should be professional. Remember to have everything you write in the chart co-signed by a MD/DO, usually your intern or resident. Always include some identifying title before each entry (e.g. “MS-II Admit Note” or “Medical Student Progress Note”) and after your signature at the end of the note, as well as a contact phone number or pager.

{ The H&P }

You have already had a great deal of experience learning how to perform and write a History and Physical Exam. As time goes on, your H&P will change according to your individual style, the rotation, and the patient. Generally, your write-ups will grow more concise over the course of your clerkship year as you gain a better understanding of what is relevant and what is not relevant. At most institutions, your H&P will be visible in the chart, complemented by an addendum or, in some instances, an additional complete H&P written by the resident. Do not be discouraged by this redundancy. It is often required by hospital policy. Look at your admission note as an opportunity to organize your thoughts about the patient, to learn to be concise and pertinent, to adopt convention, and to demonstrate your understanding to the attending who will undoubtedly read most of what you contribute to the chart. The basic H&P format is below. Please note that this was written before EPIC became ubiquitous at Penn. Your experience will yield more streamlined notes, since the EMR provides a clickable or tabular view for many sections, such as the PMH. You will also be asked to submit formal, typed H&P write-ups for some clerkships. For examples of some formal write-ups done by AOA students, check out the Sample Patient Write-ups.
H&P Format

Patient Name: MR Number:
Date: Time:
Source of Hx: Patient, Family, Old Records, etc.

CC: “In patient’s own words”

HPI: Begin by listing all relevant major medical problems in your first sentence (i.e., Mr. M is a 45 y.o. WM with a hx of NIDDM, CAD, PVD, CKD who presents with ...). Describe all episodes and conditions leading up to and relevant to the reason for admission. Include pertinent positives and negatives from the review of systems. If multiple problems are present discuss them one at a time. Give attention to the duration, intensity, location, radiation, quality, onset, etc. of sx (symptoms). Include a brief synopsis of what was done in the ER, by the EMTs, at the OSH (outside hospital) prior to transfer etc. before the patient came to the floor, such as diagnostic tests and results, medications, fluids given and response. All PMHx relevant to this admission should be detailed, including admissions, ongoing treatments, etc. A chronological structure to the HPI is preferred by most attendings, so try to organize things by when they happened.

PMH: Describe major illnesses (childhood & adult) with a brief discussion of duration, treatment, and control: e.g., rheumatic fever, HTN x 10 yrs. well controlled with meds, s/p CVA ‘91 w/ residual left sided weakness.
Hospitalizations: reason for admission, when, where, treatments?
Surgical procedures w/ dates: Indications?
Trauma/injury: residual defects or limitations?
Immunizations (most relevant in peds)
Transfusions

Meds: Include dosage and duration. Does the patient actually take them? Don’t forget to include over-the-counter drugs and herbal meds. Look back to the PMH to see if the patient may have forgotten to mention a chronic illness indicated by the meds list.

All: Record allergies and reactions to medications and foods, or NKDA (No Known Drug Allergies).

FH: Include inherited diseases: ex. diabetes, heart disease, HTN, cancer, mental illness in all immediate family members. e.g., (+) HTN in mother, (+) DM in mother and sister, otherwise (-) for heart dz, CA, mental illness.

SH: Occupation: mention of relevant exposures to asbestos, etc.

In older patients, note their functional status (ADLs, IADLs, etc.).
Marital status, Children, Living arrangements:
Education:
Tobacco hx: estimate total pack yrs, currently smoking? If not, when did they quit?
ETOH use: estimate frequency and quantity.
IV or other illicit drug use:
Sexual and OB history: are they sexually active? With whom? Do they use protection against STIs? Have they been pregnant before? If so, what were the outcomes?

ROS: Be complete for medicine. Pertinent positives and negatives should be in the HPI. On many rotations it will be entirely acceptable to write: “ROS as per HPI, otherwise negative.”

PE: Abbreviations are difficult at first, but are pretty much standardized, so you’ll see the same ones over and over again with time, to the point where you adopt most of them in your own notes. Below is a list of common abbreviations in a typical and fairly complete, benign PE.

General: B/L = bilateral; c/ = with; s/ = without; NT = non-tender.

<table>
<thead>
<tr>
<th>Write-up</th>
<th>Notes &amp; Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS: T: 98.6°F, RR: 12, HR: 65 BP: 120/80 (sitting), Pox 100% on RA.</td>
<td>VS = vital signs; Pox = pulse-ox; RA = room air (or O₂ @...); may also include supine BP/HR (orthostatics).</td>
</tr>
<tr>
<td>General: WD/WN male in NAD, resting comfortably on exam, appears stated age, pleasant and cooperative, AAOX3.</td>
<td>WD/WN = well developed, well nourished; NAD = No acute distress; AAOX3 = awake, alert, oriented to person, place and time.</td>
</tr>
<tr>
<td>H: NC/AT; (−) temporal wasting.</td>
<td>H = head; NC/AT = normocephalic/atraumatic; note any lesions/rashes.</td>
</tr>
<tr>
<td>E: Conjunctiva pale; (−) scleral</td>
<td>E = eyes; EOMI = extra-ocular muscles intact;</td>
</tr>
</tbody>
</table>
icterus; (–) injection; EOMI; PERRLA; fundi benign; acuity 20/20 B/L c glasses.

E: Acuity grossly intact; (–) cerumen; TM gray, translucent c good LR B/L; (–) erythema; (–) exudate or d/c.

N: Septum s deviation; (–) rhinorrhea; nares clear B/L; (–) polyps/masses; sinuses NT B/L.

T: MMM; pharynx s erythema; (–) thrush; (–) exudate; dentition good.

Neck: Trachea midline; supple; good tone; full ROM; (–) masses; (–) LAD; (–) JVD; no thyromegaly, (–) nodules; (–) carotid bruit B/L.

Chest: CTA/P B/L all lobes; (–) W/R/R.

CV: RRR; nl S1/S2; (–) S3/S4; (–) M/R/G, PMI @ L 5th intercostal space.

Abd: Soft, NT/ND; (–) HSM; (–) masses; (–) bruits (aortic or renal B); (+) BS; (–) CVA tenderness

Ext: WWP; (–) C/C/E; 2+ radial, DP/PT pulses B/L; cap refill < 2 sec

Skin: Clear; unbroken; (–) rashes; (–) hypo/hyperpigmented areas; nl turgor.

GU: (–) vaginal (penile) d/c; (–) rash/lesions; (–) testicular masses; (–) inguinal hernia

Rectal: Good sphincter tone; prostate NT, not enlarged; brown heme (–) stool; (–) polyps/masses

Neuro: MS = mental status; CN = cranial nerve; RAM = rapid
MS: AAO x3
CN: CN II-XII grossly intact
Motor: See diagram below
Sensory: Grossly intact and equal to
light touch, pin prick, cold, vibration
Coordination: (−) Romberg; intact
RAM; (−) tremor
Gait: Normal gait; intact heel, toe,
heel-to-toe gaits.

MMSE results.

alternating motion.

If indicated, perform and document a MMSE = mini-
mental status exam.

Abbreviated neuro exam can sometimes be
documented as “AAOx3, CN II-XII grossly intact; non-
focal exam.”

The arrows on the diagram indicate the direction of toe
movement during a Babinski test (up or down).

LABS: Chemistry, CBC, U/A etc.
Common abbreviated presentation of lab values:

BMP/Panel 7 / Lytes  CBC

DATA: EKGs, CXR, etc.

A/P: Start with a short summary of 3-4 sentences max. This should be very similar to the
bullet you would deliver if your attending wanted a quick summary of the patient’s
history and presentation. Follow by listing each active problem numerically with the
most important first. In the ICU, you will organize your assessment by organ system
(pulmonary, cardiovascular, endocrine, FEN-fluid/electrolytes/metabolism, ID, GU, GI,
etc.). Each of the problems you list requires an in-depth assessment (especially in
Medicine), which includes a detailed differential diagnosis. Support your thoughts with
elements of the patient’s history, physical findings, lab data and procedure results.
Conclude with a detailed treatment plan.

The last few problems on your H&P should always be:
  # F/E/N (fluids, electrolytes, nutrition) – regular diet, NPO w/ IVF, cardiac diet, etc.
  # PPx (Prophylaxis) – SQH (sub-cutaneous heparin), SCDs (sequential compression
devices), PPI (proton pump inhibitor if patient is on GI prophylaxis).
  # Code Status
  # Disposition – stable on floor, will need PT eval for possible SNF (skilled nursing
facility) placement, etc.

Don’t worry—you’re resident will almost always go over this with you the night before
In addition to the comprehensive H&P, every in-house patient you help admit and follow on a regular basis should have a daily progress note placed in the chart. In EPIC, which you will use most frequently, there will be a medical student progress note template that you can use to structure your notes. You don’t have to wait for all of the day’s data to come back before writing a daily progress note. In fact, the best strategies usually involve “pending” an incomplete note until the plan is agreed upon during rounds, or signing the note and writing an addendum later.

It is a good idea to include a list of the patient’s current medications with your SOAP note. Be sure to list any antibiotics that the patient is on, and the number of days they have been taking it. A word of warning: some EPIC note templates now feature the A/P at the top of the note.
This intervention was made in order to improve communication between providers. Don’t let this dissuade you from using the SOAP process to think about your patients!

{ Other Notes }

There are several other types of hospital notes that you will encounter (and become comfortable with) during your clerkship year. Reading them will not only inform you about your patients, but it will also acclimate you to their contents and styles. You may even be asked to write specialized notes, although you will often be barred from doing so for billing purposes. Consulting doctors write Consult Notes, which almost identical to H&Ps. Providers document procedures with a range of notes (e.g. Op Notes and Delivery Notes) formatted specially for their purposes. Physical therapists write PT notes, speech therapists write speech therapy notes, and so on. Every patient discharged from the hospital will have notes that summarize the admission for them and for their outpatient providers. If you are ever asked to write a note you have never used before, ask your resident how. They will undoubtedly have a template and sage words of wisdom.

•♦ Orders ♦•

A physician must write an order for almost anything to happen to a patient in the hospital, including medication administration, consultation requests, lab tests, and diets. Orders must be entered electronically. You’ll be oriented to these systems and will be allowed to enter some orders, but all of your orders require the electronic signature approval of your intern/resident for activation. You’ll become more comfortable writing orders with experience. If you are ever asked to write a prescription for the patient to take home, your intern or resident will teach you how to do this.

Nursing orders are a formal communication with the nurse, and it’s always helpful (and nice!) to add a “Thank you!” to the end. Examples of nursing orders:

- Please bring commode to bedside.
- Please check orthostatics in the AM tomorrow (11/16) only.
- Please start IVF (intravenous fluids): D5 1/2NSS (normal saline solution) @ 125 cc/hr on arrival to floor.
- Please make patient NPO (nothing by mouth) past midnight. Thanks.

