THE IMG GUIDE TO CLINICAL ROTATIONS ON THE US WARDS

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CHAPTER 1:
INTRODUCTION

In 2009, I arrived a Chicago area teaching hospital to begin 3rd-year clinical rotations. The stress of being an overachieving "beginner" in the clinical world caused me a severe migraine on my first day. I had very little preparation for the ward months in a US clinical setting as my school did not have its own teaching hospital in the States. With little familiarity with the new hospital environment as a Caribbean medical student, I learned through my own shortcomings BUT you DON'T have to.

This book will be a brief supplement of helpful information to you. It will not replace other resources on the recommended reading list offered by your institution. This is a quick read to answer questions my medical students frequently ask me. It will serve as a confidence booster from an attending physician and clinical preceptor who was once in your shoes. It offers inside information on how to have a better first week on the wards especially if you are at a new hospital that is not your primary institution as you begin clinical rotations.

This information is also applicable to persons who have completed medical school and are now participating in observerships or clerkships to obtain USCE (United States Clinical Experience).

CHAPTER 2:
8 Reasons Why This Book Will Be Beneficial To You:

1. Serve as a resource for orientation prior to your first medical rotation.

2. A guide through the mindset shift from basic sciences to the methodical mindset needed to become a clinician & diagnostician.

3. It will help to decrease the anxiety of not knowing how to process the new clinical information that is being learned on the wards.

4. Give you tips on how to rock your first rotation and possibly define words you will see posted everywhere in the hospital.

5. Teach you the fundamental structure of the facilities you rotate through.

6. Increase your confidence level during that first month and help you maximize learning.

7. To glean a deeper comprehension of how attendings "think" when they teach.

8. Enlighten you on the role of ancillary services within hospitals.

CHAPTER 3

The Structure Of The Healthcare Team.

- There are 2 fundamental types of rounding teams which will vary based on your institution.

- This is important because the learning experience with both teams varies greatly for the medical student.

- Multidisciplinary rounds versus Individual rounds.

- Research shows that multidisciplinary rounds are associated with better education for medical students, improved patient satisfaction and outcomes and even lower mortality.

- Hence, when choosing sites for your core clinical rotations such as Internal Medicine, Family Medicine, General Surgery, Obstetrics & Gynecology and Pediatrics, I suggest you seek out a teaching hospital/academic center that offers the multidisciplinary model. This is because your experience with the rotation becomes a determining factor on what specialty you choose, so the experience that offers optimal exposure is best.

- When selecting an audition rotation or acting internship in a specialty of your choice, it is always best to pick one that offers you the multidisciplinary rounding experience as it can correlate with the quality of care and education at the facility.

- Once you decide what medical or surgical subspecialty you want to pursue then focus your 4th-year electives in this area. Find a mentor in that field i.e. urology, ophthalmology etc. Attend the national conferences for that specialty, try to have a poster presentation that you can submit there. Posters can be a clinical case vignette that you saw during your rotations. Network with residents and fellows who are where you want to be.

The Structure of the Healthcare Team

Multidisciplinary (academic centers) versus Individualized (community-based).

1. **Multidisciplinary Teams:** contains several disciplines.

Members:
- Attending, residents, mid-level providers (PA/NPs), students, nurse, charge nurse, social worker, case manager, chaplain, clinical pharmacist, physical/rehabilitation services (physical, occupational, speech, and respiratory therapists) and rarely ancillary nursing staff (licensed practical nurses, medical assistants, medical technicians, certified nursing assistants).
- Typically walk around rounds that begin earlier in the day.
- Optimal learning environment due to the variety of teachers within the team i.e. PGY-3 residents may teach more than interns or attendings, though each of these can teach with different approaches best suiting for a student.
- Ideal for third-year rotations & ideal academic set up.
- A highly competitive environment which is great for quick learning.

2. **Individualized Teams**: Small groups.

Members:
- 1:1 attending to student ratio.
- Walk around or sit down rounds.
- Less competitive environment
- Learning is primarily self-motivated and subjective to only one source i.e. preceptor as typically within a private practice or community hospital setup.
- Best for residency interview months, elective rotations or later in the 4th year.

CHAPTER 4
Hospital Units 101

Critical or Intensive Care Units (ICU) :

These are units within the hospital that offer specialized care such as advanced life support and intensive monitoring e.g. mechanical ventilators, vasopressor use for cardiac collapse, invasive catheterization for continuous hemodynamic monitoring or medication administration. The nurse to patient ratios is often narrow such as a 1:1 ratio or 1:2 due to the need for close monitoring.