Abbreviations used in ordering medications:

- **qd:** once a day - this abbreviation is no longer allowed on charts and you should write out “daily” instead; however, you will often still see or hear it
- **bid:** twice a day
- **tid:** three times a day
qid: four times a day
q12: every 12 hours (not the same as bid: q12 means at midnight and noon, bid means approximately when you wake up and before going to bed)
qAM: every morning
qHS: every evening (HS = hora somni, or hour of sleep)
qAC: before every meal
prn: as needed
Examples:

• Begin Furosemide 40 mg PO BID.
• Ceftriaxone 1 g IV q12° x 14 doses—first dose STAT
• Prednisone 40 mg PO daily x 2 days, then 20 mg PO daily x 2 days.
• Maalox 30ml q4°-6° PRN dyspepsia

{ Admission/Transfer Orders }

All patients need a standard, conventional set of orders when they are admitted or transferred between services and floors within the hospital. There are templates in EPIC for admission orders for medicine, so ask your resident to show you how to use these.

Remember: Have your orders reviewed, approved and co-signed by a physician, and do admission orders once or twice first with an intern or resident before doing it on your own.

♦♦ Electronic Medical Records Systems ♦♦

There is a variety of EMRs that you will use during your clerkship: EPIC on outpatient and inpatient sites within UPHS and CHOP, CPRS at the VA, and possibly some other EMR on your outpatient pediatrics or medicine rotation, depending on where you are placed. You will receive training in each of these systems prior to starting the relevant clerkship, but most of the learning will be done “on the job,” as you attempt to find information and enter notes and orders during your time on the wards. Use your residents, interns, and sub-interns to help you navigate the various EMRs. Be prepared for a good amount of computer errors and annoyance, but recognize that learning to use your resources, in this case EMR, is part of your clinical education and is necessary to be an effective medical student, and in the future an effective resident. Recognize that the same thing can usually be done multiple different ways, and the same information, such as vital signs or lab results, can usually be displayed in multiple different fashions in the same EMR. Make the effort to learn all the different methods and choose the one you find easiest and most useful. One of the key things to learn about each EMR is how to set up “flags” for your patient so you are informed of new changes: orders, results, and notes. If you have any trouble accessing or using any of these systems, call the IT Help Desk at 215-662-7474. Below is a brief overview of the different electronic systems you will be encountering throughout your clerkships:
 EPIC – A personalized form of EPIC will be used in both medicine and pediatrics. It is a very common EMR nationally, and you might use it during your residency even if you go to a different institution. It is relatively easy to use, with “tabs” for multiple patients and for different parts of the chart. If you are writing notes in EPIC on your outpatient rotations, it is helpful to learn “Smart Phrases” to automatically pull medication lists and lab results into your notes.

CPRS – CPRS is the national VA EMR, accessible from any VA across the world. It is an older EMR (started in the 1970s!) but is incredibly useful, with a complete VA medical record detailing all interactions the patient had with the system at any VA hospital. It consolidates both inpatient and outpatient information along with medications, notes, and lab results, making chart biopsies much easier. It isn’t configured to store certain types of information, like ICU vital signs, but it is generally sufficient for all clerkship VA activities. Several fun facts – CPRS is based on software that is in the public domain, so anybody can use it. CPRS was also created by physicians for physicians, and it has remained unchanged since its creation. That’s right, still version 1.0, only 40 years later.

Other electronic systems:

- **Medview** – Medview can be accessed from within PennChart or from the UPHS Intranet homepage. It consolidates all lab and radiology results, and allows you to view UPHS images and pathology notes that can be difficult to bring up in other formats. It also pulls in information from PennChart so you can view all of a patients’ UPHS inpatient and outpatient visits, PennChart medications, discharges, and more. If you access Medview via a web browser (rather than through another EMR), you can also view old UPHS inpatient paper medical records that were scanned into the computer through either eWebHealth (through 2011) or OnBase (since 2012).

- **Carelign** – This is a more recent addition to the suite of EMR options on the UPHS menu. It is available online and in app form, which makes it a valuable resource for checking on patients and updating to-do lists on the go. It collects and displays lab values, vital signs, imaging and pathology reports, and more. Carelign also allows residents to create and modify to-do lists and signouts, so many services use this for the most up-to-date assessment and plan. From Carelign you can also print out signouts and progress notes with auto-populated vital signs and lab data. Pro tip: using the computer’s native snipping tool allows you to copy images of lab values in pretty displays to your EPIC notes.

- **Amion** – Amion provides scheduling for many of the UPHS residency programs, and you can find out your own call schedule and members of your team on this website. You can access it through the UPHS Intranet homepage.

- **Navicare** – Navicare is the nursing patient tracker at UPHS inpatient sites, which shows where each patient is in the hospital at every moment. It is also used in the ORs to track operations, and is updated to show the stage of the operation (anesthesia, draping, incision, closing). There are a lot of icons that show various things about patients (contact precautions, one-to-one), but the most important thing
for medical students is to learn how to use it to find where a patient is if they aren’t on the floor (in radiology, the OR, PT). Navicare is displayed on big TV screens near the nursing station on every inpatient ward, and you can use it to find patients as long as you return it to the same screen when you are done. It is also accessible on all computers. You can sign on with most floor names (i.e. “founders14”), the password being the same (“founders14”).

{ Accessing EMR Systems From Home }

If you have any problems, call the IT Help Desk at 215-662-7474

UPHS Extranet – Through the Extranet, you can access all the same webpages as the Intranet (including Medview) and access UpToDate from home as well. You can log onto the Extranet at https://extranet.uphs.upenn.edu, and click on “UPHSNET” to access the UPHS Intranet Homepage. Your initial login is the same as your Medview login, and a second verification step will usually follow. To set up UpToDate, log into the Extranet, click on “UPHSNET”, search in the search bar for “uptodate”, click on “UpToDate” Intranet, and click “Here”. You can then add this page to the Extranet Home Screen by clicking the plus sign in the top right corner, and then click the home screen button (snowflake/asterisk symbol) to see the link on your home screen.

PennChart – PennChart can also be accessed through the Extranet, through the “PennChart Hyperspace Web” link. You may need to call IT Help Desk to link your Network ID to your PennChart account if you have not already done this through Penn Access Manager (see “Other Electronic Systems” above).

{ Accessing EMR Systems on the iPad/iPhone }

As you’ll see in the next section, iPads have limited utility for the clerkship student in a clinical setting (such as patient rounds). However, there may come a time when you find yourself growing bored of Ross Geller’s perpetual whining and you want to look up some protected patient information. Here’s how you can get EPIC with an iPad or iPhone. Of note, how to get remote access changes over time and may be different by the time you are in the hospital. If you get stuck, call IT or ask the residents around you, all of whom have probably gone through a similar access process.

Getting EPIC on an iPad/iPhone:
• Download Haiku (iPhone) or Canto (iPad)
• Go to settings and click on the app
• Enter this info: Server = ssproxy.pennhealth.com, Path = Haiku
A Brief Word About iPads

In our experience, few students utilize iPads on the wards. Unless you have an excellent reason to use one, we recommend leaving it at home or in your backpack. The iPad can be distracting on rounds, make your white coat heavy, and give the appearance that you aren’t paying attention to the team. While it can be used to visualize data, there are usually more than enough computers (with much larger screens) to obviate this benefit, and you can see everything you need to know about a patient on your phone using Carelign.

Useful Apps

If you read the previous section then you are aware that iPads can be used for studying +/- clinical reading when you aren’t on patient rounds. Listed below are some popular apps used by clerkship students. Note that many of these apps are also available for smart phones, which are much easier to use discreetly and with a single hand while on rounds. You can download many of these apps for free by going to the “Biomedical Library Home Page” → “Resources for Clinicians” → “Clinical Mobile Resources.”

Apps to look things up:

1. UpToDate – Free for PSOM students. This is one of the most useful resources you can have on your phone. It offers up-to-date (get it?) information on diagnosis and treatment of essentially anything you might see on the wards. You can access UpToDate on your mobile device by first going to the UpToDate website from a UPHS computer. At the top right of the screen, you have the option to “register” for an account. Once you do that, you can access all that UpToDate has to offer from your phone without being remotely connected to UPHS.

2. Epocrates Essentials – Free for PSOM students. You can register at https://www.epocrates.com/EFMSLanding.do?CID=EFMS. This essential resource provides you with drug information and dosing, an interaction checker, pill ID program, and multiple medical calculators and tables, among other resources.

3. Dynamed – Free for PSOM students. Access it by following the instructions on this website: https://dynamed.ebscohost.com/access/mobile. Provides clinically organized summaries on more than 3,200 topics. CHOP now prefers Dynamed to UpToDate as a management resource.


5. Rolodoc - provides contact information for consult services at HUP. Your intern/resident should be able to help you with this.


7. QxMD Calculate (Free) – Clinical calculator

enter relevant aspects of a rash (location, associated symptoms, etc.) and it provides you with a differential diagnosis.

9. Micromedex (Free) – Essential resource for drug information and dosing
10. Wikipanion (Free) – The most important resource of all: Wikipedia!
11. AHRQ ePSS (Free) – From the U.S. Dept. of Health and Human Services, “to assist primary care clinicians identify the screening, counseling, and preventive medication services that are appropriate for their patients.” Great for Family Medicine.
12. Shots by STFM (Free) – Up-to-date immunization reference
13. Growth Charts (Free) – As the name implies, pediatric growth charts
14. Diagnosaurus ($1.99) – Free online. Differential diagnosis builder
15. Pokemon Go – You can be a great help to the team by locating invisible pokemon. Your attending will ALWAYS appreciate it when you locate a Snorlax in the Pouch of Douglas.

Apps to study with:
1. USMLEWorld QBank (Free, with subscription) – access USMLEWorld on your device!
2. Your favorite flashcard app of choice
3. PDF reader and editor for textbooks, study guides, etc.

•♦ Filling Your White Coat ♦•

The contents of your pockets will vary between rotations and with experience, but in general:

For the minimalist:

1. Stethoscope: put your name on it with tape, a patient ID bracelet, or some other tag—and never let it out of your sight.
2. Reference handbook for current rotation; e.g. Pocket Medicine —useful for almost all rotations!
3. Note cards, paper, or whatever else you feel comfortable using to keep patient information organized and easily accessible.
4. Several pens: Have lots of them because you will lose them and/or lend them out.
5. Smartphone with access to medical apps.

Also useful:

1. Maxwell Cards for quick reference for normal lab values, standard forms for notes, etc.
2. Clipboard. You can find a folding clipboard with useful lab values printed on it at mdpocket.com or on Amazon by searching for “White Coat Clipboard.”
3. Jay Sanford's Guide to Antimicrobial Therapy
4. Scissors, clamp, and/or trauma shears (especially for surgical rotations)
   a. NOTE: remember to take these out of your pocket before you attend your nephew’s violin recital.
5. Tape, gauze, gloves, ABG kits, lubricant, hemoccult cards, tourniquets, etc.
6. Snacks: food is considered off-limits for providers on many hospital wards, but you may find moments during the daily journey for a granola bar or so. This may be frowned upon by some teams, so make sure to ask permission if you plan to eat conspicuously.

Rotation specific accessories such as a gestation wheel in obstetrics, a reflex hammer for neurology and medicine, growth charts in pediatrics, and skin staple removers in surgery will become obvious as you go along. Detailed recommendations are included later in the sections dedicated to specific clerkships. You’ll feel more and more comfortable without certain things as your coat gets heavier, but you need to come to that point on your own.

•♦ Phlebotomy ♦•

Always have everything you’ll need for a given procedure with you when you go into the patient’s room. This makes you seem more professional and inspires confidence in your abilities (don’t worry, this won’t be the only time you actively deceive a patient about your competence).

**Before you do a blood draw:** Grab an emesis basin, water bucket or empty cardboard gauze box and fill it with the following:

- Gloves that fit (gloves that are too big increase the risk of sticks)
- Tourniquet, alcohol swabs, small gauze pad, and Band-Aid
- Vacutainer needles or butterfly needles (more than one, because nobody’s lucky all of the time)
- Vacutainer needle holder
- Appropriate specimen tubes (always bring extras) or blood culture bottles
- Specimen bags
- For blood cultures bring Betadine swabs (at least 6)
- Pre-stamped and completed labels and lab forms

**Selecting appropriate tubes:**

Tube color designations may vary from one hospital to another. If you ever have any questions, just call the Lab and ask. Commonly used tubes at HUP are as follows:
** To prevent dangerous clerical errors, samples going to the blood bank for type and cross or screen of blood products require special pink labels for processing. Be sure to sign the pink label and the requisition slip carefully, and make sure the stamp on these labels is entirely legible. Otherwise, the samples will be discarded and you’ll have to draw them again. Be sure to ask your resident for help the first time you attempt this process.

Have an intern or resident help you through the first few and then have a go at it alone when you feel ready (after checking with a resident or intern first). Ask for help if you’ve tried a couple of times without success (nurses can also be a huge help with this). No one will be upset with you, honestly, and you’ll learn from others’ approaches. Also, don’t resort to asking the patient if they know of any good veins you could try next. It makes them uncomfortable.

♦♦ Cellular Phones ♦♦

Make sure your team has a way to get in touch with you at all times in the hospital. It is also important to update your UPHS phonebook profile so that it has an up-to-date contact number. If you feel uncomfortable using your personal cell phone number for professional purposes, some students choose to set up a Google Voice account and forward that number to their cell phone.

♦♦ A Guide to HUP Bathrooms ♦♦

Everyone who spends enough time in a hospital eventually comes to realize the importance of finding a bathroom that feels *right*. Great bathrooms tend to exist in locations with minimal foot traffic, exhibit moderate or better cleanliness, and allow you to put your stuff down.
without your entire outfit becoming one big fomite. Our predecessors have ranked some particularly highly rated bathrooms below, but this doesn’t mean you shouldn’t explore for yourself. If you do wander into a gem of a restroom, be honorable and regale a select group of friends with your discovery. One important note: do not use bathrooms as a hideaway to avoid your clinical duties.

*The top bathrooms* (rated out of 4 toilets)

1. **Maloney 7 (4/4 toilets)** – The perfect setup with 1 urinal-1 stall, very low foot traffic, and the stall has an inviting, womb like feel.

2. **OR bathroom by service elevator on Founders 4 (3.5/4 toilets)** – Single occupancy bathroom, but has hooks for white coat and a table for bags. Foot traffic is heavy but interruptions minimal, as most traffic is from active transports.

3. **Maloney 6 (3/4 toilets)** – All the advantages of Maloney 7, but with a 2 stall setup. You may have to share the beautiful vistas of HUP’s bowels with a fellow traveler.

4. **4 Silverstein surgical office (2.9/4 toilets)** – Three enormous, single occupancy, seldom visited bathrooms are certainly inviting, however you run the risk of encountering a surgical attending.

*♦ Module 4 Core Clerkships ♦*

The four-block system designed for Module 4 combines different specialties of medicine that have some similarities in content and approach. Each student will rotate through four 12-week blocks that include two or three separate clerkships and integrated didactic material. There are generally multiple locations at which the clerkships can be completed, and you will have an opportunity to select among these sites. When more than one site is offered, there is typically some variation between them, and you will want to talk to other students to find out which site may best match your interests. Ultimately, however, there is central standardization by the course director in terms of grading requirements. For most clerkships, regardless of your site, you will be in JMEC on Fridays for didactic lectures. Course specifics such as weekly schedules, write-up requirements, lecture topics, and evaluation schemes have been excluded from the following discussion. These materials will be given to you on the first day of every rotation.

Grading for clerkships is based on evaluations of your clinical prowess from attendings, your score on a standardized “shelf” exam, and other types of short write ups and quizzes unique to each rotation.

One note on shelf exams: for the most part the shelf exams last 2 hours and 45 minutes (with 15 minutes additional minutes allotted at the beginning for instructions). The only clerkships where this isn’t the case are those that don’t have an official NBME shelf exam, like emergency medicine, which is a 2 hour test.
**Internal Medicine/Family Medicine**

This 12-week block is broken down into 8 weeks of inpatient medicine and 4 weeks of family medicine. Inpatient medicine is a fun but rigorous 8 weeks. During this time, you will feel more like a “doctor” than you will on most other rotations – you will have quite a bit of responsibility and will hopefully feel like you’re learning something each day. Family medicine is a 4-week block. During this time, you will see patients of all ages with a large variety of concerns, from children needing well-child care, to pregnant patients, to the elderly.

{ Internal Medicine }

What students remembered...

“...When - because I was a medical student - I was the only one on the team who had the extra time to sit with my terminally ill and nearly comatose patient’s family each and every day to learn more about what he was like and what he would have wanted. You really appreciate the fact as a medical student that because you only have a few patients that you are responsible for - unlike the senior residents and the attendings on the team - you are sometimes the only one with the luxury of truly getting to know the details of your patients’ lives and wishes.”

“...When a patient thanked me for being the only one to stick by his side throughout the admission.”

“...When my patient who had been unconscious and non-responsive for 3 days opened her eyes and looked at me and smiled. Of everyone who would try to get her to respond to them as her consciousness waxed and waned during the rest of her hospital stay, my voice, more than anyone else’s on the team, was what she responded to the most.”

“... When I was the only person on the team who was able to convince my patient that the next step in his cancer therapy was radiation.”

“...When I got to tell the wife of a man with decompensated end stage liver disease that he had been approved to be placed on the transplant list. He got his liver 2 days later.”
The Team
There are several different team structures and organizations. Some teams are broken down into multiple sub-teams with one attending. In this case, each sub-team has its own supervising resident, as well as interns and/or a sub-intern, and one or two medical students.

- **Sub-I**: This is a 3rd or 4th year medical student doing an advanced elective in medicine. They are usually very approachable and good people to ask questions that you are afraid may be stupid. Not all teams will have a sub-I.

- **Intern**: First year residents who are responsible for the majority of the daily work on all of the team’s patients. You will likely interact very closely with your intern – the patients you cover are ultimately their responsibility as well. For the most part, your intern will give you as much autonomy as you like in terms of caring for your patients; however, he/she is ultimately responsible for your patient’s well being, and and he/she or your resident will have to cosign all of your orders.

- **Supervising residents**: Each team will be supervised by a 2nd or 3rd year medicine resident (JAR—Junior admitting resident or SAR—Senior admitting resident). Your resident will not carry any patients directly but will instead oversee care for all patients covered by you, your intern, and your sub-I. They are also responsible for most informal teaching that takes place on the rotation.

- **Attendings**: You will round with them each day (sitting or walking rounds).

Sites
The 8 weeks of this clerkship are most often broken down into 4 weeks of “general” medicine, either at HUP, the VA, Pennsy, or Presby, and 4 weeks of sub-specialty medicine, primarily on services at HUP. However, it is possible that you will end up with only 2 weeks of sub-specialty medicine or none at all. See the “Call” section below for more information on schedules and call.

Your Responsibilities
The goal of the medicine rotation is for you to feel as if you are the primary point person for the care of your patient. It can take time to build up to this level of involvement and responsibility, but, if you carry out the activities described below with enthusiasm and integrity, you will eventually begin to feel as if you are capable of taking charge of your patients. As a part of your team, you will be responsible for carrying 1-4 patients at all times. “Carrying” a patient implies that you “picked-up” the patient during a call day (or occasionally picked up a patient who came in overnight and was seen by the night float team) and presented him/her on rounds the following day.

- **Picking up a patient**: Ideally, picking up a patient means that you are helping to admit that patient to the hospital (i.e. doing the initial intake, discussing admission orders/tests with your resident, and then presenting the H&P the next morning on rounds). Sometimes, however, timing is poor and instead you will be asked to pick up a patient
who has already been admitted to your team by someone else. You will only be able to pick up a new patient on the days your team is on call; the frequency of this will vary depending on the service. You are expected to pick up 1-2 patients per call day, depending on the admitting structure. Your JAR/SAR will tell you which patients you should help to admit. Depending on the preferences of your team, you will work with your intern and/or resident to admit patients. Before you go to see your patient, check in with your intern or and resident. Many interns prefer to go with you when you see the patient so that the patient doesn’t have to be seen twice, but others will tell you to go ahead by yourself. It is most courteous to ask first. Before seeing the patient, you should read through the chart, review ordered and current labs, radiological studies, and EKGs. Review EPIC and/or Carelign for past discharge summaries and/or labs. When you see the patient, take as complete a history as you can and do a complete physical exam. After you’ve seen the patient, write a complete admission note (HPI, past medical/surgical history, family history, social history, medications, allergies, review of systems, physical exam, labs/ studies, assessment and plan) and do your admission orders if your intern wants you to do them (early on, you may want to start by watching your intern put them in, then you can progress to putting them in on your own after the first week or two). Methods of order writing will vary with your site, and your intern will show you how to enter orders.

- **Presenting your patient:** You will present your patient to your JAR/SAR during your call night, and he/she will help you develop your treatment plan. For practice, try to do this presentation formally, as you will for your attending the following morning. The following day, you will present your new patients to your attending on rounds. This is a formal presentation that requires you to speak in front of your team – it is not meant to be intimidating, but it can be. The best way to handle this is to prepare WELL the night before. Think about it as your time to shine! A good history and physical will not go unnoticed by your attending, but the real place to shine is during the assessment and plan portion of your presentation. Try your best to put your money down on the most likely diagnosis – it’s ok if you get it wrong! Talk to your intern/resident for help with this! It’s really ok to adopt the plan they give you. You shine by researching and learning about the plan once you go home. Many attendings also appreciate if once or twice on the rotation you bring in an article that may contribute to your patient’s care (note: this is not necessary for every patient. Also, if you are paired with another medical student, it’s considerate to check with them before doing this so that you can both prepare something, and no one looks bad. You should also reference any primary literature you found helpful in your research even if you don’t have time to present the article formally, as this shows that you are engaged with evidence-based medicine).