Neonatal ICU (NICU) - newborn infant care

Medical ICU (MICU) - critical medical care without major surgical needs

Pediatric ICU (PICU) - children

Surgical ICU (SICU) - major surgical patients

Cardiac Critical Care Unit (CCU) - heart surgery or heart attack patients

LTAC ICU - Long-term (LTAC) ICU Care, chronically ventilated patients

In some rural hospitals, one can expect to see telemedicine models being utilized in certain ICU settings where there is an absence of intensivist support. With limited resources within such facilities, they may not always provide well-rounded teaching opportunities that facilitate learning for the student.

Non- ICU Care Units

Lower acuity, less sick patients, may or may not need external monitoring such as telemetry or continuous pulse oximetry. Nursing to patient ratios is usually wider such as 1:4 or 1:5.

Post-Anesthesia Care Units (PACU): immediate post op patients

Post Critical Care or Step Down Units: serve post ICU care patients who are not fit for general medical or general surgical floors or patients with high risk for decompensation but who do not meet ICU criteria (as on the previous page).

Maternity Department (Mother and Baby Units aka Labor Hall)

Pediatric Units - children

Surgical Units i.e. Ortho, Neuro, General etc

Oncology units - cancer care

Psychiatric or mental health units - mental health patients, usually with more supervision with ancillary support staff or video-assisted monitoring and security systems.

Rehabilitation units - mental and physical function after trauma or burn/extensive wound care

Inpatient Hospice units - end of life care

Long-term care wards - provide care for long periods of time beyond designated LOS (length of stay) for DRG (diagnosis related group).

OR - Operating Room

Emergency Department - Typically not a hospital unit but closely linked to the hospital as a stabilization or entry point

CHAPTER 5

Dissecting The Rounding Process

Rounding structure will vary according to specialty. Example: OBGYN may not allow for students to do cervical checks alone or they may not need a discharge planner during rounds. Similarly, dermatology rounds may never require a case manager or social worker to be present etc. The essentials of core rounding structures are the same across the board especially for mandatory rotation like Internal Medicine, Family Medicine, Pediatrics and other core rotations.

Bottom Line:

1. **For the patient** to be given a multidisciplinary plan of care with the goal of serving sick person to the point of stability for care to be continued outside of the current acute care setting within a timeframe as ideally guided by evidence & DRG for the diagnosis.

2. **For the Attending** - to teach, lead, educate and coordinate the team.

3. **For the nurses** to gain the idea of what needs to be done for the day to carry out the plan of care along with designating tasks to ancillary services such as physical therapy/Respiratory therapy/occupational therapy or speech therapy where applicable.

4. **For the case manager** to determine what the patient's needs for discharge are such as equipment, ancillary services such as home health nursing or PT and setting up appointments at follow up. CM also help patients navigate insurance-related issues.

5. **For the social worker** to make arrangements for discharge disposition i.e. subacute rehab placement, skilled nursing facility placements and other social assistance for persons requiring aid.

6. **For students** to learn and understand cause and effect of clinical presentation, learn bedside manners, communication, and physical exam skills.

7. For the **Clinical Pharmacist** to serve as the consultant on the pharmacological effects of the options of medications being considered for treatment and offer evidence-based input.

CHAPTER 6
Pre Rounds For The Student

*** Arrive earlier to complete this task under less pressure (if possible).**

- The first thing to do is to review the progress note (or H&P for a new admission from the night before).

- During your review, look for **relevant** changes to the patient's clinical status i.e. abnormal or normal vital signs from the night before, look up **new** lab results and **new** imaging results. Make notes and create stick figures on your notepad for memory.

- Discuss politely with the nurse to get an interim history of events that happened to the patient while you were away. The nurse's notes are a great resource for information and can be accessed in the medical record. If you collect this information before seeing the patient it helps to streamline your encounter and gives the patient reassurance that the team works together and relays information.

- Definitely always evaluate the patient (with their permission) for a pertinent "HPI" as applicable to that day. Also always perform a focused exam based on findings/interventions from the previous day or the patient's new concerns. Do not fake the physical exam findings, if you are uncertain of the lung sounds you heard or the structure you palpated, create a differential list and ask your senior for an opinion.

- Review pertinent changes to the laboratory and radiographic data such as X-rays, CTs, MRI, blood work or pathology reports

- Read ALL consult notes and objectively plan to implement their recommendations into your plan of care where necessary. These end up being great learning tools.