- **Daily patient care and note writing:** You will see your patients before rounds every day (“pre—rounding”). After pre-rounding and getting signout, write a note; you can use the progress notes on EPIC (use the clerkship student template that can be accessed using the dot phrase “IMCLERKSHIPNOTE”) and fill in overnight events, new physical exam findings, and a plan for the day in a SOAP note form. You should write the majority of
your notes before rounds, but your assessment and plan may change after discussion with your attending, so leave some space for this. Once you sign your note, your attending will cosign it. Make sure your intern or resident reviews your progress note before you submit it. You are expected to complete your EPIC progress notes by 1:00 pm each day (unless your team is rounding late).

- Stop in to see your patients at least one additional time throughout the day, if not multiple times! This is your opportunity to begin to understand what it means to be a physician. The more involved with your patient (and their family, if they are around) you are, the better you will be able to help them with both their medical and social issues. Patients for the most part love having medical students around, and they feel better cared for when people from their medical team see them more frequently (and yes, that includes YOU!) Knowing your patient better will allow you to formulate better daily plans for them, will make you look better to your team, and will help provide better overall care for your patient.

- **Patient discharge:** Your team will decide when each patient is ready to be discharged, but you should start thinking about discharge relatively early on in the patient’s stay. Discharge planning is a great opportunity for you to be helpful as a medical student and make your team love you! To be discharged, the patient will need good follow-up from a primary care provider and/or specialist. Patients may also need to follow-up with consultants seen in the hospital, and you will help arrange this. Decide with your resident what medicines the patient will go home on. However, you are not allowed to do anything to the discharge document at all because physicians need to receive training to do so, and errors in the discharge document can result in adverse patient events. If a medical student creates or edits a discharge document, doing so is grounds for disciplinary action.

**Call Schedule**

The call schedules of the various services are constantly in flux, but you will be provided with accurate information at the start of your clerkship, and the clerkship directors are always available if you have questions. Generally speaking, you are expected to follow the schedule of your team, with the exception being that your resident and/or intern may stay overnight and you will not. Overnight call is no longer a required part of this rotation and you should NOT be staying overnight. Always look to the senior resident on your team for direction regarding when to show up and how late to stay.

If you are on a **sub-specialty service** (HUP: Solid Oncology, Cardiology, GI, or Heart Failure; PPMC: ICU; VA: ICU) your team will be on call every day or every other day, and your daily hours will generally be from 7am to 6pm, but you may stay later if you are admitting a patient. However, the latest you should be staying is 9:00 pm on any service, which is tolerated if it happens once during 2-week block, but if it happens more frequently, you should contact one of the clerkship directors so adjustments can be made. The decision to stay after 6 PM
should be based on the number of patients you currently have on your census and the number of new patients you have admitted during your rotation (i.e. if the admissions have been few and far between, you may want to take one while you have the opportunity even if it means staying a little later.

If you are on a general medicine service (PPMC ACE Unit and general services at the VA, PPMC, and PAH), your admissions will be on a 4-day cycle. Most admissions will be accepted on long-call days (day 1) when the team is in the hospital the longest. You can stay from 7 am to 9 pm, but you may be able to leave before 9 pm when you have admitted a patient or two and your work is done. Post-call days (day 2), you will leave by 3 pm (unless there is mandatory teaching such as didactics, simulation, or physical exam rounds). No patients will be admitted on this day. On short-call days (day 3), you will generally stay from 7 am to 6 pm, and the team accepts some patients in the morning on this day. On “good days” (day 4), no patients are admitted and the team can leave when work is complete.

If you are on the Martin service (general medicine service at HUP), your admissions will be distributed during days 1 through 4 of a 5-day call cycle. Since the call schedule is a little confusing, you will receive a thorough explanation of the schedule from either Dr. Bennett or Dr. Hamilton during orientation. Most admissions occur on day #1 (“medium” call day) where the team admits patients from 7 am to 7 pm. On days 2 and 3, you can pick up patients between 7 and 5 pm. On day 4, you can pick up 2 nightfloat patients. On day 5, you do not pick up patients. All times listed above are rough estimates. You will receive information about your days off during orientation. You can usually leave earlier if work is complete, just make sure to check in with your team before leaving. Because the schedule is confusing and there are multiple admission days, you are expected to carry anywhere from 2 – 4 patients at a time (depending on what time of the year you are rotating on the medicine service). You do not have to admit a patient each day, but you should pick up patients regularly during the week.

If you are on Cardiology at PPMC your admissions will be on a 3-day cycle. Most admissions will be accepted on long-call days (day 1). Post-call days (day 2), you will leave by 5 PM, or sometimes earlier. Patients can also be admitted on short-call days (day 3).

### What to Wear

On non-call days, women should wear pants/skirt, closed toe shoes, and a shirt/sweater. Men should wear a shirt and tie. It’s best to be on the conservative side, even if other team members aren’t. When you are on call, or if you are in the hospital on a weekend day, you can wear scrubs if your team wears scrubs. You should discuss whether or not you should wear scrubs before your first call/weekend day. You should wear your white coat and ID every day.
What to Put in Your White Coat

- Stethoscope
- Reflex Hammer
- Pen light
- More than one pen, because someone will steal yours and you have to be nice about that
- Pocket Medicine (very helpful for Medicine!)
- Some system of notes about your patients, either on the daily signout from EPIC/Carelign or your own notecard system
- SNACKS!

Grading/Assignments

The rotation is graded honors/high pass/pass/fail. The exam is a shelf. Your final grade will be a combination of your shelf score (25%), evaluations from all of your residents and attendings (60% total), completion of required videos (5%), the EKG quiz (5%), and 2 patient write-ups you will submit to a small group preceptor (5%). Your shelf exam grade is important (there is a minimum score of 74% required to obtain an Honors grade in this clerkship), but your evaluations are VERY important. If you do an outstanding job with your clinical responsibilities, and this is reflected in your evaluations, you will most likely do well in the course. You will also have a series of assignments over the course of the rotation, including two formal, typed patient write-ups as above. For an example of a formal medicine write-up done by an AOA student, see the Sample Patient Write-Ups section.

Tips for Studying for the Shelf

The biggest problem with the medicine shelf is finding time to study for it. Try to use your patients’ cases as learning examples for large blocks of information and use downtime in the hospital to study. Decide which resources you’re going to use to study (see later sections of this guide), and then make a planned reading schedule starting the first week—it is really hard to cover all the material if you don’t stick to a schedule. You will need to study on most of your days off, so make sure to leave some time on those days to do work. Especially if it’s your first shelf, do as many practice questions as possible, as half the battle is learning to do the questions. (More on this in the later section, but most folks find the USMLEWorld questions to be the most representative of the shelf.) Students that do well on the shelf exam have done a lot of questions to supplement their reading throughout the clerkship. Time is an issue during the exam, so practice doing the questions quickly and efficiently (you will want to do timed sets of questions to get yourself ready).

Tips for Succeeding

- Be enthusiastic and always helpful, and remember that your team will help you if you help them.
This is one of the more demanding clerkships, but hopefully you will find the opportunities for learning and patient interaction to be some of the more satisfying. It can be difficult to spend long hours in the hospital, but do your best to remain positive and be a team player throughout the clerkship. Often, your work ethic and team spirit are what stands out to the people grading you more than your clinical acumen or fund of knowledge.

Know your patients well. You will not know everything about their medical issues, but if you know the answers to questions such as where the patient lives, his/her family history, his/her baseline hemoglobin, etc., your team will know that you care and that you’re on top of your patients’ care.

For that matter, GET to know your patients well. You have more time than anyone else on the team, and your patients are stuck in the hospital and could really use some friendly med student attention. If you have a good relationship with your patients, you will enjoy the rotation more, and you will provide an important service to the team.

Topic presentations do not need to include PowerPoint. If you haven’t been asked to give a topic presentation by the end of your second week, mention it to your resident or attending to see if there is an appropriate time for you to talk to the team for 5-10 minutes. This provides a time for you to show off your knowledge.

Get frequent feedback on your performance from your residents and attendings.

Follow up on questions. If you are asked a question that you don’t know the answer to, admit that you don’t know it and be sure to read up on it for next time – some attendings will ask the same question the next day to see if you looked it up!

If there is another med student on your team, treat him or her as a colleague. This person’s smiling face will be very nice to see during attending rounds each day. We all like to think that we are simply outstanding on our own, but the truth is that an attending is much more likely to remember how great the “med students” on a rotation were than to recall that you knew an answer that your colleague didn’t. Making each other look good will definitely be good for both of you in the end!

Check your e-mail frequently, as room assignments or times for teaching sessions often change, and you want to make sure not to miss any of these.

Keep up with your patient logs and evaluation cards. Otherwise, you will be scrambling at the end and may get overwhelmed and/or look disorganized.

Smile, be nice to everyone (clerks, nurses, consulting teams, etc.), and have fun.

What Not to Do

Never act uninterested to attendings or residents.

Never keep information from your team that you plan to mention on rounds. You should always report first to your intern/JAR/SAR, and then to your attending. Outside of rounds, you will probably not interact with your attending much, but your resident will. Your resident needs to have access to all information so that patients are well cared for.
Never go behind your intern’s back to give a patient information, examine a patient, etc. Be a team player and check in with him or her first. If you feel that you need or want more autonomy, just ask for it.

Never, never, never give a presentation on another medical student’s topic/patient. Your team will notice, and they won’t like you if you do this. Along the same lines, don’t jump in and answer a question posed to someone else, even if you did just read about it and know the answer by heart.

Don’t disappear. It’s fine to sit and study in a quiet area if you have some free time, but make sure your team knows where you are and that your phone is on. Otherwise, you may miss out on patient care opportunities and you’ll look like you don’t care.

{ Family Medicine }

What students remembered...

“...When I had the chance to work with one of the best, most caring physicians that I encountered in medical school, following him from his solitary private practice to the hospital several times each day, where he cared for his patients’ both acute and chronic concerns and addressed their needs completely.”

“...When I got the chance to bring the son of my patient with dementia into the room, and ask him about how he was doing as a caregiver and what we could do for him. He told me no one had ever asked him that before.”

“...When one of my patients told me I was the first person he felt comfortable asking for help since he had started thinking about hurting himself.”

Rotation Structure

During your month of family medicine, you will be at a site with anywhere from 0-4 other medical students. Although some of the physicians with whom you work will have an inpatient service, you will be working mainly in the outpatient setting. You will be seeing patients presenting for routine check-ups and screening, well-child visits, ob/gyn concerns, chronic disease visits, sick visits, injuries, psychiatric concerns, and everything else you can think of. Depending on your site, you may have formal teaching sessions each day or on specific days during the week.

Responsibilities

• **Seeing Patients**: In the beginning of your rotation, you may shadow a resident or an attending; however, at most sites you will quickly start to see patients on your own. You
will be given their chief complaint and should focus your history on this complaint; however, remember that family medicine is all about preventive care, and so you should not forget the rest of your history either and should do a pertinent physical exam. The exception to this is an “acute” clinic that some practices have. In these cases, your resident or attending may not want to hear an entire presentation.

- **Presenting:** After you see your patient, you will be expected to present him or her to your attending, resident, or both. This type of presentation is different from those on inpatient medicine in that it is done immediately after you see the patient. You are thus not expected to know every answer about the patient’s needs or to have expertise on their complaints. You should try to get comfortable presenting, know everything you can about your patient (especially the interim history – what has happened since the last time the patient saw the PCP), and try to find time before presenting to organize your thoughts regarding possible interventions (though sometimes you will have only a minute or two, if that). Keep it brief and focused, and use the opportunity to practice presenting without detailed notes or planning.
  
  - NOTE: It can, at first, be overwhelming to have to do a full presentation with little preparation. Do your best, and don’t forget the principles that hold for all good presentations: be as focused as possible during the HPI, present the exam fluidly, and try to put your money down during the plan. Even if the visit is just a checkup and the patient has no acute complaints, your plan can be along the lines of “continue all current medications, counseled on pertinent issues, refer for colonoscopy screening, and follow up again in 3-6 months”, etc. This is better than, “everything is fine, no active issues.”

- **Charting:** Depending on your site, you may or may not be allowed to write in the patient’s chart. You should ask about this on your first day. If you are told not to, you may want to take notes on an extra sheet while you interview the patient so that you can refer to these when you present.

**Schedule**

On your first day, you should ask what time to report in the morning. You will usually be done seeing your patients between 4 and 6 pm, and you will have no on-call or weekend responsibilities. You will have required didactics on campus every Friday (usually all day), and you will lose points if you miss any, except in the case of extenuating circumstances.

**What to Wear**

Women should wear pants/skirt and a nice shirt or sweater with closed toe shoes. Men should wear a shirt and tie. As usual, be conservative; bring the white coat on the first day and ask your supervising attending about whether to wear it.
What to Put in Your White Coat

- Stethoscope
- Pocket Medicine
- More than one pen
- Pen light
- Reflex hammer
- Pregnancy wheel (if your site sees OB patients)
- Optional: tongue depressors, sterile gauze, sterile gloves, cotton swabs, band-aids, stickers for kids.
- Clerkship forms like feedback cards, oasis log, etc.

Grading

The breakdown of grading is as follows: 55% of the grade is from the site evaluations, 20% from the exam, and 10% from the OSCE (Objective Structured Clinical Exam, a hands-on exam using standardized patients that will include both internal medicine and family medicine cases), 10% from the SOAP note assignment, and 5% attendance and participation in didactics. (NB: The OSCE is a pass/fail exam; however, PSOM does calculate a numeric grade for each of the 4 cases that you’ll see, and the family medicine clerkship uses the average of the numeric grades from the 2 Family Medicine cases to give a percentage grade for this 10%. The exam that you will take at the end of the block is not a shelf exam, but is a multiple choice exam which comes from the online cases that you are expected to work through during the clerkship. Most successful students take their time going through the online MedU cases, including reading them thoroughly and taking notes from the questions and PDFs that summarize the case. These are your best source of information from which to study. Be advised – do not blow off this shelf! It tends to be a detailed-oriented exam and should be taken seriously. There is also a standardized patient portion of the exam where you will demonstrate a joint exam (usually the shoulder exam). You are advised to study for the exam—don’t make the assumption that preparing for the medicine shelf will prepare you for the family medicine exam (people have failed this way in the past). If you have family medicine before you have pediatrics or Ob/Gyn, make sure to review these MedU cases in depth for the exam.

Tips for Succeeding

- Be enthusiastic and friendly. As is true in every rotation, these qualities are invaluable.
- Remember that you are working in a very busy office and that the faculty has invited you to learn there. On occasion, things may need to move quickly and you may not be given the opportunity to see your patient on your own or to give a full presentation. Just go with it and shadow your attending if necessary.
- Be courteous and respectful to EVERYONE in the office.
• If you are working with different preceptors, take a minute or two prior to the start of the clinic to ask their preferences about the following: amount of time spent in the room with the patient, whether or not to write a complete note, and whether the preceptor wants you to find them to present to them after you’ve seen the patient or if you should wait until they come get you.

• Feedback will come in many different forms on this rotation: a preceptor telling you what she agrees and disagrees with after you present, a preceptor doing a physical exam and pointing to the location where she hears crackles on the lung exam so you can place your stethoscope there to listen, or a preceptor guiding your hand during a procedure.

• If the schedule is backed up, offer to help room patients, assist patients in getting labs done, or help with other “patient flow” issues to keep things moving.

• If you have a smartphone/iPad, put a couple of valuable programs on it before you start: Epocrates, ePSS (super helpful for preventive medicine and screening schedules), an antibiotic guide of some kind, and a guide to pediatric vaccination schedules. If you don’t have one (or don’t like using it), keep a medication guide and a pediatric vaccination schedule in your pocket. Being able to look things up quickly will make you a superstar.

• That said, if you use your phone or iPad to look something up in front of your preceptor and/or patient, make sure you explain this so that it doesn’t looking like you’re just checking out.

• Don’t forget to take advantage of the extra time to study for the medicine shelf, but at the same time, don’t neglect studying for the family medicine shelf. It is essential that you study during family med no matter when in the sequence you have it; you will not get this time back when you are on inpatient medicine.

**Things Not to Do**

• As usual: never backstab anyone, never act bored, never make jokes or act disrespectfully about a patient.

• Never ask to leave before you and/or your attending have seen every patient on the schedule. If you have a valid reason to leave early, just mention it early in the day or week – for the most part, attendings are very understanding.

• Don’t be late for office hours. If you are at a distant site and get caught up in traffic they will understand once, but be sure to leave plenty of time to get to your site.
Testing whether laughter *is* the best medicine
**Pediatrics/Obstetrics and Gynecology**

The 12-week block is divided equally between Ob/Gyn and Peds. Each individual discipline will have its own teaching curriculum with didactic sessions and problem-based learning.

**{ Pediatrics }**

What students remembered...

“...When each and every chubby 4-month-old baby smiled and giggled at me because they were just-that-happy-to-enjoy-all-the-everyday-life-moments (also just known as normal, happy baby syndrome.)”

“...When I realized that the mother of a very sick baby, who would certainly have severe physical and cognitive deficits, was essentially living the effective death of the child she had imagined she would have. It was an overwhelming sense of being called to do everything I could do to help her, the mother, emotionally and spiritually.”

“...When I comforted the worried mother of a child with a severe congenital malformation. I found out later that the mother was a famous musician, but in the hospital, she was like every mother of a sick child.”

“...When I had the opportunity to spend 3 hours with a family while we talked through treatment for Kawasaki’s disease. The family was angry and apprehensive about the medication but because I was the medical student, I had the time to sit with them and explain the medications.”

“...CHOCOLATE MILK. There are many moving moments in pediatrics. But there is also a lot of free chocolate milk and peanut butter crackers.”

“...When I got to examine/play with adorable infants at their well-child visits.”

“...When my patient got diagnosed with a very rare (but thankfully treatable) disease, and I had the time to sit down and walk the family through what it meant after the busy specialists left. I was able to break it down for them, walk them through the scans, and make this big scary thing seem a little more manageable.”
Introduction

Pediatrics is a 6-week course in which you will learn diagnosis and treatment of common childhood diseases. You will spend 3 weeks on one of the inpatient general pediatrics services at CHOP and 3 weeks in an outpatient pediatrics practice. This is a fun, though busy, rotation that most people enjoy, even if they are not planning a career in pediatrics.

Outpatient

On your 3 weeks of outpatient, you’ll be in clinic Monday – Thursday (Fridays are for didactics at CHOP). Your experience will vary depending on your site. At most practices you will have the opportunity to see both routine check-ups and sick visits, and you usually see 2-5 patients per half day. You will perform histories and physical exams and present your assessment and plan to the attending physician. You may be expected to write progress notes for each visit, depending on the site. You will also likely have the opportunity to assist with immunizations, hearing screens, visual testing, and other routine health checks. Some students may have the opportunity to spend a week in the Well Baby Nursery (depending on site). A key to being successful is being friendly to everyone in the practice, including the receptionists, clerks, and nurses. Beginning in January 2018, students will primarily be sent to CHOP primary care sites as well as one private practice in Philadelphia. Make sure to try to incorporate yourself into the team. Your day to day responsibilities during this part of the rotation are similar to those for Family Medicine, so take a look at the “Responsibilities” section for Family Med.

Inpatient

The Team

You will be a member of one of the general floor services. Each service may cover a range of general pediatrics and subspecialty patients. The current floors for the clerkship students are: BLUE team (general pediatrics/complex care BLUE on 5 East), RED team (general pediatrics/hematology on 5West A, 8 South (general pediatrics/pulmonary), 9 South (general pediatrics/neurology), 4 West CSH (adolescent), and 7 West MHT (general pediatrics on a hospitalist only service). Usually, you will have two different attendings who will round separately in the morning. The team includes:

- 1-2 medical students.
- 0-1 externs (third- or fourth-year med students doing an advanced rotation).
- 3-4 interns (first-year residents): these will be the people you work most closely with. You will share patients with the interns. They are usually really tired so they definitely appreciate your help in any way (tracking down lab values, calling primary care docs, etc.). **Unlike other rotations, interns on Pediatrics will also have a role in your evaluation.**
- 2 senior residents (second- or third-year residents): the senior residents have a supervisory role on the team. They will often do a lot of teaching for the med students.
• Fellow for the subspecialty services.
• Attendings: one general pediatrics + one specialist.

The only exception to the above description of the team is the MHT/7W team. This is the Medical Hospitalist Team, an attending only service that covers General Pediatrics Patients. It tends to be busy and has high turnover, so there are lots of opportunities to see new admissions. As there are no residents, the attendings do a lot of teaching for the medical students.

Other people you may see:
• Teaching senior: a third-year resident whose entire role is to teach the med students on the rotation. He/she will lead special weekly didactic sessions during the inpatient rotation and grade your write-ups.

Chain of command

Depending on the time of year you will be rotating in Pediatrics, it will be important to come up with your own assessment and plan before seeking guidance from your interns and residents. That said, if any issues arise with your patients, go to your intern first. If you find out something new about your patient, make sure to share it with the intern. Even though it is “your patient”, the intern is ultimately responsible, so never do anything behind his/her back. If the intern deems it necessary, he/she will go to the resident or attending to ask for help. As a 200 student, you will rarely call the attending directly with patient issues, but during rounds you should feel free to discuss your ideas with the attending. As most pediatrics floors include both a general pediatrics service and a specialty service, you will likely have a different attending for each service at one time. These attendings will change every 1-2 weeks.

Schedule

• 6:30: Interns get sign-out from the on-call intern at 6:30 am. You should be there so you know what happened with your patients overnight.