- Ask the resident or intern above you to allow you to present the case to them prior to rounds so that you are well prepared to give a killer presentation that'll earn you good points (especially during an audition rotation).

CHAPTER 7

Pre-Rounds: How to Create a Daily Plan of Care

1. Assess current clinical scenario by rating patients symptoms, tying them up with the presentation to create a differential of potential diagnoses that fit in with current illness course.

2. Use a systems-based & anatomic focus format to determine most common cause of ailment i.e. pain in chest approached with musculoskeletal, respiratory, cardiovascular and gastrointestinal differentials etc.

3. Apply medical knowledge to rule out the least likely etiologies until the most likely is unopposed by reasoning and clinical data.

4. Implement knowledge of pharmacology to reverse physiological effects of pathology to correct disease state (i.e. using an afterload reducing agent to treat systolic dysfunction in cardiomyopathy or using a positive chronotropic/ionotropic agent to manage cardiac pump failure)

CHAPTER 7

Pre-Rounds: How to Create a Daily Plan of Care.

1. Create a list of problems identified from the H&P based on presenting signs & symptoms first i.e. pain, dyspnea, weakness, loss of function etc

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2. Based on the list above create differential diagnoses (from what you have previously learned in pathophysiology) for each problem listed.

3. Always connect the dots, you should always ask yourself how each problem relates to others within the same body system first, then move on to the next system. Example: a presentation with dyspnea will warrant interrogation on the respiratory system first, then cardiovascular, then musculoskeletal, neurological and finally psychiatric.

4. You are less likely to miss a diagnosis when you follow a system based format.

5. Before ordering any laboratory test, seek to answer these questions first:

- What exactly will this test result help me rule in or rule out?
- Is there another alternative to get to this answer?
- Are there contraindications to this test for my patient?

6. Define every term you see or hear (in your head) to get a deeper understanding. For example, ask yourself: what does the abbreviation MCHC or RDW typically seen on the standard Hematology result panel stand for? What is its clinical significance?

Do this simple exercise for every single test before your order.

CHAPTER 8

Third Year Rounding Tips

.- Approach each patient as a person.

- Introduce yourself and your role as a student to reduce expectations from the patient. Always explain actions before performing them.

- Use a pocketbook for quick reference prior to each encounter to ensure that interaction is focused and timely. My preferred pocketbooks for IM/FM/EM rotations include Pocket Medicine, Maxwell, Washington Manual of Therapeutics.

- Ask for reading references from preceptors prior to beginning in order to be better prepared for the rotation.

- Always volunteer to participate in every procedure especially during your MS III rotations. Learn to do arterial punctures, EKG setups and interpretations, maneuvering oxygen delivery systems and certainly required inpatient procedures such as central lines, thoracentesis, paracentesis, ultrasound training.

CHAPTER 9

How To Write The Perfect **SOAP** Note

Subjective: what the patient told you this morning, or if the patient is not able to speak, then you collect data from the patients overnight experience as reported by the bedside nursing staff. Include the chief complaint for the day and any interim history. Stay focused, students get distracted with trivial information here.

Objective: Include changes that occurred to the patient as collected by other verbal and non-verbal means. Such as vital signs, medications administered, laboratory results, radiology results. Usually, these are already present in the medical/electronic record or ordered prior to your encounter. It serves as a clue to "bring knowledge together" in creating your plan.

Assessment: This requires the hard work. You have to formulate an assessment from your knowledge of basic sciences and clinical experience. In the beginning, you may need a lot of help. Start by listing out all presenting symptoms and then follow that by listing out all the signs you noted on exam. Then list out pertinent abnormal labs and radiology reports. As you write these out you will begin to "bring the knowledge" together with your plan. Example: presenting symptom of dyspnea, ties in with wheezing, which ties in with low Pa02 on ABG which ties in with bilateral opacities on chest x-ray which ties in with Acute Hypoxic Respiratory Failure as an assessment. Then you will want to break that down into potential etiologies based on presentation. Follow this pattern for all presenting complaints.

Plan: Based on the assessment. With each point accounted for. If you haven't studied pathology/pharmacology intensely then you will need to to do that first before you can learn how to formulate a plan. Doing practice questions longitudinally with each rotation will create a pattern of critical thinking. Ensure you study pathology from textbooks (not review books) as they provide all the detail necessary. In piecing out the proper diagnosis details matter. Hence why you are tested in MCQ format on the USMLE. Its a game of - can you piece out the detail? EVidence based data is highly applicable in creating a plan. Each patient's plan should be individualized with the best practice plan guided by current evidence.