• 6:30-7:30: Pre-round on all of your patients (including patients you admitted the night before if you were on call). Usually, this means looking on EPIC (the electronic medical record) to check each patient’s vital signs from overnight. This also means talking with the nurses and the on-call resident about any overnight events. Then, see all of your patients and perform a focused physical exam. Returning to the electronic medical record, continue to look up any new lab results and radiology studies. Check for notes from any consultations you may have called. Then, write your SOAP notes for each of your patients in the EPIC system. Some teams prefer that you print out your SOAP notes to present before rounds begin. Some will allow you to use the computer to present on rounds.
• **7:30-8:00:** Go to morning report (optional). Morning report is primarily geared towards senior residents, but you are invited to attend if you wish and have completed all your patient-related tasks.

• **8:00-11:00:** Round with the team. You will present updates on all of your patients. If you admitted a new patient the day/night before, you will give a detailed presentation including HPI, PMH, birth history, developmental history, pertinent ROS, physical exam, and diagnostic studies. The most important part of your presentation is the assessment and plan where you will summarize the patient and give your differential diagnosis and plan for further management (you will get much better at this as the year progresses, but make sure that you double check the A/P with your intern or resident before attending rounds). When time allows, your attending or resident will often give a lecture on a pertinent topic or bring in articles for review.

• **11-12:** Use this time to call any consults (check with your intern before calling consults), order tests, and follow up on anything you discussed during rounds.

• **12-1:** Noon conference with all of the interns and med students.

• **1-4:** Work on the floor or didactic sessions.

• **4-5:** Interns sign out to intern on call. You should be present if possible, although if the day is slow, often interns and residents will send you home early. Make sure to check in with the senior resident before you leave for the day, even if the intern dismisses you home.

**What to wear**

Women: Nice pants and a top/sweater or a knee-length dress, closed toed shoes. No short skirts or bare midriffs.

Men: Nice pants and dress shirt. Many male residents/attendings at CHOP do not wear ties. We suggest wearing a tie the first day and then assessing the situation on your service.

**White coats are not generally worn in CHOP** (but you may wear a white coat if you prefer anywhere except the well baby nursery). You may be able to wear scrubs on your weekend call, but check with your intern first!

**What to put in your white coat (or carry with you)**

- Stethoscope
- Pocket pharmacopeia/Epocrates (can also use your iPhone or iPad application)
- Pocket antibiotic guide (can also use your iPhone or iPad application)
- Pocket Medicine (less applicable to Peds than Medicine, but you may still use it)
• Otoscope and tips (Otoscopes are often hard to come by on the floor, so if you have one, make sure to bring it. If you don’t have one, don’t worry about buying one. Most people don’t have one.)
• Pens (always have an extra on hand!)
• Notecards/paper (you should keep all of your patients’ lab values close at hand)
• Penlight
• Optional: Gauze, tongue depressors, bandaids, stickers (a huge hit!)
  • A table listing normal vitals for each age group—it can be hard to keep track of what’s normal for kids! These are provided for you in orientation or can be found in Harriet Lane.

Call
You will take call 4-5 times over the course of your rotation with two calls being on Saturday and Sunday. During weekday call, you will pick up a new admission or two and leave the hospital by 10 PM. You can leave by 3 PM on Saturday or Sunday after an admission. However, if you are there on a slow night, your resident may send you home early, and you can instead pick up a new patient on a non-call day during the day. Note: do not ask to leave if it’s a slow night; wait for the senior resident to send you home.

How to “Pick Up” Patients
On pediatrics, all interns admit new patients on all days (on other rotations, like medicine, interns only admit when they are on call). So it is possible that you could “pick up” a new patient any day. However, usually you will pick up new patients when you take call. Generally you will carry around 2 patients on pediatrics (and you may start with 1 for the first few days if you take pediatrics early in the year). That way you can have an in-depth knowledge of all of your patients. Your residents will usually make sure you have enough patients to follow. However, if you don’t feel like you have enough patients, ask the senior residents if there are other interesting patients you can follow—residents like students who take initiative and don’t wait for work to be given to them. Whenever possible, it’s a good idea to make sure to pick up a mix of general pediatrics and specialty patients, with an emphasis on the general pediatrics patients. This way, you will get exposure to more of the “bread-and-butter” pediatrics cases. It is ok to pick up patients that are admitted overnight (many of the admissions occur then).

Assignments
You will have to write 1 detailed history and physical write-up during your inpatient rotation, which is 5% of your grade. There is an option to complete a second write-up to improve your grade. See the “Sample Patient Write-Ups” at the end of this book for an example. Students also have to give case presentations to their classmates (5%), and complete a patient safety assignment (5%). Students will also participate in simulation sessions focusing on pediatric emergencies.
Didactics

You will have Friday didactic sessions on both inpatient and outpatient peds that start around 10:30. Inpatient students are expected to attend rounds first. On inpatient, you will also have didactic sessions during the week.

Books

See the book guide at the back for detailed recommendations. Also try to stay up to date on the *New York Times* young adult best-seller list.

Grading

The rotation is graded honors/high pass/pass/fail. The exam is a shelf. Your final grade will be a combination of your shelf score (20%), evaluations from your inpatient (35%) and outpatient (30%) rotations, your write-ups (5%), a case conference presentation (5%), patient safety assignment (5%) and professionalism/participation. You must earn a high pass on the shelf exam in order to earn honors overall.

Tips for the Pediatric Presentation

- Don’t forget about birth history and developmental history (especially for younger children).
- Don’t forget about feeding and voiding (pediatricians are more interested in diet and stooling than the average physician).
- Know your patient’s weight—everything is weight-based in peds.
- Make sure to keep a vaccine schedule handy so that you know what vaccines your patient should have had, particularly in the outpatient setting.
- Input/Output—you usually describe a child’s I’s and O’s based on their weight (mL/kg/day IN and mL/kg/hour OUT).
- Don’t leave out the SHADSSS/HEADSS assessment for adolescents.

Tips for Studying for the Shelf

The peds shelf is one of the most challenging shelf exams as the rotation is only 6 weeks, so you are required to learn an extraordinary amount of information in a very short period of time. It is imperative to begin studying for this shelf early (especially if this is your first shelf) and to do a lot of practice questions. Like other standardized tests you’ve taken (like the MCAT), half the battle is just learning how to answer the questions. There are a lot of tricks to answering the questions that you will see repeated on every shelf. The shelf exams usually test detailed knowledge, especially in peds, so it is usually not enough to only know general principles or basics. The majority of your energy should be focused on the rotation itself as your course evaluations from both inpatient and outpatient make up a substantial portion of your peds
grade. However, do not neglect shelf studying, especially on outpatient peds when you will have slightly more spare time. This is not an easy exam.

**Tips for Succeeding**

- **ENThusiasm and FRIENDliness** are key!
- Know what is going on with all of your patients at all times.
- Be prepared for rounds. It is the one time in the day when the attending will be paying attention solely to you. Prepare your assessments and plans before you get there. Feel free to consult your intern before rounds and ask for suggestions after you’ve come up with your own backbone for an assessment and plan.
- When presenting your patients on rounds, stick to the pertinent information. You don’t need to give a detailed neurologic exam every day you present a patient who is admitted for asthma.
- On peds more than other rotations, attendings appreciate it when students memorize parts of the presentation. This may be challenging if it is an early rotation, but start by memorizing the one-liner, then work your way up to the whole HPI and the assessment statement.
- Make sure to talk with parents as well as the children.
- **Once or Twice** during the rotation, bring in an article or prepare a brief presentation on a pertinent topic. Always inform your fellow students the day before about what you will be talking about so they can read up on the subject. An attending (or sometimes a resident) may assign or suggest topics and/or days for you to present, but sometimes you can pick your own topics/days. Ask a resident if you’re not sure what to do about the presentation by the middle of the rotation.
- Help out your interns in any way you can. Always ask if there is anything else you can do before you leave for the day. As always, it’s better to be specific and say, “I can do X job” rather than asking, “is there anything else I can do?”
- Read about your patients’ issues. Good resources are UpToDate and Dynamed, as well as your pediatrics books.
- Ask for feedback halfway through the rotation. It is often intimidating to approach your residents and attendings to get constructive criticism, but it is an important part of being a successful student. Most pediatricians are really nice, so it makes them easier to approach. However, they may shy away from giving criticism to your face. To avoid this, asking specific questions are key! Some examples: Was my assessment accurate, how could I make the presentation more focused, was there unnecessary information that I included, etc. Some people think they have done a great job and then are surprised when they read their evaluations.
- Remember that you are a student, and that you are there to learn. You are not expected to know the answer to every question, so it is ok to say “I don’t know” if you really have no idea. But you should go home that night and learn about the issue so if you are ever asked again, you will know the answer.
• CHOP is one of the premiere children’s hospitals in the world. You will see things on the ward that only 10 or so people have ever been diagnosed with. DON’T get bogged down with these details or making the diagnosis – focusing on ‘bread and butter’ peds will serve you better for the shelf.

What Not to Do

• Back stab your fellow students

{ Obstetrics & Gynecology }

What students remembered...

“Each time I saw the look on the face of a new mom when she heard her baby’s heart beat for the first time.”

“…When I had the privilege and pain of comforting my patient as she was diagnosed with uterine cancer.

“…When a beautiful family told me they will remember me always after I delivered their gorgeous baby boy and gave me a vote in choosing his name!”

“…When I watched a woman struggle through hours of labor to deliver her first child, with nothing but pure determination on her face. And then I watched all that stoicism melt away when the baby boy was suddenly placed on her chest. She let out a surprised “oh!” and started crying some very happy tears.”

“…When I saw the look on an 18-year-old’s face in recovery after we removed a 50 cm ovarian cyst.”

Introduction

OB/Gyn is a 6-week rotation where you will have experiences in delivering babies, working in obstetric and gynecology clinics, and assisting in gynecologic surgeries.

The Team

• Interns: first-year residents who are responsible for the majority of the daily work on all of the inpatients.
• Residents: generally have a more supervisory role and spend more time in the operating room and on advanced rotations. Third years and chiefs (fourth-year
Residents) generally take the most active teaching roles. Do not expect second years to teach as much—they are the busiest of all.

- **Fellows**: Depending on your site, you may have fellows in Gyn Oncology, Reproductive Endocrine and Infertility, Family Planning, Urogyn, and Maternal-Fetal Medicine (high risk OB).
- **Attendings**: At some locations you will work with private attendings, who are doctors in the community who admit patients at that hospital.

**Sites**

For this rotation, students will be placed at HUP or Pennsylvania Hospital.

**Schedule**

The schedule varies greatly depending on your site and your rotation. In general, you will spend two weeks on labor and delivery (one week of days and one week of nights), two weeks on a surgical service, one week with a subspecialty of your choice, and one week in an outpatient clinic.

Didactics for this rotation are held Friday afternoons weeks 2 through 5 from 1:00 to 5:00. If you are at Pennsylvania Hospital, you will also have Wednesday morning didactic sessions with the site director, Dr. Pamela Levin (“Lattes with Levin”). If you’re at HUP, you’ll meet Thursday mornings with clerkship directors Dr. Holly Cummings and Dr. DaCarla Albright. Most sites also have daily or weekly conferences (Grand Rounds, resident didactics/conference, etc.) that you will attend.

**Breakdown of the rotation**

At most sites, you will spend approximately 2 weeks on each on the following rotations:

- **Labor and Delivery**: This is the fun and exciting part of OB for most students. During this rotation you will be expected to assist in vaginal deliveries as well as C-sections. You will follow the progress of laboring patients by doing frequent cervical checks (or, more likely, accompanying a resident who will do the checks), reviewing maternal vital signs and fetal heart tracings, and writing progress notes. You will assist the attending and/or resident in the actual delivery (you will often be in charge of delivering the placenta, but will hopefully get to deliver some babies as well) and then might write the delivery note. Maxwell’s has a good outline of a delivery note. To prepare for your first day, read about normal labor—know the stages, how long is normal for each stage, etc. Some other high yield topics: pre-term labor, preeclampsia/HELLP syndrome, placental abnormalities (abruption, previa, etc.), signs of placental separation, post-partum hemorrhage, grading of vaginal/perineal tears.
• **Clinic/Subspecialty:** You will see pregnant patients who are coming in for routine checks as well as gynecology patients who are coming in for yearly pelvic exams or acute visits. Generally you will see the patient first, perform a history and general physical exam, and then present your assessment and plan to the resident or attending. You should not do the pelvic exam without supervision by a resident, nurse, or attending. In some clinics, you may spend more time shadowing attendings or residents. **High yield topics:** size of uterus at various gestational ages, grading of gestational diabetes, mammogram guidelines, Pap smear guidelines/pathology grading, diagnosis of PID, diagnosis of preeclampsia, amenorrhea, etc.

• **Gyn Surgery:** This rotation is similar to your surgery rotation. You will assist in surgeries like hysterectomies and tubal ligations, as well as oncology cases (at some sites, there is the possibility of being assigned to the Gyn Onc service, in which case you will only see oncology cases). Your chief resident will tell you which cases you should “scrub in” on. Like on general surgery, you will be an extra pair of hands in the OR. You may be asked to prep the patient or assist the attending and resident in any way they need. If this is your first rotation and you have not done surgery yet, be sure to let your resident know. He/she will teach you how to scrub in, prep the patient, staple, and tie sutures. Sterile technique and scrubbing will also be reviewed during orientation on the first day of the course, and you will have a chance to participate in simulation sessions for Foley insertion and suturing during the first week of the rotation. Try to read about each patient’s problems and planned surgery prior to going to the OR. At some sites, you may also pre-round on pre-op or post-op patients and participate in rounds. **High yield topics:** pelvic anatomy (make sure you know the vessels and the ligaments they run in), complications of various surgeries, cancer staging/treatments/etc.

**What to Wear**

Scrub on L+D and surgery. For clinic, standard business casual with closed toed shoes is appropriate.

**Books**

See book guide at the back for detailed book information. Unlike in Pediatrics, reading through the *New York Times* young adult bestseller list is not recommended.

**Additional Assignments**

Each student will present on a relevant or interesting topic of his/her choice at one of the weekly clerkship meetings. You will also be asked to submit an H&P and Evidence Based Medicine (EBM) report online. In addition, you will be asked to comment on 2 other students’
H&Ps as well as 2 other students’ EBM exercises. These assignments are due the third week (H&P) and fifth week (EBM) of the rotation, respectively.

Grading

The rotation is graded honors/high pass/pass/fail. The exam is a shelf exam on which you must score at least 65% to pass. Your final grade will be a combination of your shelf score (20%), evaluations of your clinical performance (60%), assignments (10%), and citizenship (10%). There is currently no minimum shelf score required to receive honors.

Tips for Studying for the Shelf

General tips for success on the shelf are to start reading early in the rotation and do a lot of practice questions. You will have access to an online tool called UWISE, which is a bank of practice questions with immediate feedback about correct answers as well as practice tests. You should try to answer as many of these UWISE questions as you can.

What to put in your white coat

- Stethoscope
- Penlight
- Reflex hammer (the neurological exam is important in pregnant and/or laboring patients)
- Pens
- Notecards/paper
- Optional: Maxwell’s cards (have a great outline of a postpartum note, etc.), tape measure to measure size of gravid uterus during prenatal visits, “Obstetrics, Gynecology, and Infertility” (a red pocket book—definitely not necessary, but a great quick reference for most everything you’ll see).

Tips for Succeeding

- Like all rotations, enthusiasm, teamwork, and initiative go very far. The residents are very busy and may not go out of their way to include you, so try to anticipate how you can be helpful ahead of time. Try to offer to do specific things (like “I’ll check her labs and write them in the chart” or “I can prep the patient if it would be helpful” or “Can I grab gloves for you?”).
- Be respectful of your patients. Before you jump in on a delivery, you should get to know the patient by going in throughout her labor and talking to her and her family. It’s not fair to only do the delivery without putting in the time first. How would you feel if you had been laboring for 10 hours and then just as you’re about to deliver, some med student who hasn’t even introduced her/himself jumps in and pulls out your baby???
- Don’t be nervous about doing a pelvic exam—you will have another standardized patient experience on the first day of the rotation to refresh your skills. And don’t turn
down a chance to do a speculum exam or cervical check—even if you don’t feel totally comfortable, the only way you will get better is by practicing. You will have to do pelvic exams outside of this rotation (in EM, family medicine, peds if you have adolescents, etc.), so it’s important to get the practice when you have the chance!

- Be on time and keep your presentations succinct.
- Have fun! Delivering babies is a truly wonderful experience that, unless you go into OB, you will likely never have after this rotation!
- Remember that you are a student, and that you are there to learn. You are not expected to know the answer to every question, but you should always look up the answer to things you don’t know in case the same issue comes up again.

**What Not to Do**

- Act uninterested or insulting to residents and attendings.
- Perform a pelvic exam on your own—the rules will vary depending on the site, but at most places you will need to be accompanied by a nurse or a resident (or at least a medical assistant).
- Sit around reading on a busy floor—if the residents are busy, you should try to be busy too. This can be really difficult, particularly on L&D, but if there’s nothing happening on the floor, check out the PETU/PEEC.
- Swoop in and take a delivery of a patient that another student has been following.
- Have multiple unapproved absences. Always contact the course coordinator if you will need to miss time for any reason.

**Common OB/GYN Abbreviations**

<table>
<thead>
<tr>
<th><strong>AC</strong></th>
<th>Abdominal circumference</th>
<th><strong>LNMP</strong></th>
<th>Last normal menstrual period</th>
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</thead>
<tbody>
<tr>
<td><strong>AFI</strong></td>
<td>Amniotic fluid index</td>
<td><strong>LOA</strong></td>
<td>Left occiput anterior</td>
</tr>
<tr>
<td><strong>AFP</strong></td>
<td>Alfa fetoprotein</td>
<td><strong>LOF</strong></td>
<td>Leakage/loss of fluid</td>
</tr>
<tr>
<td><strong>AMA</strong></td>
<td>Advanced maternal age</td>
<td><strong>LOP</strong></td>
<td>Left occiput posterior</td>
</tr>
<tr>
<td><strong>AROM</strong></td>
<td>Artificial rupture of membranes</td>
<td><strong>L/S</strong></td>
<td>Lecithin / sphingomyelin ratio</td>
</tr>
<tr>
<td><strong>BBOW</strong></td>
<td>Bulging bag of water</td>
<td><strong>LT C/S</strong></td>
<td>Low transverse C section</td>
</tr>
<tr>
<td><strong>BCP</strong></td>
<td>Birth control pills</td>
<td><strong>OCP</strong></td>
<td>Oral contraceptive pill</td>
</tr>
<tr>
<td><strong>BOWI</strong></td>
<td>Bag of water intact</td>
<td><strong>PID</strong></td>
<td>Pelvic inflammatory disease</td>
</tr>
<tr>
<td><strong>BPD</strong></td>
<td>Biparietal diameter</td>
<td><strong>PIH</strong></td>
<td>Pregnancy induced hypertension</td>
</tr>
<tr>
<td><strong>BSO</strong></td>
<td>Bilateral salpingoophorectomy</td>
<td><strong>PMDD</strong></td>
<td>Premenstrual dysphoric disorder</td>
</tr>
<tr>
<td><strong>BTL</strong></td>
<td>Bilateral tubal ligation</td>
<td><strong>PMS</strong></td>
<td>Premenstrual syndrome</td>
</tr>
<tr>
<td><strong>CD</strong></td>
<td>Caesarian delivery</td>
<td><strong>POC</strong></td>
<td>Products of conception</td>
</tr>
<tr>
<td><strong>C/S</strong></td>
<td>Caesarian section</td>
<td><strong>PPROM</strong></td>
<td>Preterm premature rupture of membranes</td>
</tr>
<tr>
<td><strong>CST</strong></td>
<td>Contraction stress test</td>
<td><strong>PROM</strong></td>
<td>Premature rupture of membranes</td>
</tr>
<tr>
<td><strong>Cx</strong></td>
<td>Cervix</td>
<td><strong>PTL</strong></td>
<td>Preterm labor</td>
</tr>
<tr>
<td><strong>D&amp;C</strong></td>
<td>Dilation and curettage</td>
<td><strong>RDS</strong></td>
<td>Respiratory distress syndrome</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
<td>Abbreviation</td>
<td>Description</td>
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</tr>
<tr>
<td>D&amp;E</td>
<td>Dilation and evacuation</td>
<td>ROA</td>
<td>Right occiput anterior</td>
</tr>
<tr>
<td>DUB</td>
<td>Dysfunctional uterine bleeding</td>
<td>ROP</td>
<td>Right occiput posterior</td>
</tr>
<tr>
<td>ECC</td>
<td>Endocervical curettage</td>
<td>SAB</td>
<td>Spontaneous abortion</td>
</tr>
<tr>
<td>EDC</td>
<td>Estimated date of confinement</td>
<td>SROM</td>
<td>Spontaneous rupture of membrane</td>
</tr>
<tr>
<td>EGA</td>
<td>Estimated gestational age</td>
<td>STD</td>
<td>Sexually transmitted disease</td>
</tr>
<tr>
<td>EMB</td>
<td>Endometrial biopsy</td>
<td>SUI</td>
<td>Stress urinary incontinence</td>
</tr>
<tr>
<td>EP</td>
<td>Ectopic pregnancy</td>
<td>SVD</td>
<td>Spontaneous vaginal delivery</td>
</tr>
<tr>
<td>FH</td>
<td>Fundal height</td>
<td>TAH</td>
<td>Total abdominal hysterectomy</td>
</tr>
<tr>
<td>FHR</td>
<td>Fetal heart rate</td>
<td>TOA</td>
<td>Tubal ovarian abscess</td>
</tr>
<tr>
<td>FHT</td>
<td>Fetal heart tones</td>
<td>TOL</td>
<td>Trial of labor</td>
</tr>
<tr>
<td>FM</td>
<td>Fetal movements</td>
<td>TVH</td>
<td>Total vaginal hysterectomy</td>
</tr>
<tr>
<td>FOB</td>
<td>Father of the baby</td>
<td>UC</td>
<td>Uterine contraction</td>
</tr>
<tr>
<td>FSH</td>
<td>Follicle stimulating hormone</td>
<td>US</td>
<td>Ultrasound</td>
</tr>
<tr>
<td>FTP</td>
<td>Failure to progress</td>
<td>VB</td>
<td>Vaginal bleeding</td>
</tr>
<tr>
<td>GC</td>
<td>Gonococcus</td>
<td>VBAC</td>
<td>Vaginal birth after C-section</td>
</tr>
<tr>
<td>H/C</td>
<td>Head circumference</td>
<td>VTX</td>
<td>Vertex</td>
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<tr>
<td>HCG</td>
<td>Human chorionic gonadotropin</td>
<td>HPL</td>
<td>Human placental lactogen</td>
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<tr>
<td>HPV</td>
<td>Human papilloma virus</td>
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<tr>
<td>HSV</td>
<td>Herpes simplex virus</td>
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<tr>
<td>IUD</td>
<td>Intrauterine device</td>
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<tr>
<td>IUGR</td>
<td>Intrauterine growth retardation</td>
<td></td>
<td></td>
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<tr>
<td>IUP</td>
<td>Intrauterine pregnancy</td>
<td></td>
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<tr>
<td>LAVH</td>
<td>Laproscopic assisted vaginal hysterectomy</td>
<td></td>
<td></td>
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<tr>
<td>LH</td>
<td>Leutenizing hormone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMP</td>
<td>Last menstrual period</td>
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54
•♦ Neuro/Psych/Emergency Medicine ♦•