CHAPTER 10

H&P Pearls

There are tons of resources out on how to write the perfect H&P and it is taught in school so the template remains the same. Here are a few pearls to remember:

- CC: should be brief, focus on patients presenting complaint (which may not directly correlate with the final diagnosis). The CC always offers a clue.

- HPI: Focus on asking in-depth questions in relation to the CC. Include points from the ROS as pertinent to the presenting complaint. Always include factors that rule out the confusing differentials in your potential diagnosis list. The goal is to defend your thought process through your differential list.

- PMHx, Family, Reproductive, Travel, Social, Medications & Allergies remain the same for each individual. If you have a returning patient seek to figure out what has changed since this section of the chart was last updated.

CHAPTER 11

Rotation Terminology To Know

- Observership – Clinical rotation done after the completion of medical school or accredited rotation for those in medical school. Typically by IMGs/FMGs.
- Internship – In medical education, this typically refers to the first year of postgraduate or residency training.
- Clinical rotations – clerkships done during the 3rd and 4th year of medical school
- Electives – clinical rotations that the student chooses to participate in based on future specialty or career interests. Usually graded like other rotations.
- Selective – Electives that are graded as a pass/fail. Based on the patient's choice and towards the end of the year. Not offered by all schools.

- Inpatient status - Patient in hospital admitted for greater than 2 midnights.
- Observation status - Patient in the hospital for a medical issue considered to be resolvable in less than 2 midnights.
- Discharge Disposition - Where patient will be best served on day of discharge, ideally to be addressed earlier on in the hospital stay.

1. In the care of patients, you will only recognize what you know. (Therefore, you must seek to expand your medical knowledge.)

2. If you listen to the patient they will tell you what is wrong with them, if you listen closely they will eventually tell you how to fix it.

3. You become complacent if you are not learning one new thing every day at any point in your career.

4. Trust but verify. Look at the EKG yourself, you are better than the machine.

5. Documenting "WNL" in the review of systems should never mean "We Never Looked".

6. Never assume, otherwise you make an "ass" out of U and ME.

7. " I will look it up and get back to you" is still the most preferred answer during rounds.

8. Rounding is still not a bluffing game.

9. If you are uncertain, refrain from offering to counsel the patient on their condition without direct supervision. The same rule applies for procedures.

10. Always talk TO your patient. Not at them. Make eye contact with the person laying in the hospital bed (when they are awake) and not with the family member. Sit down at eye level if you can.

Helpful Links

How to get over a 240 on the USMLE
https://ninotswalk.com/2017/08/27/how-i-studied-for-the-usmle/

Top 3 Things FMGs must do to match into residency
https://ninotswalk.com/2017/05/06/top-three-things-fmgsimgs-must-to-do-match-into-residency/

Tips on interviewing as an IMG
https://ninotswalk.com/2017/05/06/top-three-things-fmgsimgs-must-to-do-match-into-residency/

Networking Tips For IMGs
https://ninotswalk.com/2017/11/26/my-top-6-networking-tips-for-imgs/

Residency Interview Tips
https://ninotswalk.com/2017/10/09/residency-interview-tips/

Strategies to Succeed In A Caribbean Medical School
https://ninotswalk.com/2017/08/10/strategies-to-succeed-in-your-caribbean-medical-education/

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BIO

Dr. Nina Lum is board-certified in Family Medicine and currently practices hospital medicine in Kentucky. She completed residency training at the University of Kentucky Rural Program where she graduated as Chief Resident in 2015. She is a health and wellness columnist, lifestyle blogger and health media enthusiast who also is passionate about continuing to serve on short-term medical mission trips to Africa and the Caribbean. You can contact her on www.ninotswalk.com or on Instragram @theencouragingdoc .

Tips From My Students

“ Most nurses are more than willing to show you how to do anything you want to learn to do. They are a valuable asset to your learning if you just ask "
JB OMS 4

"First, start studying and reading current guidelines that apply to the rotation weeks before. Get the easily memorizable things out of the way so your preceptor can spend more time teaching you something interesting.

- Do as many practice questions for each shelf/rotation as you can. They helped me recognize a lot of clinical cases and understand different managements (also perform very well on shelf exams)

- Practice practice practice giving problem focused presentations with multiple differentials and next steps in management

- This one may be cliche, but I've been surprised not to see it a lot with other students. Be eager to learn. Don't be afraid to ask questions and accept any offer that you get to do something. Also stay off your phone unless it's to look something medical up. "

C. L. OMS 3 student