This clinical block consists of 4 weeks of psychiatry, 4 weeks of neurology, and 4 weeks of EM. Both psychiatry and neurology end with an official shelf exam, and these rotations will be fast-paced with only a short time to learn a lot of material. EM is demanding as well, and is a great opportunity to learn how to determine the acuity of a patient’s presentation and how to present and act quickly.

{ Neuro }

What students remembered...

“...When a chronic neuropathic pain patient was so touched by the fact that I held her hand during a procedure that she asked the nurse to tell my resident to call me after I had left the rotation just to thank me.”

“...When an older woman came in with her husband and they bragged to me about all the fun things they were able to do now that her Parkinsons was under better control.”

“...When I could help an older gentleman come up with smoking cessation strategies after he suffered a minor stroke.”

The neurology block is a great opportunity to learn about the various major diseases involving the central and peripheral nervous system.

Sites

On the first day of the rotation, you will meet as a group with Dr. Pruitt and discuss which type of clinical experience you would like to have. Based on your interests, she will assign you to an inpatient site. In previous years, sites have included HUP consults, HUP Stroke, HUP Ward, Pennsy, Presby, and CHOP. This year you will also be able to do half the rotation at one site and half at another. In addition to your time on the inpatient service, you will be assigned an outpatient clinic to attend once a week.

Day to Day

Didactics are held weekly on Thursday afternoons and cover much of the material you need for the shelf.

The inpatient experiences will be similar to your medicine rotation in that you will help admit, work up, manage, and follow specific patients throughout the course of their admission. On a consult service, you will see how neurologic issues affect patients on other specialty services.
Presentations and notes should follow the standard format, with the addition of a directed neurologic history, comprehensive neurologic exam, and underlying appreciation for relevant neuroanatomy.

The most important aspect of this course is to get comfortable performing a neurologic exam!

Note for future pediatricians: If you choose to do your rotation at CHOP, you may need to spend a little extra time mastering some of the adult neurological issues for the exam. With pediatric patients, keep in mind that at different ages some aspects of the neuro exam are not applicable or need to be approached in a different manner. You may want to get a copy of the Denver developmental milestones sheet to get an idea of what is appropriate behavior given a child’s age. A small finger puppet may be helpful when trying to assess a child’s extraocular eye movements.

Books/Supplies

Dr. Pruitt, the course director, will provide self-study materials that include the “Yellow Pages” (a packet of practice questions) and “Nanatomy” (a small book with core neuroanatomy review that is sufficient for the shelf). Pay attention to the “yellow pages” questions and know these concepts for the exam. Remember to carry the extra tools you need for the neuro exam in your white coat: penlight, toothpicks or wooden cotton swabs, reflex hammer, and tuning fork.

Assignments

Near the end of the rotation you will be asked to give a 5-7 minute presentation on a topic of interest encountered during the rotation. If you need help selecting an appropriate topic, you can talk with the course directors.

Grading

This rotation is Honors/High Pass/Pass/Fail. The exam involves a shelf exam and an Objective Structured Clinical Examination (OSCE) where you will rotate through 3 stations (know how to do a good neuro exam and be able to counsel about common neurological complaints!).

Tips for Studying for the Shelf

The neurology shelf can be challenging, especially if encountered early in the year, as the clerkship is only four weeks long. Reviewing Dr. Pruitt’s material is essential, and it is also a good idea to check out several of the resources listed in the Review and Textbooks section. You should definitely also complete the neurology questions from the USMLE question bank (over 200 questions in total).
Neurologic Exam

Cranial Nerves:
I: Olfactory: Not generally tested
II: Optic: Can use the eye chart in Maxwell’s; remember to do visual fields; assess color vision with MS patients
III/IV/VI: Extraocular movement; light reflexes
V: Trigeminal: A variety of things, (corneal reflex, jaw opening, bite strength), but most just test facial sensation
VII: Facial: Eyebrow raise, eyelid close, smile, frown, pucker, taste
VIII: Vestibulocochlear: Hearing; Rinne, Weber, doll’s eye, ear cold caloric stimulation
IX, X: Glossopharyngeal, Vagus: Gag reflex, swallowing, palate elevation
XI: Spinal Accessory: Lateral head rotation, neck flexion, shoulder shrug
XII: Hypoglossal: Tongue protrusion
Sensation: Pain, temperature, vibratory, proprioceptive, 2-point discrimination
Strength: Know the grading 0 to 5
Reflexes: Know the grading 0 to 4+
Cerebellum: Finger to nose, heal to shin, rapid alternating hand movements
Gait: Tandem, walking on heels and toes
Mental status exam (see the Psych section for details): Important for CNS disease

{ Psychiatry }

What students remembered...

“...When I had hours just to talk with my medically and emotionally complex patients on HUP consult and had the chance to bond with a man who I ended up crossing paths with multiple times over the year as he went through the process of getting a liver transplant.”

“...I spent an hour talking with my patient who was scared and wouldn’t let anyone draw his blood, even though it was medically very necessary, and we talked through everything he was worried about and made a list of how we would address each concern. Eventually, he then felt safe enough to let us draw his blood.”

“...When I could sit and listen to an elderly man with severe dementia and depression for as long as he needed to talk.”

“...When a very depressed elderly woman who was a retired librarian kept mentioning that she wished she had something to read while inpatient, and during a break I ran out and bought a few books from a nearby used bookstore for her. It was the first time I had seen her smile in days.”
Psychiatry will be a unique component of your clinical experience because it focuses on human thought and behavior, examining the psychological and social dimensions of illness. As a 200 student, you’ll become very familiar with the psychiatric history and complete mental status examination. You’ll be challenged to formulate a reasonable differential diagnosis based on the DSM (The American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders). You will also be involved in the application of psycho-pharmacological agents and non-somatic modalities of care. Regardless of whether or not psychiatry is your career field of choice, you will be expected to strengthen your interpersonal and interview skills and become aware of the psychological issues in medicine.

The Team

The patient care team will vary slightly depending on your site. In general, though, the structure is similar to that of an inpatient medicine team with a few extra members:

- **Interns**: First year residents responsible for the daily care of patients. Not all teams have an intern.
- **Residents**: May act as someone who oversees the intern, or may act alone without an intern. Regardless, is responsible for patient care and will be your primary contact person.
- **Attending**: Oversees all patient care on the ward.
- **Psychologist**: Some inpatient psych services have a psychologist who can function as an attending – taking charge of a patient’s care and supervising the residents’ clinical work.

Sites

There are 5 sites at which you can rotate for psych: Pennsy 4 Spruce (emphasis on psychotic disorders), Pennsy 6 Spruce (emphasis on mood disorders), VA inpatient unit, and Presby 5 Wright inpatient unit (emphasis on dual diagnosis population), and HUP consults. Students at all sites will spend 1 afternoon per week at the VA outpatient clinic.

Breakdown of the Rotation

Your psych experience will be similar to other rotations in that you will pick up new patients and follow their daily progress throughout the course of their admission to the hospital. In contrast to other services where patients present more acutely, during psych your team will often wait until the following morning to “admit” a patient (meaning interview them and discuss their diagnosis). This means that most afternoons you don’t have to worry about admitting new patients on top of your existing patient care tasks.

Each site has a different format and time at which rounds are held. Usually, you are expected to meet around 8:00 AM when the team will interview patients as a group. For new patients, one person on the team is expected to “pick up” the patient and interview him or her during rounds. The remaining patients are seen at the discretion of the attending. After rounds, you
are expected to write admission notes for the new patients you are following. You are also expected to talk, spend time with, and get to know your other patients and write progress notes on them as well. Often there are group activities on the inpatient wards, and you may participate in these also. You will often be interviewing patients in front of your entire team, including other students and attendings. Students should become familiar with the Mental Status Exam as it replaces the physical exam component of the patient interview and note.

More specific requirements, such as write-ups and presentations, will vary by institution and service.

Call

Call requirements for psych are 2 weekday nights and 1 weekend day. Call is spent at Pennsylvania Hospital’s Hall Mercer Crisis Response Center (CRC). You are expected to be at your call site around 6 pm and to stay until your supervising resident dismisses you for the night (no later than 10 PM). Unlike other rotations, there are opportunities to trade away your assigned call nights in exchange for participating in various enrichment activities. This policy will be thoroughly explained during clerkship orientation. These enrichment activities are usually very well received with students and include book club, going to a 12-step recovery meeting, and attending a weekly Narrative Medicine seminar.

What to Wear

You are expected to dress in business casual hospital attire and most sites also expect students to wear a white coat. Be extra careful about dressing professionally on psychiatry; remember that inappropriate clothes might give the wrong signal to a confused, disinhibited, or manic patient.

Grading/Exams

Your grade in this course will be determined by the following:

- Clinical evaluations by attendings and residents you work with (60% of grade).
- Final write-up following a live patient interview (you will learn more about this during your orientation).
- Performance on the shelf exam (shelf plus other assignments add to 40% of grade, and you must score over the average on the shelf to be eligible for honors: in 2016, this cutoff was 83).

Safety/Security

Be sure to follow the guidelines of the inpatient wards. Do not put yourself in any potentially unsafe circumstances. During your first day of orientation, the course director will cover these issues with you. As a general rule, never put the patient between you and the door, never do